Labour Relations and Economic Performance

Edited by

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and

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for the

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Proceedings of a conference held by the International Economic Association in Venice, Italy

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The International Economic Association

A non-profit organisation with purely scientific aims, the International Economic Association (IEA) was founded in 1950. It is in fact a federation of national economic associations and presently includes fifty-eight such professional organisations from all parts of the world. Its basic purpose is the development of economics as an intellectual discipline. Its approach recognises a diversity of problems, systems and values in the world and also takes note of methodological diversities.

The IEA has, since its creation, tried to fulfil that purpose by promoting mutual understanding of economists from the West and the East as well as from the North and the South through the organisation of scientific meetings and common research programmes and by means of publications on problems of current importance. During its thirty-seven years of existence, it has organised seventy-nine round-table conferences for specialists on topics ranging from fundamental theories to methods and tools of analysis and major problems of the present-day world. Eight triennal World Congresses have also been held, which have regularly attracted the participation of a great many economists from all over the world.

The Association is governed by a Council, composed of representatives of all member associations, and by a fifteen-member Executive Committee which is elected by the Council. The present Executive Committee (1986–89) is composed as follows:

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Abbreviations and Acronyms

AC	Akademikernes Centralorganisation (Denmark)
ACTU	Australian Council of Trade Unions
AF	Akedemikerners Fellesorganisasjon (Norway)
AFL/CIO	American Federation of Labour/Congress for Industrial Organisation
AIC	Advanced industrialised countries
AKAVA	Akateeminen Yhteisyoevaltuuskunta (Finland)
APRA	Alianza Popular Revolucionaria Americana (Peru)
CBI	Confederation of British Industry
CCO	Communist Commissiones Obreras
CEPR	Centre for Economic Policy Research
CEPREMAP	Centre d'Etudes Prospectives d'Economie Mathematique Appliquées à la Planification
CES	Constant elasticity of substitution
CESOS	Centro di Studi Sociali e Sindacali (Italy)
CFDT	Confédération Française Démocratique du Travail (France)
CGIL	Confederazione Generale Italiana del Lavoro (Italy)
CGT	Confédération Générale du Travail (France)
CGT	Confederación General del Trabajo (Argentina)
CGTB	Confédération Générale des Travailleurs de Belgique (Belgium)
CIO	Congress for Industrial Organisation
CISL	Confederazione Italiana dei Sindacati dei Lavoratori (Italy)
CME	Co-ordinated market economies
CNG	Christlich-Nationale Gewerkschaftsbund (Switzerland)
CNV	Christelijk Nationaal Vakverbond (Netherlands)
CPI	Consumer price index
CSC	Confédération des Syndicats Chrétiens (Belgium)

DAEST	Dipartimento Analisi Economica e Sociale del Territorio
DAG	Deutsche Angestellten Gewerkschaft (W. Germany)
DBB	Deutscher Beamtenbund (W. Germany)
DGB	Deutscher Gewerkschaftsbund (W. Germany)
EC	European Community
ECLA	Economic Commission for Latin America
ECLAC	Economic Commission for Latin America and the Caribbean
EEC	European Economic Community
EETPU	Electrical, Electronic, Telecommunication and Plumbing Union
EMS	European Monetary System
EPEW	Equal pay for equal work
ESS	Evolutionary stable strategy
ESSE	Equal shares for shared efforts
EWH	Efficiency Wage hypothesis
FGTB	Fédération Générale des Travailleurs de Belgique (Belgium)
FO	Force Ouvrière (France)
FTF	Faellesraedet for Danske Tjenestemands -og Funktionaer-organisationer
GDP	Gross domestic product
GNP	Gross national product
HMSO	Her Majesty's Stationery Office
IBM	International Business Machines
ICTU	Irish Congress of Trade Unions
ILM	Internal labour market
ILO	International Labour Office
IMF	International Monetary Fund
IMS	Institute of Manpower Studies (University of Sussex, UK)
IR	Industrial relations
ISFOL	Instituto per lo Sviluppo della Formazione Professionale dei Lavoratori (Italy)
ISMEA	Institut de Sciences Mathématique et Economiques Appliqueés

IT	Information technology
JEIRC	Japan–Europe Industry Research Centre
LO	Landesorganisation (Scandinavia)
LSE	London School of Economics
MACE	Macro and Energy (model of Canadian Economy)
MCT	Macro-corporatist theory
MIT	Massachusetts Institute of Technology
MITI	Ministry of International Trade and Industry
NAIRU	Natural rate of involuntary unemployment
NIC	Newly-industrialised country
NKV	Nederlands Katholiek Vakverbond
NSER	Number of industrial conflicts for economic reasons
NVV	Nederlands Verbond van Vakvereningen
NWS	Number of workers in economic conflicts
OBI	Organisation of Business Interests
OECD	Organisation for Economic Co-operation and Development
ÖGB	Österreichischer Gewerkschaftsbund (Austria)
OLM	Occupational labour market
OLS	Ordinary least squares
PCI	Partito Comunista Italiano
PMBD	Partido de Movimento Democrático Brasileiro
PPI	Production price index
PPP	Purchasing power parity
PSBR	Public sector borrowing requirement
R & D	Research and development
RMHP	Raad voor Middelbaar en Hoger Personeel (Netherlands)
ROI	Return on investment
SACO-SR	Sveriges Akademikers Central Organisation – Sveriges Statstjanstemannens Riksforbund (Sweden)
SAJ	Suomen Ammattijaer jestoe (Finland)
SAK	Suomen Ammattiliittojen Keskusjaer jestoe (Finland)
SGB	Schweizerischer Gewerkschaftsbund (Switzerland)

SMSA	Standard Metropolitan Statistical Area
SPRU	Social Policy Research Unit
SSRC	Social Science Research Council
STTK	Suomen Teknisten Toimihenkiloeiden Keskusliitto (Finland)
TCO	Tjanstemannens Centralorganisation (Sweden)
TUC	Trades Union Congress (UK)
TVK	Toimihenkiloe-ja Virkamies-jaer jestoejen Keskusliitto (Finland)
UGT	Uniones Generales de Trabajadores
UIL	Unione Italiana del Lavoro
VSA	Vereinigung Schweizerischer Angestelltenverbände (Switzerland)
WIRS	Workplace industrial relations survey
YS	Yrkesorganisasjon Sentralvorbund (Norway)

Introduction

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The purpose of the conference entitled Markets, Institutions and Co-operation: Labour Relations and Economic Performance held in Venice in October 1988 was to assess the current state of our instruments for the analysis of the labour market and of industrial relations. The need to re-examine the analytical tools used so far emerges clearly when one considers the way in which 'traditional' economic theory has sought in recent years to exclude social influences from its approach to labour market problems. Yet there is an increasingly impelling necessity to analyse the labour market from a perspective that embraces the whole complex of social and institutional features, going beyond an approach restricted to economic variables alone.

The neo-corporatist solution, studied in depth by Ezio Tarantelli, appeared to be suitable for dealing with the stagflation that came in the wake of the first oil shock in 1973–4. The need, now, following the recovery of the early 1980s, is to find the best solution for designing a framework for industrial relations in keeping with the changes that have intervened, but no longer in a short-term, emergency perspective.

In a scenario marked by low inflation and high unemployment, naturally, the problems are quite different from those that prevailed until recently. In part this is because the radical change in the frame of reference has been such as to affect even the position of the trade unions.

The changes taking place in the labour market, which also reflect broader changes in the productive economy, preclude the simple representation of industrial relations models in which centralised agreements form the basis for controlling emerging trends.

A first set of papers discussed at the conference dealt specifically with these issues, bringing together a number of contrasting opinions. On the one hand there were those who considered the corporatist approach to be a viable response both to the stagflation of the 1970s and to the mass unemployment that has afflicted the European economies in recent years. This view was contested by other participants who argued that this solution has been superseded and that what is required is a radical rethinking of neo-corporatism's original proposals. This position was upheld by some of the same people who originally developed neo-corporatist ideas in the course of the previous decade. Possible lines along which the approach could be rethought and developed, some participants felt, could be located in a sort of 'meso-corporatism', that is a sector corporatism or at any rate an organisation of interests midway between the state and individual firms. Others suggested an entirely different solution such as the 'micro-corporatist' Japanese model. This is still far from implementation, but it is taking hold in some large European corporations.

The difficulties of the labour movement in terms of membership and legitimacy are such as to make it difficult to foresee with clarity the potential scenario of industrial relations in the next few years. Fundamental to this effort are comparative studies of developments in different countries, with reference both to the conditions in which incomes policies have arisen and to the elements that represent departures from or evolutions of the neo-corporatist model.

A number of participants suggested the usefulness of an analysis of the role of institutions and public structures in view of their importance in guiding and framing the fundamental options that are reflected in the strategies of employers and labour organisations. Significant in this regard is the discussion that has evolved since the turn of the decade on the state's role as regulator of social and economic conflict and the tendency that has emerged in a number of countries towards a reduced public presence, turning over to the marketplace regulatory functions that had seemed to have been definitively removed from the market sphere in earlier decades. The role of the trade unions themselves is an object of study, since despite the crisis of the labour movement the unions remain fundamental to the definition of industrial relations.

In view of the complexity of the issues involved, an interdisciplinary approach was agreed to be fundamental. Only in this way can all the various aspects of industrial relations problems be grasped and

treated. This kind of analysis was presented by a second set of papers. In particular, these dealt with the influence of trade union action on economic performance. Also studied were the effects of incomes policies in various countries as well as the impact of trade union presence on certain key economic variables, such as efficiency of the firm and macroeconomic productivity trends.

The other papers fall largely into the sphere of research known as 'labour market flexibility'. Here too the role of unions was examined, how it has changed over the years and what effects it has had on such strategic labour market variables as mobility and wage differentials. The participants went beyond a simple analysis of the role of unions, however. The functioning of the labour market was looked at in the light of other institutional factors which affect the market in part by modifying the preferences and behaviour of individual workers. Interesting empirical and theoretical analyses were presented to explain the high unemployment that marks most European economies.

Some participants also made an effort to assess the outlook and weigh various economic policy proposals. In this area the discussion was lively and important issues were raised. Some wondered, for instance, whether a co-operative approach is still capable of solving the economic problems that are the legacy of the past. It was asked whether this co-operation should be 'macro', 'micro' or 'meso', or whether, by contrast, we should go further along the path, already embarked on in some countries, of labour market deregulation. A final question concerns the labour movement. It is still an open question whether the trade unions can overcome their present difficulties, just as there is ample room for debate as to the best strategy for ensuring a continued significant union presence.

Precise, definite answers to these questions were not provided by the conference. Interesting analyses and helpful ideas for discussion and reflection emerged from every paper, as the brief summaries presented below demonstrate.

PART I   CORPORATISM AND ECONOMIC PERFORMANCE

Philippe C. Schmitter: Sectors in Modern Capitalism: Modes of Governance and Variations in Performance

The author recalls that E. Tarantelli was particularly successful in transposing neo-corporatist ideas into the economic analysis of stagflation. The main argument of the corporatist school was that several factors were pushing the advanced industrial societies toward an institutional context in which continuous bargaining and explicit contracting among representatives of class interests were destined to be the central feature of a new 'organised capitalism'. The trend was not confined to the well organised social democratic countries where corporatism first emerged and worked best but was expected to spread to other countries, at least in Europe. But those projections, Schmitter acknowledges, were not accurate. Neither Tarantelli's work nor the related work on neo-corporatism foresaw the magnitude of subsequent change. Instead of the expected evolution, there was a revival of 'competitive capitalism' through deregulation of national markets. In place of a large and increasingly unionised working class, one finds a shrinking class with its organisations weakened. Those comprehensive national-level bargaining arrangements that were central to Tarantelli's argument and to the neo-corporatist approach have either collapsed or shifted to other levels.

Nevertheless, the author holds that the reversal in trend has not been as dramatic as sometimes thought, that the forecast of the demise of corporatism may be premature, and that organised capitalism may still be a more likely outcome than disorganised capitalism. However, a good deal of rethinking is required; in particular, to explore the new questions, analysis must end its exclusive concentration on the national economy. Practices are diversifying within national economies at the same time as they are converging transnationally. Schmitter suggests the *sector* as the key unit. Changes in technology, market structure and public policy combine to make this *meso-level*, intermediate between firms and the entire economy particularly salient.

The point of departure is that not all sectors are organised as markets. One finds an astonishing variety of more or less formalised 'mechanisms' and 'arrangements' for regulating transactions and exchanges. The author seeks to map conceptually what he calls 'sectoral governance mechanisms', envisaging two types of exchanges, economistic and sociological or political. In the former, actors are rational profit-maximising producers; in the latter, they have established identities and obligations within a broader sociopolitical environment and seek normatively and politically acceptable outcomes.

Which governance mechanism, economic or sociological, prevails in different circumstances? The author answers that the selection involves many channels and many variables. International competitiveness, regional institutions, overall economic policy, and level of class conflict are but a few. The performance of the sectors naturally differs according to the governance mechanism. The research agenda opens new frontiers for empirical investigation. The question, argues the author, is not static but dynamic efficiency, that is, the capacity of a set of firms to respond to external changes. Nor is efficiency merely economic; when the mechanism is not governed exclusively by profit-seeking but draws on the norms, identities and power of actors, social and political efficiency must also be included in an assessment of performance.

This is a difficult path for interdisciplinary evaluation of sectors, but a task worth trying, in that conflict between sectors could become more important than struggle between classes (exporters versus importers, manufacturing versus services, light versus heavy industry, and so on). In any event, capitalism need not be as 'disorganised' as is claimed; the sectors are the main frame around which 'reorganisation' is taking place.

Michael Kendix and Mancur Olson: Changing Unemployment Rates in Europe and the USA: Institutional Structure and Regional Variation

The paper addresses the often substantial interregional differences in unemployment rates within countries and the sometimes very large differences in long-term unemployment rates between countries. It uses the framework elaborated in Olson's previous work, stressing the role of institutions, especially organisations that act to affect income distribution by lobbying or combining in the market-place to influence wages and prices. In the logic of collective action, the larger the share of any group in a collective good, the more likely it is that the group will act in the general common interest. Hence the concept of the 'encompassing organisation'. In trying to win a larger share of national income, an organisation often generates deadweight costs and impediments to the growth of the entire society. An encompassing organisation shares in much of these losses and thus has an incentive to minimise them, while a narrow special-interest group tends to ignore the social costs even when these far outweigh what it gains in the distributional struggle. Encompassing organisations and

distributional coalitions are at the two extremes of the social spectrum. Societies with many distributional coalitions may be expected to be less efficient and dynamic than those that have not yet developed numerous such collective action organisations. The paper applies this thesis not only to growth rate differences but also to those in unemployment rates.

The authors hold that sticky, 'supracompetitive' wages and prices account for involuntary unemployment. Their contribution is the explanation of this stickiness, namely that transactions are blocked by distributional organisations. This applies to labour unions, for instance, but coalitions in the goods markets might be even more important, because disequilibria there can alter outcomes in the labour market itself.

Olson and Kendix share views expressed recently by other scholars (Heitger, Calmfors and Driffill, deLong and Jonung) who regardless of other differences have found that economic performance is better in countries that have either the most competitive, decentralised labour markets or the most highly centralised, encompassing institutions in the labour market. In-between arrangements, which as Olson has suggested is the case in which distributional organisations flourish, are found by all to perform less well. The authors criticise the neocorporatist assertion that the more corporatist an economy is, the better its performance will be, noting that empirical results from these recent studies contradict this corporatist conclusion.

The empirical side of the paper deals with the unemployment rate differences between and within countries, testing the hypothesis that given free movement of capital and labour, firms move away from areas where unions or other local factors raise costs to those with lower costs. That means that unemployment will be higher and employment growth slower in the highly unionised regions. This appears to be confirmed by a cross-section analysis of US regional data.

Comparable extensive data for most other industrial countries are lacking, but data which have been examined for some other countries appear to suggest that this hypothesis does not apply. The authors suggest that this is because few countries have the same large geographical variations in institutional setting and union density as does the USA. This empirical finding offers a possible explanation of higher European unemployment rates, namely that European countries lacked the possibility of large-scale internal migration away from areas of labour force cartelisation, so that they did not experience the

employment generating, unemployment-reducing drive of American labour markets.

Colin Crouch: Trade Unions in the Exposed Sector: Their Influence on Neo-corporatist Behaviour

Crouch's paper takes off from Olson's concept of the encompassing organisation. In so far as the organisation representing a group is encompassing, it cannot easily externalise the costs of its behaviour. Encompassing groups are so large that their actions have significant macroeconomic effects from which their members cannot be sheltered.

'Encompassingness', says Crouch, can exist at various levels, even the level of the single firm. A 'company union', for instance, can behave in an encompassing way, avoiding action that might threaten the viability of the firm; this is surely relevant to an understanding of the behaviour of Japanese labour. In Europe, however, the relevant level is the national one. What Crouch has done, then, is to enrich the specification of Olson's theory, which in its simplest form posits that indicators of social disruption and macroeconomic malfunction are correlated with the extent to which coalitions are organised in protective bodies, but mitigated when organisations are encompassing. Crouch argues that the degree of encompassingness depends not only on the degree of centralisation but also on the exposed-sector strength of the unions, as those in the exposed sectors are more likely to be concerned with problems of international competitiveness and more concerned with general national development. To the extent that a trade-union movement is dominated by industrial unions in the exposed sector, foreign-trade-conscious behaviour may be expected to characterise it. Such movements should therefore be those most capable of facilitating a centralised confederation seeking to internalise national economic objectives.

To represent these variables empirically, a variety of indicators are used based on national statistics referring to the degree of unionisation in different sectors. Independent variables are the usual indicators of disruption and malfunction, such as inflation, unemployment and conflict. The hypothesis is tested by cross-country analysis at various time intervals. The number of cases is small for the number of independent variables, but the results confirm that exposed-sector unionism is a relevant variable in explaining macroeconomic performance and can thus be used as a fair proxy for

encompassingness. The empirical results leave much to explain, leading the author to comment on the situation in single countries. It emerges that exposed-sector unionism is declining over time. Two relevant major changes have taken place in the European economies: first, the proportion of the work force in non-manual jobs has increased, and white-collar workers are more likely to join status-based rather than industrial unions; second, the share of the union-ised work force accounted for by public-service workers has risen significantly, weakening the position of exposed-sector unions.

How likely are tertiary-sector unions (usually white-collar unions with low membership levels) to assume the responsibility for national development that was a central concern for the exposed sector unions? Can public service and other protected-sector unions ever be induced to bear a macroeconomic burden? This concluding, open question is similar to that asked by Schmitter, namely whether we are now entering a phase of 'disorganised capitalism'.

Ronald Dore: Two Kinds of Rigidity: Corporate Communities and Collectivism

This paper focuses on micro-corporatism, that is, corporatism in labour relations at the company level. The point of departure is the consideration that there are two forms of labour market rigidity: collectivism, that is, state economic intervention and government action as redistributor, redresser of imbalances in income and power; and micro-corporatism or the 'community corporation', that is the employment relations within large, technologically advanced corporations, with job security and some form of profit sharing in wage determination. In neither of these types of labour market do wages play their traditional market clearing role.

The first type of rigidity stems essentially from two sources: state income-maintenance programmes and statutory guarantees of workers' and unions' rights. Most notably in Europe, where job security is felt to be a kind of right, wage rigidity has originated in income mainten-ance and minimum wage legislation plus union bargaining power. The second type of rigidity is the more typically Japanese 'community corporation', in which the wage system rewards seniority rather than function, preventing wage offers from reflecting changes in relative scarcity or sending accurate signals to labour market participants. As in the former case, here too there is allocative inefficiency, but this is largely compensated for by X-efficiency gains thanks to motivation

and the savings on transaction and learning costs that flow from this system. A worker who is a member of an enterprise community, with a lifelong commitment, is more likely to care about the firm's profitability and reputation and consequently to work harder, to cooperate with his fellow-employees, to see to it that work is done quickly and efficiently, to accept new technology that makes his own skills obsolete, and to undergo training for new jobs.

This sort of 'community corporation' has been institutionalised in Japan, but there are signs of a similar pattern in labour relations elsewhere, even in Britain. The traditional labour movement has been weakened by the spread of microcorporatism in enterprises managed along these lines. In an increasingly segmented labour market, there is a core of workers in the primary sector who are far from the sense of class solidarity that used to inspire the English labour movement. They belong to unions that increasingly resemble the Japanese enterprise unions, at the very most federated in industry organisations for limited common action. Such unions start from a basic 'business unionism', that is, acceptance of the need to cooperate with management to ensure the competitiveness of the firm whose workers they represent.

The paper shares some of the conclusions of Dore's well-known 'British Factory, Japanese Factory' of 15 years ago. The question, which he leaves open, is whether those who work in the leading, primary sector will be prepared to tolerate (and pay for) the type-one rigidities flowing from the political system, which protect the most disadvantaged workers in the secondary labour market from the full consequences of their powerlessness.

Heikki Paloheimo: Between Liberalism and Corporatism: The Effect of Trade Unions and Governments on Economic Performance in Eighteen OECD Countries

Starting from the contraposition between liberal-pluralist and corporatist literature, Paloheimo finds both explanations of the crisis unsatisfactory. Better is the approach of those who, following Olson's seminal work, have suggested a U-shaped relationship between corporatism and economic performance. In this view, performance is generally good in both pluralist and corporatist countries, poor in those in-between. But Paloheimo goes further than Olson and Kendix, with an explanation that is more highly articulated though not basically dissimilar. He contends that the empirical studies of the

effect of corporatism on economic performance have been done at too high a level of aggregation, analysing corporatism as a one-dimensional scale based on unionisation, wage bargaining, social consensus, etc. Instead, he proposes to disaggregate, to consider unionisation, centralisation of wage determination, and the party makeup of government as independent factors with the potential for a great variety of interactions.

The hypothesis is that in relation to economic policy strategies and economic outcomes there is a conditional relationship between the rate of unionisation and the level of wage bargaining, and also between the party complexion of government and the level of wage bargaining. Not only may political and social factors interact in different ways, but their interaction may produce different outcomes in terms of price stability, growth and employment.

Paloheimo proposes four basic types of economic policy regime, according to the way these strategic factors interact, which can account for the disparate experiences of the OECD countries. First there are countries, such as those of Scandinavia, with centralised wage bargaining, high unionisation, and left-wing governments. Here governments act to ensure full employment and the trade unions accept and have the power to guarantee wage moderation, which is indispensable to profitable investment, growth and price stability. Secondly, there are countries with centralised wage bargaining and conservative governments, such as Belgium, Sweden between 1976 and 1982, and Norway from 1981 to 1985. In this case conflict between government and unions is likely to spur unions to opt for redistributive policies. These countries perform worse than the first group in both growth and employment. Third, there are countries with weak unionisation and comparatively decentralised wage bargaining, and ruled by centre-right coalitions. Typical of these are Canada, the USA, France prior to 1981, Japan, Switzerland, and the UK since 1979. These countries have relied heavily and successfully on market forces. Finally, there are countries with decentralised wage bargaining but left wing governments, such as Britain from 1974 to 1979 and France from 1981 to 1986. Here, there have been attempts to create corporatist interplay between government and unions, but they have failed. The institutional prerequisites for a long-term incomes policy being lacking, stagflation has become a real problem in these countries.

In conclusion, although there is some evidence for the liberal pluralist and corporatist hypotheses, these two views should not be

looked at as contradictory but rather as complementary subtheories
(or better, special cases) of a more general theory. This could be
either the *U*-curve hypothesis or Paloheimo's own proposal, based on
the conditional relationship among a variety of independent political,
social and economic factors.

Jeffrey D. Sachs: Social Conflict and Populist Policies in Latin
America

In the corporatist welfare states such as those of Northern Europe,
says Sachs, conflict is low and there is a broad consensus on the
distribution of income and the redistributive role of the public sector.
In Latin America, by contrast, bitter economic conflict is a central
phenomenon in social and economic life. It is Sachs's belief that at
the heart of this conflict lie the extreme inequalities of income that
characterise the entire region, and the paper thoroughly documents
them. The central thesis is that high income inequality determines
economic conflict, which in turn contributes to bad policy choices,
hence poor economic performance. This is what Sachs calls the
populist policy cycle, a variety of Latin American policy-making
featuring over-expansionary policies intended to achieve various
redistributive and macroeconomic goals. Because of the sharp div-
ision in many Latin American countries between a labour-intensive
non-tradables sector and a resource-intensive export sector, monet-
ary and fiscal expansion can raise urban real wages at the expense of
the wealthy primary resource owners. This takes place through a rise
in nominal wages and in the prices of non-tradables compared to
those of imports and exports. The nominal exchange rate is kept fixed
so that the real exchange rate appreciates, leading to a profit squeeze
in the export sector and a decline in export production. If this were
the end of the story, as most populist leaders want to believe, there
would be no problem. Sooner or later, however, as the expansion
continues, a balance-of-payments crisis breaks out. The exchange
rate plunges, and the enormous budget deficit that has been accumu-
lated in the meantime is financed via the inflation tax. As a final
result, real wages decrease, usually more than they rose during the
expansion. That is the end of the populist cycle, a pattern which has
recurred historically in innumerable episodes throughout Latin
America, such as the governments of Peron in Argentina and
Allende in Chile.

An important question is why these countries fail to learn from their experience and avoid repeating their mistakes. One reason may be the lack of 'institutional memory'. With every change in government, there is usually a very thorough turnover of public sector personnel. The result is the absence of the normal bureaucratic restraint in the design of major policy initiatives. In closing, Sachs stresses that the political and moral impulses underlying the populist policies are understandable and indeed often noble. The continent's income distribution is reason for moral concern and constitutes a standing provocation to action, but the countries of the region must still find effective ways to address the long-standing crisis in income distribution while encouraging price stability, private investment and capital formation.

David Soskice: Reinterpreting Corporatism and Explaining Unemployment: Co-ordinated and Non-coordinated Market Economies

Neo-corporatist economists gave a clear response to the question of what role institutions play in explaining unemployment in advanced industrial societies. Economies with neo-corporatist institutions, they said, and in particular those with strong, centralised industrial relations systems, were more likely than others to have low unemployment. For Soskice, this answer is not satisfactory. There are empirical questions that cannot be answered this way. True, all the low unemployment countries were also corporatist economies (or, as Soskice prefers to call them, co-operative market economies). Some co-operative market economies, such as the Netherlands, however, had high unemployment. Moreover, not all cooperative market economies have centralised industrial relations – instances here are the successful Japanese and Swiss economies. There are thus important cases that the neo-corporatist school cannot explain. Soskice's analysis consists in a search for partially differing explanations. The starting point is the consideration that in the last two decades the fundamental obstacle to sustained low unemployment has been the requirement of external equilibrium and not, as the neo-corporatist school seemed to believe, just controlling inflation. External equilibrium requires institutions adapted to promoting both price and non-price competitiveness. Then the existence of centralised industrial relations, that is, strong centralised unions able to sanction affiliates and workplace organisations to impose nominal wage restraint (with-

out imposing ex-post real wage outcomes), is not a sufficient condition for economic success. Macroeconomic performance needs more than that.

First of all, real wage restraint has been needed in the past and is still needed in many countries in order to maintain the foreign trade balance. Second, non-price competitiveness is also required, for the same objective. Non-price competitiveness can only be achieved in an environment propitious to innovative companies. Soskice argues that the closer an economy moves to textbook perfect competition, the more hostile that environment will be. At the same time the network of institutional arrangements that favours that environment is more complex and more durable than is implied by the neo-corporatist school. Although the conclusion is the same (namely, that the market cannot provide wage restraint except at the self-defeating cost of higher unemployment), Soskice's analysis parts company from that of the neo-corporatists in many important respects. He admits that the sanctioning capability of powerful centralised unions is important, but argues that it needs to be integrated and placed in a wider context that must include relations between employers and work force, the educational and vocational training system, the role of employers' organisations and unions in generating cooperation through education (with sanctions only as a background phenomenon, not the decisive condition).

In any case, it is still true that co-operative market economies are more likely to supply the necessary external environment in terms of institutions and understanding for the action of innovative firms that can improve non-price competitiveness. The paper looks at long-run finance, marketing and R&D, management, occupational flexibility, workforce-management co-operation, as areas for intervention by the state and by the social actors. The concluding section links institutions with countries and seeks to explain why some countries have 'clusters' of appropriate institutions and consequently better economic performance.

PART II   UNIONS AND INCOMES POLICIES

John McCallum: Incomes Policies in a North American Setting

The paper examines policies to improve macroeconomic performance in a North American industrial relations system featuring decen-

tralised bargaining and overlapping contracts. In such a system, wage inertia makes the output and employment costs of disinflation very great when inflation rates are high. In fact, disinflation-related unemployment accounts for a good part of total joblessness in North America, whereas in Europe unemployment appears more largely structural.

The most relevant analyses in the literature are those of Phelps and Taylor, which show that despite the wage inertia stemming from earlier contracts, disinflation could be painless if the slowdown in nominal GNP were very gradual at first. Of course, bargainers must be convinced that it will work, raising the problems of credibility and time inconsistency.

The paper retraces a significant Canadian success in carrying out such a programme starting in 1975. However, instead of the voluntary wage guideposts proposed by Phelps to ensure credibility, there were compulsory limits on wage increases for three years, combined with a gradual slowdown in M1 growth announced and implemented by the central bank. Canadian economists unanimously agree that the programme greatly moderated wage settlements, implying that unemployment or inflation would have been much worse had the wage controls not been introduced.

In conclusion, the programme produced both a smaller 'Okun gap' and a smaller 'Harberger triangle' than otherwise. There appears to be no technical reason why, should there be a resurgence of inflation, the controls could not be repeated either in Canada or in the USA. Rather, political and constitutional considerations involving the preservation of collective bargaining and the prevention of such sweeping government intervention may prove difficult to overcome. If so, however, the unemployment cost is likely to be great.

Lucrezia Reichlin and Michele Salvati: Industrial Employment in Italy: The Consequences of Shifts in Union Power in the 1970s and 1980s

In the later 1970s Italy was the sole major EEC economy in which industrial employment grew. At the same time, Italy had the fastest growth in industrial output and the slowest growth in productivity per worker. At other times, both before and after the mid-1970s, the pattern of Italian growth much more closely resembled the French and German pattern. Using the main historical data series for the past two decades, the paper determines the salient statistical features

of the relationship between the dynamics of industrial employment and other macroeconomic indicators. It analyses the extent to which economic variables depend on their own history and the effects of shocks, in order to explain Italy's relative high employment in the later 1970s and the subsequent sharp decline.

The paper finds that the data do not support the thesis of labour demand depending on fixed labour costs and union protection of 'insiders'. Rather, it proposes an alternative explanation based on changes in the industrial relations system and the trade unions' varying ability to impose labour hoarding. The drop in employment in the 1980s is attributed to the decline in labour's organisational and political strength.

The paper describes three phases in industrial relations: from 1970 to 1975, union militancy and conflict; from 1976 to 1979, union strength and co-operation; from 1980 on, progressive union weakness. Periods of union strength, the authors argue, caused high employment by encouraging labour hoarding. Union power kept the larger 1973–5 shocks from affecting the growth rate of any of the macroeconomic variables studied, while the smaller 1979–80 shocks did affect the long-run path of industrial employment and of hourly wages but not of output or hours worked. It was the unions' shift in 1976 to a cooperative work-sharing strategy that weakened their organisational and bargaining power, making possible the different outcome in the wake of the 1979–80 shock. The decline in industrial employment is seen in part as a disciplinary device forming one element in a 'new regime' also featuring more restrictive monetary policy and a decline in wages.

The conclusion, combining qualitative, institutional history and statistical analysis, is that the change in the industrial relations regime at around 1980 coincided with or slightly preceded changes in the mean trends of only employment, unemployment, and money supply. Price and wage data began to decline during the period of co-operation.

The findings are not consistent with explanations based exclusively on the credibility of monetary stance, on insiders-outsiders, or fixed labour costs. Rather, the authors find that labour hoarding stemmed from union strength through either militancy (threat) or co-operation. Co-operation, however, while maintaining employment and beginning wage and price stabilisation, was accompanied by a worsening of income distribution that undermined it as an industrial relations regime.

Renato Brunetta and Carlo Carraro: Incomes Policies as Co-operative Strategies: Lessons from the Italian Experience of the 1980s

Using as its point of departure the Italian experience with incomes policy in the 1980s, the paper offers a new explanatory framework in which incomes policy is seen as the co-operative outcome of a conflictual, long-term game among a number of players (workers, unions, firms, government, parliament, and so on). The assumptions coincide well with Italy's real situation of centralised bargaining (synchronised national contracts, indexation, and so on), strong unions, and pervasive state presence in the economy. Assuming that each agent's action affects the welfare of the others, the authors argue that these externalities may lead government to intervene to enforce the distribution of the gains that stem from the harmonisation of the agents' actions.

The originality of the game-theoretic approach taken lies in its postulate that, except in an intertemporal dimension, incomes policy cannot be adopted, in that the agents will not co-operate if the game is a single-play one, in which it is to the advantage of each not to cooperate if the others do. Rather, incomes policy must be a long-term agreement sustained by appropriate norms and institutions. Decisions are supposed to be decentralised and sequential (workers choose unions, tripartite agreements specify wages, prices, and taxes, and finally parliament ratifies or overturns the agreement). Each player naturally maximises his inter-temporal payoff, profit or utility. Economic decisions are interdependent, markets oligopolistic, industrial relations centralised. For simplicity it is assumed that unions set wages, firms set prices and employment, and government sets monetary and fiscal policy.

To eliminate 'free-riding', any incomes policy agreement must be policed or self-policed, which means the development over time of norms and institutions punishing non-compliance. Time and non-myopic discounting of future benefits are crucial to a co-operative outcome. This, however, is not consistent with the decision by some Italian unions in 1984 to discontinue support for the co-operative incomes policy. This is explained in terms of a separate sub-game, between workers and unions, in which even if in the long run incomes policy benefits all players, unions sometimes must behave differently to ensure their own survival.

Incomes policy is likely to be inequality-preserving. Profit-sharing

is one mechanism that may be helpful in sustaining such agreements. The paper, finally, shows that an agreement may be sustainable even when unions may lose worker support if they co-operate. In these circumstances, the long-term equilibrium is a polymorph, and some unions will refuse to sign the incomes policy agreement while others accept it.

David Metcalf: Trade Unions and Economic Performance: The British Evidence

The paper investigates the effects of trade unions on pay, productivity, profits, and jobs in the Britain of the 1980s, following Flanders in the assertion that unions have both a vested interest effect and a sword of justice effect. The former accounts for the lower labour productivity and higher relative pay found in firms with high union density. Where unions are recognised, profitability is lower, job gains rarer and job losses more likely. The sword of justice effect persists, and wage dispersion and wage differentials by race, sex and occupation are narrower in union companies.

Neither effect has been completely overturned by the transformation of the industrial relations climate in Britain in the 1980s, but the transformation has radically altered labour productivity patterns in manufacturing, and productivity has accelerated sharply. The change can be attributed to fear, competition, and the decentralisation of collective bargaining.

The paper finds that strong unions, indicated by the presence of a closed shop or very high union density, affect costs and performance more than weak unions, even where these are recognised collective bargaining agents. The impact of strong union presence on profitability and jobs remains even allowing for the life cycle and industrial composition of plants.

Richard Freeman: On the Divergence in Unionism Among Developed Countries

The paper examines the evolution of unionism in the course of the post-1973 'crisis of unionism' throughout the West, explaining why union representation declined in some countries but not in others. It finds that unionisation rates diverged greatly; that membership shifted from private sector blue-collar workers to public sector and white-collar workers everywhere; that the divergence in density is not

explained by changes in the industrial composition of employment, or in public attitudes to unions, or by governmental protection of labour; but that inflation was a contributing factor, unions doing better in countries with high inflation. In some cases, where unions dispensed unemployment benefits, higher unemployment raised union density.

The prime reasons for the divergence are institutional, depending on the incentives and opportunities that the various industrial relations systems give employers to oppose unions. Unions did comparatively well under neo-corporatist arrangements, poorly where decentralised bargaining provides a strong incentive for hostility to unionism and where management is free to act on the incentive.

In terms of the union response, union organisation and action adjusted significantly in some countries where unionism was declining but not in all. The paper finds that if the trends of this decade continue, the industrial world will be divided into two very different groups: neo-corporatist countries with strong trade union movements, as in Scandinavia, and countries like the USA, with 'ghetto unionism' for special segments of the work force.

The paper concludes that the view of industrial relations as converging transnationally with development is not borne out by the facts. Union density diverged among developed countries in the 1970s and 1980s, implying that quite small differences in labour relations institutions have a major impact on the evolution of unionism. In particular, private sector unionism is more fragile than has been thought, as shown by its decline in Japan and the USA. Thus labour relations structures are never immovably established but must be continually renewed with the shifting balance of power between workers and management and their changing interests.

PART III LABOUR FLEXIBILITY AND UNEMPLOYMENT

Samuel Bowles and Robert Boyer: Labour Market Flexibility and Decentralisation as Barriers to High Employment? Notes on Employer Collusion, Centralised Wage Bargaining and Aggregate Employment

Despite the resurgence in this past decade of an old orthodoxy, namely that unemployment is caused by wages outstripping productivity and that the best way to promote fuller employment is to

enhance market mechanisms via industrial relations reform. The reality, however, as both theoretical and econometric studies have shown, is that relations between wage formation, centralisation, and unemployment are much more complex. During the 1980s countries where industrial relations are more decentralised have not performed better; if anything, the reverse is true: more centralised bargaining has succeeded better in containing the surge in joblessness without hindering the process of disinflation. Pure market flexibility is thus not the only way to fostering employment. Collective institutions for labour mobility and wage determination, training and retraining may be even more effective.

A series of models contemplate a variety of institutional settings ranging from a thoroughly decentralised bargaining system and free market to a relatively highly centralised industrial relations system. All suppose the peculiarity of the labour commodity, in that it requires incentives and discipline. In a pure free market system, loss of control over labour intensity, paradoxically, prevents the achievement of full employment. By contrast, collusion between firms, to produce a *de facto* monopoly, results in a different sort of wage formation and generally higher employment levels. Positing a single, strong union that calculates the likely macroeconomic impact of its actions, surprisingly, does not necessarily result in better performance than the purely decentralised case. A final case is that of a small, price-taking economy, that is, one subject to strong international competition. Surprisingly, here too the social democratic model can outperform the purely competitive ideal type.

The main conclusions are: (i) that purely competitive markets and uncoordinated strategies may lead to unemployment; (ii) the greater the scope for bargaining, the better the macroeconomic outcome; (iii) that quasi-full employment in a small open economy with a single, strong union can be explained by the union's necessary strategic concern with the general equilibrium; (iv) that highly conflictual labour market institutional arrangements, such as those that emerged in Sweden in the past decade, can also deal with the challenge of full employment. In short, the currently prevalent exaltation of decentralisation as opposed to decentralisation needs reconsideration.

Andrew Newell and James Symons: The Passing of the Golden Age

This paper deals with the causes of rising unemployment in Britain. The authors claim that since the British experience reflects that of

other countries, their explanation of unemployment is valid elsewhere as well. The explanation is based on the changing tastes of the labour force, and it is easy to see how different this is from that offered by neo-corporatist economists. The authors contend that in the 1950s and 1960s unemployment was much lower because the labour force had an extremely low taste for it. These individual tastes, it is held, were the primary cause and low unemployment the effect. The authors call these tastes 'home and hearth' and believe they were formed by the hardship of war and the Depression and provoked a particularly strong desire for regular, steady family life. Home and hearth causes a violent aversion to unemployment. Workers thus change jobs less often, spend less time between jobs, and reduce wage claims to reduce the risk of joblessness. The first section of the paper is devoted to substantiating this thesis, using a set of socioeconomic indicators, including social insurance growth, strike activity, marriage, birth, divorce, and illegitimacy rates, and family size, to demonstrate the change in tastes, and consequently individual behaviour, over time.

As the generation of the 'golden age' passed out of the labour force, both components of the natural rate of unemployment rose, that is, search and involuntary unemployment. Changes in search unemployment correspond to fundamental preferences and are difficult to resist, but one can try to do something about involuntary unemployment, and this is exactly what the British government attempted for so many years. The result was total failure. The British experience shows that in the long run the involuntary component of unemployment too is hard to deal with. If involuntary unemployment is caused by trade union market power, say the authors, then corporatism could be the right response. In principle, some incomes policies can be effective in reducing unemployment, and they could be enacted with democratic approval, but in practice this seldom happens. In order to gauge the impact of British incomes policies and at the same time test the hypothesis of changing tastes, the paper estimates a small model consisting essentially in a Phelps-Friedman type of Phillips curve. The main finding is that most of the difference between present unemployment levels and those of the 1950s is accounted for by the changed tastes of a new generation of the work force, the proxy of 'generation' being the proportion of the working-age population born before 1930. Incomes policies did reduce unemployment, but mainly in the short run, and they were always rescinded sooner or later, the authors say, because they were unpopular. Governments that used them to combat unemployment

tended to end up out of office. Thus in the end came the decisive triumph of the Conservative Party, which was due at least in part to the persistent failure to recognise that the 'golden age', with its full employment, was a thing of the past.

Assar Lindbeck and Dennis J. Snower: Inter-industry Wage Structure and the Power of Incumbent Workers

The inter-industry wage structure is an aspect of the labour market that is receiving increasing attention. Many empirical studies have found an apparent stability of this structure across occupations, age-groups, job tenure, and countries. It has also been shown that industries with comparatively high wages tend to have high profits, high concentration ratios in the product markets, high capital-labour ratios, and high union density. This paper reviews the theories used to explain this empirical evidence.

The theory of perfectly competitive wage markets can explain the differences as due to unmeasured differences in job attributes or labour quality, but it cannot explain why inter-industry wage structure is related to inter-industry differences in concentration ratios and union density. Nor can this correlation be explained by the efficiency wage theory, which focuses on inter-industry differences in the relation between wages on the one hand and productivity and quit-related costs on the other.

The paper suggests another explanation, arising from the insider-outsider theory the authors have set forth in earlier works to account for involuntary unemployment. The basic idea is the same: wages are the outcome of a bargaining process whereby firms and their 'insiders' (employees whose jobs are protected by substantial turnover costs) share the economic rent from insider employment. The insiders' wages will be higher, other things being equal, the more their firms stand to lose from a breakdown in wage negotiations. The authors develop a theoretical model showing that under specified conditions what firms stand to lose depends on: (a) their potential profit opportunities; (b) their capital-labour ratio; and (c) the concentration ratio and workers' market power in their industry. The paper also seeks to explain why the industries that offer high pay to workers in one occupation tend to pay well for all occupations. The high wage industries may be particularly vulnerable to insider power. For example, industries that make high profits tend to have a comparatively high stake in avoiding labour conflict in all the relevant occupational, age, and seniority groups. It is for this reason, that is,

the greater potential cost to firms if negotiations fail, that wages are set at a comparatively high level – higher than would be justified by productivity or the quality of jobs.

Carlo Dell'Aringa and Claudio Lucifora: Wage Determination and Union Behaviour in Italy: An Efficiency Wage Interpretation

The Italian labour market underwent major institutional changes between the 1970s and the 1980s which by no means harmed the performance of the economy. The authors start from an analysis of the wage-productivity relationship, considering how institutional conditions and union behaviour might have influenced the wage determination process.

They distinguish between two periods. The first was marked by strong union pressure, a high degree of social conflict, and substantial narrowing of wage differentials. In the second, unions had a less conflictual attitude, accepting the implementation of an incomes policy, and there was a widening of both inter-industry and skill differentials. In both periods unemployment rose. It also appears that during the period studied union concessions in terms of flexibility (that is, the easing of restrictive practices) were matched by large gains in labour productivity. In attempting to explain these 'stylised facts', the paper carries out two types of empirical tests: a cross-section analysis of the wage structure, using individual data on wages and salaries plus various other characteristics; and a time-series analysis of aggregate data for the engineering industry.

The analysis of the wage structure confirms the findings of many empirical studies that there are substantial 'unexplained' wage differentials between industries and occupations. Closer inspection reveals a systematic correlation of occupational pay premiums across industries. These results led the authors to reject the standard competitive interpretation of the wage process and to propose an alternative model, namely the efficiency wage hypothesis, which seems to be better founded empirically.

A more direct test of the efficiency wage hypothesis is performed by the time-series analysis. An augmented production function, which takes into account efficiency wage factors, is fitted for the period 1974–85. The purpose is to assess the impact of efficiency wage premiums on labour productivity. In other words, the intent is to consider whether the share of workers' wages fixed unilaterally by the employer can increase labour productivity and whether it eventually did.

Statistical results seem to support the view that a significant positive relation exists in the Italian engineering industry between the efficiency term and labour productivity. On the basis of the empirical evidence, the authors conclude by suggesting that there may be some scope for firms to pay efficiency premiums, particularly when bargaining activity is depressed. However, the possibility of adverse wage and employment effects should not be ignored. An increasing wage dispersion and slow employment growth – due to a buoyant wage productivity relationship – could well prevail in the short term.

David Marsden: Institutions and Labour Mobility: Occupational and Internal Labour Markets in Britain, France, Italy and West Germany

What role do institutions play in the formation of labour markets? How big is it and how important is it for policy? This paper deals with one aspect of the question, namely institutional support for occupational and internal labour markets (OLM and ILM, respectively). The distinction is developed for the market for skilled manual workers. By OLM is meant a market in which workers have access to jobs of a particular type in many firms, usually by holding a recognised qualification. There is said to be an ILM for a particular position in an organisation when the employer regularly seeks to fill vacancies in it from among its present staff.

An important feature of OLMs is a high degree of skill standardisation and an equivalent standardisation of vacancies, so that mobility of skilled labour between firms is possible. For an ILM standardisation is unimportant, and job design can be more easily adapted to the needs of the individual enterprise.

The author presents some evidence of the relative predominance of each type in Britain, West Germany, France, and Italy using a number of indicators: age, length of service, mobility, industrial training, job classification, and so on. Each allows discrimination between different types of labour market. With respect to age, for instance, one should expect that in an OLM the time needed to acquire the necessary qualification will be most commonly spent at the beginning of the career in order to maximise the period over which a return can be earned. Thus the employment share of skilled workers in a given age range should rise fast and then level off at a relatively early age. As a consequence, the proportion of skilled workers in the young age-group should be larger in countries where OLMs prevail. A similar argument can be applied to length of

service. Using these and the other indicators proposed, the paper concludes that OLMs are more prevalent in Britain and Germany, ILMs in France and Italy. Marsden pays special attention to the institutional support that sustains OLMs in Britain and Germany, and tries to explain why such support is critical to interfirm labour mobility.

In Britain, where the utter collapse of the apprenticeship system is a distinct possibility, a collapse of the occupational markets for skilled labour threatens. At times it seems that the government and some employers see British OLMs as a source of rigid job demarcation rules and multi-unionism and would not be unhappy to see more widespread existence of ILMs. This sentiment might be shared by employers seeking greater freedom to adopt pay structures designed to promote employee commitment, something which the OLM cannot offer. But the author warns that there are also disadvantages in the predominance of ILMs. For instance, ILMs leave workers and especially skilled workers much more dependent upon their current employer, so that job security becomes a much more serious issue. This is precisely the problem that some European countries have had during the industrial employment crisis of the last decade. In such circumstances, the more prevalent ILMs as the mechanism of matching workers with jobs, the more acute the problem of reorganising or restructuring firms and sectors.

Guy Standing: Labour Flexibility and Insecurity: Towards an Alternative Strategy

Since the early 1970s the labour market has been radically transformed in ways that suggest that we will not see a return to full employment, in the old sense of the term, or of the social consensus associated therewith. This or some similar affirmation has been made by many of the conference participants, but the meaning has been quite different depending on the related analysis. Standing's analysis is based on a negative assessment of the way things have changed in recent decades and in particular of the responses of various governments to changing social and economic conditions. A rapidly changing international division of labour, the technological revolution, and inflationary pressures are among the developments that have undermined the postwar consensus and led to the new orthodoxy of the 1980s, which has shaped policy almost everywhere: 'supply-side economics'. Standing is sharply critical of this approach, which has

been taken in the belief that slow growth, unemployment and other adverse labour market developments were the effect of structural rigidities, excessive public spending, and restrictive regulations. The effects of the policy are all negative, Standing contends. Income distribution has worsened, poverty has increased, unemployment has expanded, and precarious and irregular employment has spread.

If the labour market is developing along these lines, what are the strategic options? An alternative to supply-side economics is what the author calls 'social dividend strategy', a package consisting in three parts. First there is 'collective profit sharing' implemented via community or regional 'wage earner funds', for example, such as are tentatively emerging in Sweden (Meidner's scheme). This, Standing argues, would enable the surplus generated by profitable enterprises to be channeled into projects with a high social rate of return for the benefit of the local population. The second ingredient of the strategy is 'community unionism'. The key to union revival is acceptance of flexible labour markets as an economic reality. With them, workers can expect to shift between occupations, industries, and work statutes, and will be expected to do so. In these circumstances, trade unions will have to evolve into community unions organising local communities of different types of worker. This is the way to guarantee job security under new conditions. Finally, 'citizenship income security' must be provided. The basic proposal is a guaranteed minimum income as a right of citizenship. Standing presents various arguments for the feasibility of the proposal and its usefulness as a solution to many of the problems cited above. It would not be a panacea for poverty, and it could be introduced only as part of a general strategy for reducing inequality and promoting growth, but as the author argues it could yield critical advantages for the labour market. It would facilitate flexible forms of employment, encourage some areas of the underground economy to switch to the tax-paying mainstream, encourage work sharing, lessen the stigma of unemployment, and so on.

The strategy envisaged is built upon the recognition that since the new, more 'flexible' labour market cannot provide income security for a large part of the population, it is essential to relax the linkage of benefit entitlement to work, to formal membership in the labour force. The concept of a society organised according to a social dividend strategy, in which individual income security is integrally linked to collective motivation for capital formation and the redistribution of the surplus, offers the nucleus of a new social consensus.

Part I
Corporatism and Economic Performance

1 Sectors in Modern Capitalism: Modes of Governance and Variations in Performance

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1 INTRODUCTION

'Capitalism is a moving target'. This seems so obvious as to be hardly worth repeating, but the implications of such an observation have rarely been explored, much less been incorporated systematically into our explanatory models and theories. 'Its' science, the discipline of economics, is usually presented as a singular and consistent body of steadily accumulated knowledge, without epistemological or theoretical breaks due to discontinuities in its subject matter.[1] In ordinary language, we rarely refer to 'capitalisms' in the plural,[2] and the most common qualifier we place in front of the singular noun is just the name of a country or a people: American capitalism, German capitalism, Bolivian capitalism, and even (more recently) Soviet capitalism. Efforts to specify fixed sequential stages of capitalism; mercantile, industrial, financial and post-industrial; or local competitive, national monopolistic, state monopolistic and trans-national monopolistic, have not proven very fruitful analytically, although they have occasionally been quite effective politically. Perhaps the most useful device for breaking up the subject matter and producing meaningful sub-categories for analysis has been to impose a simple temporal distinction between early, later, delayed, late, even late-late and delayed-late capitalisms. Alexander Gerschenkron and Albert Hirschman (among others) have argued convincingly that the

the *timing* of capitalist development has a significant impact upon both the role of institutions and the strategy of actors (Gerschenkron, 1962; Hirschman, 1958). To this, Raul Prebisch, Fernand Braudel, André Gunder Frank, Immanuel Wallerstein *et al.* have added the observation that the unit's *location* within a worldwide system of exchanges – its proximity to the centre, semi-periphery or periphery – also makes a crucial difference (Prebisch, 1950; Braudel, 1966; Frank, 1967; Wallerstein, 1980, 1974/80).

From these and other arguments, I take it for granted that the comparative study of capitalism – as distinct from the academic discipline of economics – requires a special sensitivity to the likelihood of virtually uninterrupted change in institutional structure and strategic behaviour. This holds for variation within the same economy over time and, *a fortiori*, for variation across economies at the same point in time. Capitalism's basic motives, mechanisms, attributes and outcomes may remain constant: *quest for profit* (or 'maximising discounted net assets'), *allocation by competition*, *drive toward expansion* and *tendency for accumulation*. These can be momentarily 'squeezed' by other claimants, distorted by political interventions and cultural norms, racked by cyclical crises or natural disasters, and/or expropriated by vandals and thieves – but where capitalism of whatever type and configuration is well entrenched (and it has never been more entrenched and faced fewer alternative regimes than at the present moment), these generic properties will eventually reassert themselves. What will not necessarily reassert itself, however, will be the previous institutional order and strategic calculation – whether of capitalists themselves, or of those upon whom capitalists depend for the provision of necessary social and political infrastructure. Indeed, it is precisely this capacity both to generate new economic arrangements and to adjust its structures and practices to changes in non-economic conditions that has so impressed its friends and astonished its enemies. The paroxysm of 'late capitalism' always seems just around the corner – and yet is getting farther away!

To the outsider reviewing the contemporary literature in economics, this dynamism in structure and strategy is not readily apparent. The basic constants are reaffirmed (not to say, reified) and given certain law-like propensities for change, but only within the opportunities and constraints set by a pre-established (and presumably immutable) institutional context. The firm, the market, the labour contract, the production process and the economy all appear as fixed

and endogenous. No effort is wasted in trying to explain how they came about or how they are likely to be transformed. They just perform according to a given script, unless they are somehow deflected from their economising role by unpredictable and invariably exogenous factors. Even if one accepts the idea that the capitalist plot remains more-or-less constant in its basic motives, mechanisms, and so on, but searches for the reasons why the scripts seem to have changed and new actors have got into the play, one must look outside the established ranks of the economists' guild. One must turn, if not to radical dissidents or utopian schemers, at least to the practitioners of other academic disciplines such as sociology, business or economic history, or to the writings of certain mavericks within the discipline of economics, especially those known as 'institutional economists'.

Ezio Tarantelli was one of those mavericks (although I do not know if he would have appreciated the title of institutional economist). His special genius was to have recognised the significance of the emergence of trade unions as economic actors and of industrial relations systems as contractual arrangements, and to have attempted systematically to write both into an altered script for explaining the dynamics of contemporary capitalism – rather than to have treated them as 'extra-economic' nuisances or temporary aberrations. Particularly crucial in his analysis was the extent of centralisation in the organisational structure of the union movement and in the level of bargaining between capital and labour. This naturally brought him into contact with the burgeoning literature on neo-corporatism which had been stressing the very same properties from a quite different perspective. He was particularly successful in transposing the neo-corporatist emphases on the sociological origins of collective action and the political dynamics of interest conflict into the idiom of economics by demonstrating, first theoretically and then empirically, how these changes affected both the likelihood and the impact of income policies through what he called '*la curva di affidabilita*'. By displacing this curve outward, the emergence of enhanced trust between leaders of organisations representing otherwise conflicting class and sectoral interests permitted the attainment of more mutually satisfactory solutions to the classical trade-off between employment, inflation and real income than would have been the case with a more decentralised bargaining system or individual labour contracts.[3]

It does not diminish the stature of Tarantelli's contribution to the development of a genuine 'political' economy to suggest that the target at which he took aim (and successfully hit at the time, in my

view) has since moved on. This was to be expected from my opening remarks. Unfortunately, neither his nor the related work on neo-corporatism accurately predicted the direction or the magnitude of subsequent change. My hunch is that Tarantelli and the rest of us shared a distinctive, if largely inarticulate, set of assumptions about the likely evolution of capitalist economic-political institutions and practices. In a phrase (which only a few of us used explicitly), we believed in the advent of 'organised capitalism'.[4]

For our purposes here, this evolutionary model can be summarised in terms of three interrelated premises. All seemed to be emerging gradually and unintentionally – if not surreptitiously – but at different times and to different degrees in the national economies of advanced industrial societies:

1. The growing importance of the formal, specialised and central-ised organisation of interests, especially those based on social classes, economic sectors and professional categories – displacing economic roles traditionally assigned to individual entre-preneurs, workers and consumers and political roles occupied by individual voters and local notables.

2. The direct and systematic incorporation of these interest associ-ations within the policy process, shifting the exercise of influence away from the traditional, territorially specified, centres of power in party and parliament, and away from the usual con-flictual strategies of strikes, lockouts, demonstrations, and so on.

3. The expanding role of these associations in the negotiation of comprehensive social agreements, especially tripartite ones in-volving capital, labour and the state, that set goals and limits on macroeconomic and social policy, replacing market mechanisms and state intervention with new practices of consent formation and collective self-regulation.

The first signs of these changes in class relations began to appear in Europe during and immediately after the First World War. The label, 'organised capitalism', was first coined by the German Social Demo-crats during the Weimar period to refer both to their analysis of these new realities and their preferred strategic response to them. In that country, the prognosis of a peaceful and benevolent – one might even say, deliberate – evolution in the institutional structure of capitalism was proved tragically wrong by the early 1930s (Maier, 1975).

Where it worked better was later in that same decade when several

small European countries began experimenting with new forms of 'social contracting' among interest groups. Faced with a collapse in international trade, high unemployment and downward pressure on wages, trade unionists and business association leaders converged on a class compromise that had the effect of establishing broad parameters on macroeconomic policy outside party-parliamentary and executive-administrative channels. They managed to avoid the social wastefulness of a market-dictated outcome and the bureaucratic rigidity of a state-mandated solution. The Swiss Social Peace Treaty of 1937 and the Swedish Saltsjöbaden Agreement of 1938 were the forerunners of modern corporatism/corporativism – even if they carefully avoided any reference to the concept itself, which at that time had been appropriated by such authoritarian regimes as Mussolini's *Fascismo*, Salazar's and Getulio's respective *Estados Novos*, and so on. Both the Swiss and Swedish contracts have been renegotiated and revised since and they remain the primary basis for industrial relations and economic policy-making in these countries.

After the Second World War several other countries moved in a similar direction. The Netherlands and Belgium were ruled initially by coalitions forged in exile that included corporatist components and a marked increase in the self-organisation of capitalists. Norway, Denmark and, later, Finland gradually adopted centralised bargaining between capital and labour that set a wide range of policies outside the partisan and administrative channels. But by far the most striking case of neo-corporatism and organised capitalism has been (and remains) Austria (Marin, 1985). As part of a comprehensive strategy aimed at regaining national sovereignty from its four occupying powers, Austrian élites came up with a complex power-sharing arrangement between the two, previously warring 'Camps' (*Lager*) – the Conservatives and the Socialists – that also included provisions for a 'Social Partnership' between peak associations representing conflicting class interests. The latter aspect persisted even after the 'consociational' arrangement between the parties switched to competitive alternation in power. It remains the most distinctive trait of Austrian political economy and the main reason why many foreign observers (including Ezio Tarantelli) admired its exceptional economic performance.

The above excursus suggests the primary site for modern corporatism and organised capitalism: small European countries with well-organised class and sectoral associations and highly vulnerable, internationally penetrated economies. This tendency was all the more

marked if they also had strong Social Democratic parties, stable electorates, relative cultural and linguistic unity and neutral foreign policies.

But this does not mean that efforts to establish such arrangements were confined to these, admittedly exceptional, countries. We analysts of neo-corporatism were quick to point out that during the 1960s and 1970s everywhere in Western Europe the need was felt for some institutionalised and centralised mode of negotiating (and subsequently implementing) explicit compromises between social classes and economic sectors.[5] We questioned both the Liberal belief that an implicit consensus on a 'fair' distribution of wages, profits and investments would suffice; and the Pluralist assumption that an implicit normative agreement on the 'proper' rules of the game would be enough to ensure the compatibility of democratic freedom and capitalist accumulation.

Our argument was that certain general political factors such as: (1) more effective freedom of association; (2) increased capacity for collective action, especially by trade unions; (3) public commitment to full-employment; and (4) political legitimation based on citizen participation had combined with a series of economic and administrative changes such as: (1) the growing reliance on professional expertise, specialised information and explicit group compliance; (2) the need for planning, more extended time-horizons and greater security in investment calculations; (3) and the imperative of ensuring social peace, worker flexibility and wage restraint for purposes of international competitiveness. All these factors seemed to be pushing advanced industrial societies toward a qualitatively different strategic and institutional context in which virtually continuous bargaining and explicit contracting among representatives of class interests were destined to become the central feature of the new, organised capitalism. To us, the 'temptation' toward corporatism (if not the 'inexorable trend' toward it) was not confined to those small, well-organised, neutral, Social Democratic and internationally vulnerable countries where it emerged first and clearly worked best.

We expected to see it cropping up elsewhere (at least in Western Europe) and, therefore, watched with considerable interest the efforts of the Germans to run their '*Konzertierte Aktion*' scheme, the repeated attempts of the British to produce an incomes policy and negotiate a '*Social Contract*', de Gaulle's abortive proposal for institutionalising the 'participation' of organised interests in a revised *Senat*, the various *Accordi* and *Protocolli d'intesa* that the Italians

negotiated in trying to bring wage costs and inflation under control. Admittedly, none of these worked very well – especially after the repeated oil shocks and the declining growth rates of the later 1970s and early 1980s – but we still remained convinced that this was the path that national capitalisms were eventually destined to travel, if they were to respect *both* the civic rights of free assembly, petition, contract, self-organisation, and so on, *and* the functional imperatives of expanded accumulation and social peace. Moreover, several econometric analyses of OECD data during the 1960s and 1970s consistently demonstrated that the performance of the more corporatist countries in terms of employment, inflation and productivity was significantly better – even if little or no impact on overall growth rates was observed.[6]

2 THE CHANGE IN SCENARIO FROM ORGANISED TO DISORGANISED CAPITALISM

One of the things that we, neo-corporatists, neglected to include in our projections was an understanding of the rather independent evolution of partisan politics and electoral preferences.[7] Also the United States was never considered in our speculations – its sheer size and pluralistic institutional structure seemed exceptional, as was the oft-noted absence of a socialist or social democratic party. The victory of Ronald Reagan, therefore, passed unnoticed. His neoliberal rhetoric, his advocacy of 'supply-side economics' and his eventual deregulation policies hardly seemed to threaten the entrenched Keynesian welfare-state orientation of Western Europe – at least until Margaret Thatcher came along.

The complex processes of 'corporatist intermediation' (to use a favourite expression of ours) had developed largely outside the circuit of political parties and beyond the reach of individual citizens. Moreover, they manifestly and deliberately intervened in the 'free play of market forces'. It should come as no surprise to learn that they were an anathema to the newly triumphant partisans of neoliberalism. Margaret Thatcher, in particular, has devoted considerable energy to the extirpation of such trends from the British policy (see Bonnet, 1985); Ronald Reagan paid less attention to the problem simply because in the United States there was relatively little to dismantle in this area (Salisbury, 1979; Wilson, 1982).

Elsewhere, that is, in the rest of Western Europe, the slowing

down and even reversal in the corporatist trend was less a product of ideological zeal, than of the impact of new developments in technology and the international economy (to be discussed below). For example, 'bourgeois' governments came to power in Sweden and Norway after long periods of Social Democratic hegemony, and they made no move toward dismantling these countries' corporatist bargaining arrangements. Instead, their viability was undermined by different forces.

Rather than a confirmation of our confident prediction of an evolution (however uneven and unintentional) toward 'organised capitalism', we now find ourselves apparently confronted with an increasingly 'disorganised capitalism' or, to put it more positively, with an increasingly plausible revival of 'competitive capitalism' *via* deregulated national markets and unhampered international exchanges. In a recent book, Scott Lash and John Urry have sought to prove that virtually all of our expectations should be reversed.[8] For example, instead of a greater concentration of capital at the national level, we find its growing dispersion on an international scale. In the place of a large and increasingly unionised working class, we see its numbers shrinking and its organisations weakened, as new governments take over that are dedicated to removing 'union privileges' and new service professions emerge that are much less prone to collective action on a class basis. Those comprehensive national level bargaining arrangements that were so central to Tarantelli's argument and to the neo-corporatist approach have either collapsed or shifted to other levels.[9] The assumption of a growing commitment to the welfare state and full employment by politicians and civil servants – hence, an increased need for collaboration with specialised interests in the implementation of policy – has given way to stasis or even retraction in such commitments. State regulation which seemed to be such an imperative for the reproduction of capital is now seen as impeding it – as is the intermediary action of business and professional associations. The list could go on!

In the following remarks, I will suggest: (1) that the reversal in trend has not been so dramatic as Lash and Urry suggest; (2) that reports of the demise of corporatism may be premature; (3) that organised capitalism may still be a more likely outcome than disorganised, that is, neo-liberal, capitalism. However, exploring these questions will require a good deal of rethinking and revision about changes in the institutional structure of capitalist societies, especially this involves a shift in the level of analysis away from an exclusive

concentration on the national economy both downward to particular 'sectors' and upwards to supranational and global 'regimes'.

3 'SECTORS' AND A NEW MODEL FOR THE COMPARATIVE STUDY OF CAPITALISM

Recently, several West European, North American and Japanese scholars have begun meeting with the objective of creating an SSRC working group on 'Comparative Capitalism'. We have brought together an eclectic bunch of sociologists, political scientists, economists and historians and we hope that our deliberations over the next few years will produce a much revised – not to say quite novel – basis for understanding the sources of variation in the institutional structure of capitalism within these three 'world-areas': Western Europe, North America and Northeast Asia. Moreover, we are convinced that these persistent differences in structure will contribute a great deal to explaining the persistent variations in economic performance, social welfare and political stability that have affected these countries. Our strategy, however, is not to begin with such diverse aggregate outcomes, but to ask why it is that economies, supposedly of the same type and general level of development-complexity-modernity-sophistication should have such a different mix of 'ways of doing business'.

We also agreed (for the moment) to avoid the temptation to engage in 'Prefix Capitalism', that is to say, to begin by sticking a qualifying adjective in front of the substantive noun, capitalism, and to imagine that one has thereby explained something. In particular, this means explicitly foregoing recourse to cultural or national explanations, i.e. calling an observed set of practices: Japanese, German, Norwegian or American and attributing the observed differences to that society's peculiar values, norms, habits, expectations, etc. In the longer run, it may well prove necessary to revert to some notion of national culture or policy-style, but in our initial deliberations we have opted to move on the problem from the opposite direction.

To save time, let me summarise the principal elements in the approach we are developing to comparative capitalism. These do not necessarily reflect a firm agreement by all participants – we have met only once as a whole and have yet to draft a definitive statement of our intentions – but they do represent my interpretation of where we seem to be heading:

1. Capitalism cannot (or can no longer be) studied as a whole, but must be broken down into subsystems – into a variety of autonomous, self-regulating contexts and levels. Instead of evolving, as both Liberals and Marxists had presumed, toward a single, unified and perfectly competitive market in which all factors of production would flow to their marginally most efficient use without spatial or functional barriers, we find significant, persistent and growing variation in the conditions under which resources and rewards are distributed. Despite the apparently homogenising effect of a burgeoning 'world capitalist system' (and, perhaps, even because of it), the practices of capitalism are becoming more, not less, diverse *within* national economies, at the same time that they are becoming more similar *across* national economies.

2. In order to '*reculer pour mieux sauter*', we propose to focus on the *sector* as the key unit for comparative analysis. Our hunch is that a number of changes in technology, market structure and public policy are converging to make this *meso-level* – that is to say the intermediate location between the micro-level of the firm and the macro-level of the whole economy – particularly salient.

    Originally, the decision to focus on sectors was purely a practical matter. In the 'Organisation of Business Interests' project which preceded the present one (and in which several of its participants were involved) four sectors initially provided a purposive sampling frame for selecting particular subsets of capitalists with different problems of collective action and political influence: chemicals, construction, food processing and machine tools (Schmitter and Streeck, 1981). The further we progressed with the interviews and analyses, however, the more impressed we became with the 'reality' of the sectors – with their peculiar forms of organisation and consciousness and the differing ways in which their exchanges were governed. In a sense, they changed in status from sampling parameter to explanatory variable.[10]

    In searching for a theoretical understanding for this serendipitous discovery,[11] I believe there may be two places to look – two different sources for the development of sectors. On the one hand, they are one of the main sites (the other being the community or locality) at which exchanges between producers are 'socially constructed'. On the other hand, they provide the prin-

cipal framework within which many public policies are 'effectively administered'. In other words, sectors can be created and sustained from below through the independent actions of capitalists, and from above through the imposition of rules and regimes by authorities. Needless to say, self-organisation and public policy can interact and combine to produce a sector, an outcome that is especially likely when capitalists find it difficult or impossible to stabilise their exchanges on a voluntary basis, and end up appealing to the state or some other outsider for help.

Capitalism of whatever type depends on the existence of multiple decision arenas within which producers make and exchange goods or services with each other and with final consumers for money.[12] If one adds to the above the assumption that both sellers and buyers are free to participate, to set the terms of their exchange or to leave the arena altogether, one has a fairly conventional definition of a market. Since it will be precisely my contention that these latter conditions are not present in many exchanges involving producers and consumers, I will use the more generic language of 'decision arenas' or 'economic exchanges', and restrict the concept of 'market' to those mechanisms governed only by price and voluntary exchange. A sector is a decision arena bounded by a subset of actually competing or potentially substitutable products.[13]

As Harrison White and Eric Leifer observe, there is a rather strong contrast between the theoretical assumption that markets are composed of competing actors with easy entry and exit, and the empirical fact that most 'markets' have rather stable memberships and structures.

A small and identifiable group of producers, attached to brands, develop stable and distinct reputations among consumers and hold on to stable market (volume) shares. . . . The interdependence between production volume and quality reputation lends to markets the appearance of rigid role structures where producers are cast into distinct and ordered niches (Leifer, 1975, p. 443).

While, as will be seen below, I would go much further in the search for stabilising (or, as I prefer to call them: governing) mechanisms, the generic point is the same: most economic exchanges are socially constructed or structured in the double sense

that they depend on relatively stable roles and they exploit extra-economic relations between actors.[14] 'Pure markets' or spot transactions between strangers with no expectation of further exchanges and no reliance on common norms (other than *caveat emptor*) are the exception. A more realistic view of how producers relate to each other and to their customers should focus on the sector as a possible intermediate level of structuration.[15] Although my reading of the economics literature is deficient, I have the impression that the prevailing approaches – with a few exceptions to be noted below – virtually ignore all the space between the micro-level of the firm and the macro-level of the national economy or state.

3. The study of capitalism *via* sectors is complicated by the fact that sectors are not simply 'given' – either by the nature of technology or by the autonomous and anonymous interaction of producers and consumers. They may seem to exist objectively in the standardised tables of national or international statistical codes, or in the transformative cells of input-output matrices, but this is an illusion (even if, for practical purposes, we may have to use the data that such assumptions generate in order to begin our analyses). Sectors are artifacts. Their members and boundaries are chosen, not given. To steal a phrase from Harrison White, they must be created 'as social structures built jointly by interlocking perceptions and decisions of actors' (White, 1981, pp. 1–2). Moreover, as I hinted above, they can get established for a diversity of motives. From below, so to speak, individual firms may create them to reduce uncertainty in their environments and/or to economise on their transaction costs; from above, state agencies and other authorities may designate them as specific beneficiaries of public policy or as clients of public regulation.

Attention to the meso-level of sectors (which in different countries can also be called by other names such as industries, industry groups, branches of production, products, product groups, and so on) immediately makes the student sensitive to something which has seemingly escaped the attention of most economists: namely, that not all sectors are organised as markets. Instead, once one looks around in any concerted way, one finds an astonishing variety of 'mechanisms' or 'arrangements', more or less formalised, for regulating transactions and exchanges inside and across the boundaries of any one sector.

4   THE VARIETY OF MECHANISMS FOR THE GOVERNANCE OF SECTORS

At present, one of the main theoretical tasks of our working group is to map conceptually the variety of what we call 'sectoral governance mechanisms'.[16] This involves a radical break with the existing literature which insists on imposing a dichotomous choice on this domain: between Market and State (if you follow Charles Lindblom and others (Lindblom, 1977)) or between Markets and Hierarchies (if you follow Oliver Williamson and his transaction cost analysts (Williamson, 1975)). Although neither refers explicitly to sectors as a relevant unit for analysis, the guiding assumption is clear: either you allow a process of dispersed competition between autonomous actors for anonymous customers to send signals about production and allocate resources within a given sector, or some dominant actor (an integrated or multi-division enterprise or a state agency) must use its authority to channel selectively the messages about what to produce and to choose a 'preferred' allocation of resources. To the classical choice posed in the literature on business administration between 'make or buy', between arranging to produce some good or service 'in house' (often by merging with or buying out an existing firm) or acquiring them from someone else through the market, we would add the two other strategic alternatives offered to firms, namely, 'enter an alliance' or 'form a network'. Both authors make a few elliptical references to mixed or hybrid forms of coping with these strategic choices, but the implication is clear that they regard them as intrinsically unstable, not to say undesirable, ways of 'doing business'.

My work with Wolfgang Streeck in the context of the 'Organisation of Business Interests' project has convinced me that this is incorrect. There are many (but not always very visible) ways in which sectors can be governed. Some of them are quite stable and some of them could even be classified as quite desirable from a political or social point of view. For the most extreme cases, the sort of publicly sanctioned monopolies that Weber envisaged, we even coined a special label: private interest governments – PIGs is the unfortunate acronym!

It would be premature to go excessively into the details of my effort to generate a typology of 'modes of sectoral governance'. It is still being elaborated and, hopefully, will be improved in the light of comparative case studies by members of the working group. The

labels I have attached to specific cells are all very tentative, but what is most important at this point is to get the co-ordinates of the property space right, that is to say, to define them by variables that really do make a significant difference in the strategic choice between alternative structures. In Figure 1.1, I have done this by distinguishing on the vertical axis between two generic types of exchange and on the horizontal axis between three means of enforcing whatever mechanism or arrangement comes about.

First, as was hinted above, it is important to differentiate between an 'economistic' and a 'sociological' or 'politico-logical' motive for the creation and governance of sectors. These correspond roughly to the notion that sectors can be created 'from below' or 'from above' (or, better, 'from within' or 'from without'). In the top row of Figure 1.1, rationally maximising producers or firms with their existing capacities and stable preferences act autonomously in search of a solution at which they can make a profit. In the second row, actors with already established identities and obligations within a larger socio-political unit interact or bargain explicitly with each other in search of an outcome that is normatively and politically acceptable. Both of these are 'models', that is, exaggerated simplifications of a much more complex set of actions and motives; both are rooted in well-established theoretical traditions; both are potentially valid for understanding why a particular type of governance mechanism may emerge. In fact, I doubt whether either alone could do the job. The *homo economicus* on the top row would be constantly plagued by the opportunistic defections of his 'partners' who would have no reason for trusting the agreement or fearing its sanctions; the *homo sociologus* on the bottom would seem so bound by fixed roles and collective obligations that it is hard to imagine why he would dare to innovate in such a sensitive area. Even if one admits that the actual choice of mechanism is likely to involve some mix of profit-maximisation and norm-generation, it still seems useful to separate the two analytically and to use them to define the property space within which actors can search for a solution. Jumbling them together in a so-called mixed motive game just produces an indeterminate solution – even if, alas, this corresponds to the real world of business.

The horizontal axis of Figure 1.1 captures a quite different dimension of the problem of sectoral governance: namely, how can a stable solution be sustained. If, however motivated, the actors do come up with some arrangement for structuring their exchanges, what will ensure that it will persist? At the extreme four corners, economic and
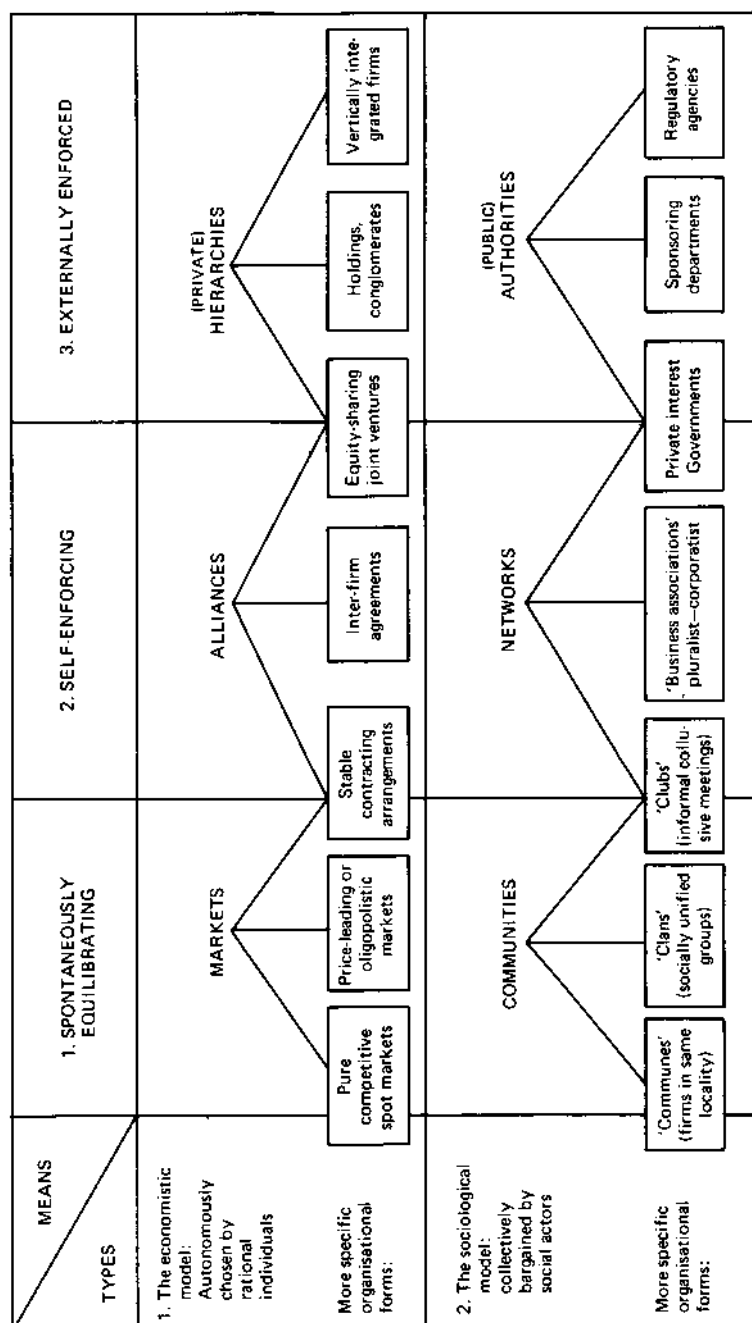
Figure 1.1 Types of actors, means of enforcement and modes of governance

social theory has no difficulty in coming up with answers. Markets in the upper left are spontaneously equilibrating (*vide* the hiding hand) on the basis of equal marginal rates of return; communities in the lower left are presumably self-equilibrating because of the universal normative consensus among their members that things just ought naturally to be that way. Neither requires any form of coercive threat, nor an explicit mechanism for (re)distribution or side-payments. Moving to the extreme right of Figure 1.1, both of these properties become necessary parts of the solution (*vide* the Visible Hand). The private hierarchies in the upper right hand corner do need an external enforcement mechanism and this is provided by the distribution and enforcement of property rights. As long as the merger or growth of the co-ordinating firm is based on acceptable standards of acquisition (for example, not in violation of anti-trust law) and backed by an effective judicial system, it should be able successfully to internalise and, therefore, control the requisite exchanges.[17] Public authorities in the lower right hand corner are external units of enforcement *par excellence* that have developed historically and acquired a distinctive 'sovereign' status. They can choose, according to legitimate procedures and usually in the name of the public interest, to regulate exchanges in any part of their territorial domain and even impose this policy against the preferences of dissident groups.

So far, we have not strayed too far from dichotomous orthodoxy. Our task becomes conceptually much more difficult when we venture into the intermediate terrain where the arrangements that emerge, either from autonomous calculations of individuals or from collective bargaining among groups, depend on self-enforcement. Here, there is no expectation that some 'natural' equilibria will develop, nor is there a readily available, independently constituted external agency to punish transgressors and defectors.[18] I have given these 'meso-solutions' the tentative general labels of alliances when they are based on autonomous calculations of mutual advantage strictly among business enterprises; and networks when they are elaborated on the basis of interpersonal or intergroup reciprocity and rooted in surrounding social or political institutions. My research on business associations, on the one hand, and my reading of the burgeoning literature on inter-firm agreements, on the other hand, indicate that behind these generic titles lie an enormous (and confusing) variety of very specific arrangements or subtypes of alliances and networks.

For example, in a recent article, Patrizia Zagnoli of the European University Institute has developed a typology of the diverse forms of

alliances that have emerged between firms in hi-tech sectors according to the nature of the transactions they cover, their juridical status and their financial form. This produces some eight categories (28 if one includes the substantive content of the agreements!), ranging from non-equity contracting for such specific matters as technology transfers, supply agreements and marketing licensing – close to the market end of the continuum – all the way to shared equity arrangements in newly-established inter-firm consortia dealing with such things as joint R&D, production and marketing – close to the hierarchic solution. Nevertheless, both of these (as well as all the intervening forms) must rely extensively on mechanisms of self-enforcement (Zagnoli, 1988 and also Kay *et al.*, 1987).

In his more recent work, Oliver Williamson has tried to make theoretical sense of intermediary, 'cooperative', solutions to competition among firms (Williamson, 1985). These occur in situations where the hierarchic (legal incorporation) solution is ruled out, for example, because complete contracts cannot be drafted or enforcement is unreliable, and market transactions are inefficient, for example, because the temptation for opportunism is too great and asset specificity makes for excessive vulnerability. Mutual gains can be had if the contracting competitors can generate what Williamson calls 'credible commitments' to each other. This requires the establishment of appropriate institutions, but Williamson – true to his economistic approach – rules out *a priori* any reliance on pre-existing, extra-economic arrangements or generalised feelings of trust, friendship and/or mutual obligation among actors. He finds two such institutions in the exchange of hostages, for example, through the reciprocal exposure of assets, and the recourse to arbitration, for example, through the prior designation of a mutually acceptable (but not powerful) expert to settle conflicts. These are but hints, but they illustrate how capitalist firms can create enduring, self-enforcing 'private orderings' among themselves without relying upon either community identity or state/legal coercion.

Our research on the 'Organisation of Business Interests' in ten European countries and Canada, along with related work on the United States by Hollingsworth, Lindberg and Campbell at the University of Wisconsin (Madison), has uncovered a similar diversity of intermediate forms of governance that are motivated not by calculations of efficiency, transaction cost minimising or profit maximisation as in the upper 'economistic' row of Figure 1.1, but by exploiting or responding to different structures of social and political power.

The central device is the business association, a permanently administered, specialised organisation with independent firms as members and state agencies, trade unions and other organisations as interlocutors. These trade or employers' associations can accomplish a wide range of tasks and acquire a considerable diversity of enforcement mechanisms, depending on whether they are organised pluralistically or corporatistically. If they are monopolistic, involuntary in membership, set within broader overarching networks of co-ordination and have gained exclusive recognition and privileged access to state authorities, they may come to play a very significant role in sectoral governance (and their peak associations may even have the capacity to govern the behaviour of the capitalist class as a whole). If they act independently within overlapping and competing domains, remain purely voluntary in their memberships, and cooperate only episodically with other organisations on an issue-by-issue basis, then, their role is likely to be considerably diminished. Business associations in much of Western Europe, especially *Mitteleuropa* and Scandinavia, come closer to the first model; those of the United States and Canada – with rare exceptions – conform more to the second model.

Flanking the associational response on the left in Figure 1.1 is an interesting hybrid that I have labelled 'clubs', but they could just as well be called 'gentlemen's agreements' or 'loose networks', in that they are based on face-to-face personal loyalties and informal interactions. Obviously, this is a form of sectoral governance that is restricted to relatively small groups (read – concentrated industries) and is facilitated if the participants are territorially concentrated and/or culturally homogeneous (read – industrial districts or *ethnics*).[19] The more these communitarian properties become important for the monitoring of compliance or the application of sanctions, the closer one approaches to the clan model proposed by Ouchi where, presumably, family connections, intermarriage and friendship are what allows actors to co-ordinate their behaviour without need for enforcement by outsiders (Ouchi 1980). On the opposite (right hand) side, we find much more formalised arrangements that depend in large part on 'borrowing' the authority of the state. Here, business associations become what Streeck and I have called private interest governments (Streeck and Schmitter, 1985, pp. 1–29). They can command their (usually involuntary) members to comply with sectoral directives setting quality of production, prices, quantities, investments, and so on, under the threat of associational controlled sanctions: for example, loss of license, denial of critical services,

imposition of fines, exclusion from bidding, withdrawal of trademark, and so forth. While it is conceivable that this sort of legitimate coercion could develop privately ('a sectoral state within the territorial state'), in most cases the association is explicitly delegated by public authority with the responsibility for administering some programme (*Staatsentlastung* is the incomparable German expression)!

5 EXPLANATIONS FOR THE SELECTION OF DIFFERENT GOVERNANCE MECHANISMS

Neo-classical economic theory does not say it explicitly, but it seems to assume that markets are the natural (and certainly the preferable) way in which capitalist business is conducted. Adam Smith was a wiser and more acute observer of human nature. He suggested that capitalists would instinctually attempt to avoid the uncertainty and discipline of markets and try to find a safer, more orderly and more co-operative way of conducting their business:

> People of the same trade seldom meet together for merriment or diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices! (Smith, 1976 edition p. 144)

Weber's comments on the inherent tendency toward closure, and the need for some form of rational administration of monopolistic privileges are but an organisational coda on this same theme.

This leads to the following hypothesis: capitalists when faced with a threatening disturbance in their established exchanges (whether endogenous due to the entry of too many producers or exogenous due to changes in technology or consumer preference) will seek to resolve them by increasing the governance capacity of their sector, *provided* – and this is an important caveat – they can do so without bringing in any external actors. They are especially reluctant to incorporate social or political actors who are likely to charge high rents and/or to impose criteria other than profit-maximisation on their transactions – even when such outsiders (read, 'enforcers' and state agencies) can be relied upon to provide immediately gratifying and stabilising solutions.

Put in the terms of Figure 1.1, capitalists threatened by changes in technology, shifts in consumer preference, alterations in the structure

of competition or just plain *mala fortuna*, will first seek solutions to the right on the continuum of the top row. Only if frustrated in their objectives at the lowest level of self-enforcement will they move further to accepting more hierarchical solutions (which, after all, have the effect of eliminating some previously autonomous actors). They will not prefer, and will actively resist, being transposed to the bottom row unless all these individually-based potential arrangements are exhausted or inaccessible. Of course, the ethical norms, legal codes or political practices of powerful outsiders may not permit them to experiment with their preferred solution and may even force them to accept a sub-optimal (from their point of view) arrangement.

To understand the logic of choice in that preferred top row, we fortunately have a very interesting theory available: namely, that which stresses transaction costs. What is usually at stake is some intra-sectoral exchange problem ('ruinous competition' is the code-word among US capitalists) or some inter-sectoral dispute ('predation' by suppliers or downstream consumers is one generic term, I believe). What kind of governance arrangement will be chosen depends, according to this theory, on economising on transaction costs. This, in turn, depends on the degree of uncertainty that has emerged, the frequency (and standardisation) of the goods that are being exchanged and the extent of asset specificity that has already been built into the market. The theory, like most of liberal economics, assumes that the most efficient of the non-market solutions will always be selected, due to the implacable pressures of interfirm and international competition. For reasons that are not clear to me, Oliver Williamson – the leading proponent of this approach – seems to regard the intermediary 'self-enforcing' arrangements as less interesting or, in any case, less likely to succeed. His thrust is to demonstrate why (at least in the US case) the dominant solution for troubled capitalists has been to merge and to form private hierarchies, that is, large, vertically integrated firms or broad, horizontally encompassing conglomerates backed and enforced by an impressive battery of corporate property rights.

As usual when sociologists and political scientists do the thinking, there is no such elegant and parsimonious a theory for explaining movement along the bottom row. Let us begin with the assumption that capitalists are not resorting to these non-market arrangements because they prefer them. The power of some other set of actors induces or compels them to play these games, not the opportunistic behaviour of their peers. Which is not to say that sectoral arrange-

ments involving clans, clubs, associations and private governments cannot provide stable environments within which capitalists can do profitable business – quite the contrary! Indeed, the recent bountiful literature on 'flexible specialisation' and 'regional economies' stresses that it is only by exploiting the social and political resources of surrounding communities to provide common services and solve collective action dilemmas that small and medium-size firms can expect to produce efficiently and compete effectively.[20] Furthermore, let us recognise two distinct types of power affecting the choice. At the communitarian end, there is 'social power', that is, the capability of certain territorial localities or distinctive ethnic/religious/partisan groups to instil trust and to identify and punish defectors through such non-market mechanisms as the invocation of a common identity or part loyalty, the fear of social ostracism or the 'wrath of God'. At the authoritarian end, there is 'state power' (backed in some cases by popular consent). Once one concedes that public authorities may not be the passive 'executive committee of the bourgeoisie', but may have the capability to intervene autonomously out of a different calculation of interests (this becomes most manifest during wartime – which incidentally is the period during which many of the bottom row governance arrangements were first invented and established), then, one can imagine a number of reasons why they would induce or compel capitalists to resort to associations, private governments, sponsoring departments or regulatory agencies. *Nota bene*, that state power can also be used in the other sense, that is, to restrict the utilisation of communities, networks and authorities on the grounds that they constitute 'restraints on trade' – to use the American jargon. Indeed, it seems probable to me that the marked propensity for US capitalists to develop private hierarchies rather than various forms of intermediary governance may be due to that country's exceptional anti-trust tradition (and then, only after 1890 – before that time the US was in the vanguard of experiments in self-enforcing sectoral governance among consenting capitalists).[21] European states – now with Germany, the Netherlands, Switzerland and Austria in the vanguard – went out of their way deliberately to assist in the development of associational forms, making the reliance both on private hierarchies and public regulatory authorities much less attractive. The end result of these historical choices are persistent differences in the 'mix' of sectoral institutions at the national level with lasting effects on these countries' respective ability to compete with each other in today's vastly more liberalised environment.
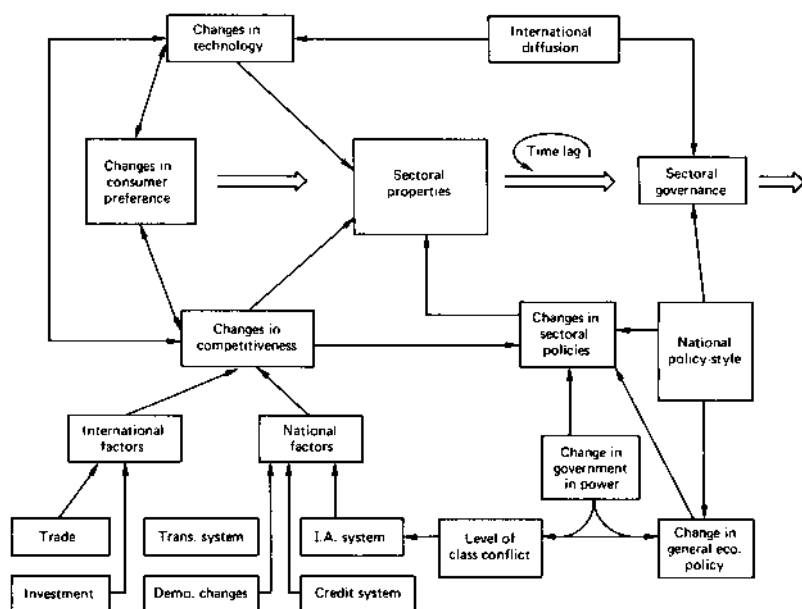
Figure 1.2

In Figure 1.2 I tried to sketch out *grosso modo* the variables and channels which seem to me to be influencing the selection of sectoral governance mechanisms. It represents a distillation and first approximation of findings from the dozen or so comparative case-studies that have been presented by members of the working group. On the principle that a picture is worth a thousand words and a diagram at least a few hundred, I will not comment upon its structure and the assumptions behind it, except to note the growing importance of changes in international competitiveness upon outcomes in the top row (especially upon the destruction of nationally protected markets and the encouragement of international alliances and mergers), and, in the specific case of Western Europe, the growing importance of regional institutions upon outcomes in the bottom row. The prospect of 1992 – the so-called completion of the European internal market – has set off a veritable flood of changes in sectoral governance mechanisms at the national level, and the beginning of their transposition to the regional level.

Another major source of recent variation – this time affecting both the top and bottom forms of governance – has emerged from the box

in the lower right hand corner labelled 'Change in General Economic Policy'. The decline in credibility of Keynesian prescriptions with their emphasis on macroeconomic variables (for example, aggregate demand) and cross-sectoral measures (for example, fiscal policy) has been replaced by a new fashion for 'supply side' policies. These typically involve very discrete interventions and subventions to particular industries: industrial restructuring measures, research and development funds, export promotion schemes, special training programmes, specific tax exemptions, infrastructural grants, direct services, and so on, aimed at promoting international competitiveness (or, in the long-established case of agriculture, at protecting the industry from international competitiveness). Along with this 'sectoralisation' of public policy comes a revised set of incentives for capitalists to cooperate with each other (and with their workers) in the creation of new types of 'private orderings' that can take advantage of the goodies being offered.

6 AN EXPLANATION OF DIFFERENCES IN PERFORMANCE?

Approaching the 'moving target' from a sectoral angle obviously complicates the issue of evaluating performance. This for two major reasons: (1) most of the necessary data is aggregated at the wrong level; and (2) most of the criteria employed are of limited utility.

While it is true that a sector is but an aggregate of firms and that, in turn, a national economy is but an aggregate of sectors, the competitive-co-operative interaction among these units can produce effects that are not merely additive, especially when one admits the possibility of exploitation and predation between firms and sectors that are not, as in the pure market situation, free to exit from the exchange or capable of switching easily to another partner. Frankly, I am not familiar with the conventions in national accounting that govern the collection and compilation of statistics and, therefore, do not know what sort of a potential data base already exists for sectoral analyses across countries.[22] I do know that, in terms of ready availability, most of the quantitative indicators are either under- or over-aggregated.

This would be an illusory difficulty if we could assume that each national economy (or specified subsets of them) utilised distinctive modes of governance. If there was a particular 'national (or regional)

policy-style' that permeated each national sector, then we could move to that level of aggregation and confidently evaluate the performance of markets versus alliances versus hierarchies versus communities versus networks versus authorities. Moreover, there is some apparent validity to such an observation. As early as Andrew Shonfield's *Modern Capitalism*, (1965) it has been a commonplace to point to 'standard' differences in the institutional structures and policies of advanced capitalist countries: the USA with its emphasis on markets, price leaders and private hierarchies (with state regulation in some sectors); Western Germany with its inter-firm alliances led by banks and its heavy reliance on sectoral trade and employer associations; France with a more prominent role for sponsoring agencies (in the form of committees of the *Commissariat Général du Plan*) and, later, the state encouragement of hierarchies (the so-called '*champions nationaux*'); the Netherlands with its public cartels; Switzerland with strong private governments in some sectors and hierarchic concentrations in others; Austria with its extensive system of obligatory associations and peak agreements (as well as state-owned holdings and conglomerates); the 'Third Italy' with its exploitation of communes, clans, stable contracting arrangements, consortia and networks of all kinds; finally, Japan with the now-legendary MITI and its surrounding private governments.

On the level of political rhetoric, contemporary neo-liberals proclaim *ad nauseam* the superiority of markets over authorities, and point triumphantly to the recent aggregate performance of the United States or Great Britain as proof of it! Leaving aside the fact that such 'comparisons' are usually quite nationally selective (for example, they prefer to ignore the performance in price stability, employment, productivity and competitiveness of certain countries such as Switzerland, Sweden, Finland, Austria, West Germany that are characterised by greater associative action and private interest governance), and often quite temporally selective (for example, they pick out a specific period when the preferred arrangement performs especially well and compare it to the worst performance attained by some other mode of governance, usually one practiced by their political predecessors), what this sort of national evaluation and inference always overlooks is the fact that all contemporary economies harbour a great mix of sectoral arrangements. Consider, for a moment, agriculture in the United States – often cited as a success for its increased productivity and international competitiveness. It can by no stretch of imagination be classified as governed by markets or

even by hierarchies. The 'marketing orders' that determine price and volume in several of its commodities are classic instances of private governance, and its extensive programmes of subsidisation and crop-reduction are clear cases of agency sponsorship and regulation.

This question of the relation between the national and the sectoral brings up an interesting contrast with the French *'mode de régulation'* school. Up to this point, the sectoral approach advocated here and the *régulation* one have a great deal in common, as was brought out in our first meeting of the working group by Robert Boyer (Boyer, 1988). The latter seeks to capture the dynamic process of institutional adjustment between production and a changing configuration of social relations at the macro or national level. The former is interested in the same process but at the meso or sectoral level. Both agree on the existence of a variety of 'intermediate forms' between market and state, but the *régulationnistes* typically characterise these in terms of a periodic sequence of regimes; whereas, the *sectoralistes* see these as simultaneously present within the same economy. Both disagree with the assumption of neo-classical economics that market solutions 'must' be intrinsically superior. Both stress the contingent nature of rational economic behaviour, but they do not seem to agree whether consistent national policies of promoting a particular alternative mode of governance would be preferable, or whether it would be better to allow some mix of modes distinctive to particular sectors to emerge.

Let me put this difference in perspective in the form of a hypothesis: If the sectoral approach is correct, then there should be a gradual convergence in the performance levels of specific sectors, irrespective of the country in which they operate. This presumes that the national sectors concerned are effectively in competition with each other and that this process is sufficiently compelling either to eliminate or reduce the market shares of less efficient producers, or to force them to adopt arrangements similar to those *en vigueur* among the more efficient sectoral producers.[23] Hence, it would not apply to protected sectors such as national agricultures or national civil services. One especially attractive quality of this hypothesis is that it is well timed for Western Europe: the impending liberalisation of its 'internal market' by 1992 directly threatens many established national sectoral regimes. Will EEC members converge toward common regional arrangements that will nevertheless differ from sector to sector? Or will they retain their present diversity, compensated for by other national peculiarities? An even stronger test of the hypothesis

would involve a more general convergence within sectors across all advanced industrial economies, regardless of the formal dismantling of existing barriers and independent of their subsequent macro-performances.

If the national regulation approach is correct, the levels of sectoral performance should remain disparate (at least as much as they are now) and correlate more closely with the aggregate performance of their respective national economies. Here, it will be especially interesting to observe what happens in those European economies that are not part of the Common Market. Will the growth rates, extent of job creation/diminution, pricing levels, utilisation of capacity, market shares of industries in, say, Austria, Switzerland and Sweden converge with those of comparable industries in the rest of Europe? Or will the differing macroeconomic policies and macro-social relations of these countries permit/encourage a systematically different outcome?[24]

Admittedly, it may prove impossible to evaluate this appealing 'quasi-experiment', at least within the Community, if the overall performance of member national economies becomes more and more convergent due to common monetary and fiscal policies. In which case, all sources of variation – sectoral as well as national – would diminish in a more interdependent and harmonised system.[25]

The second problem in evaluating sectoral performance concerns the appropriateness of measures.[26] A fairly standard battery of items, sometimes compounded as in the Okun Index, has been developed for judging the macro-performance of national and regional economies. There exists no comparable consensus for judging whether a particular mechanism of sectoral governance is efficient or even proficient. If all that was at stake was the measurement of *static, allocative efficiency*, the indicators would be relatively easy to come by:[27] capacity utilisation; productivity; relative prices or 'terms of trade'; and, of course, profitability. Any sector that utilised its full installed capacity, had a higher productivity per worker or unit of capital, improved its prices *vis-à-vis* other products and earned a higher rate of return would be considered 'better-governed'.

Much of the concern with sectors, however, is related to the issues of industrial promotion and adjustment, that is, to the capacity of a given set of firms to respond with *dynamic efficiency* to changes in consumer preference, technology, conditions of international competition, and so on. Here the indicators could be somewhat different: relative rate of growth; assimilation of new technology; development

of new product lines; flexible redeployment of labour; conservation and expansion of worker skills – and the basis of comparison could even become counterfactual, that is, whether some particular mode of governance produced a better adjustment to changing conditions than would have another for that same sector. It would hardly be appropriate to judge the dynamic performance of the blacksmithing sector by that of personal computers!

Where the whole issue of evaluating performance gets much more murky is when the choice of mechanisms is not left exclusively to the self-interested, profit-seeking 'economising' of markets, alliances and hierarchies, but draws upon the norms, identities and powers of 'socialising' and 'politicising' actors, that is, when governance takes the form of communes, clans, clubs, associations, interest governments, sponsoring departments or regulatory agencies. In exchange for their 'benevolent' help in stabilising exchanges within a sector, these external participants will not only extract some 'rents' for the services they perform, but they will also seek to impose different criteria of evaluation upon the outcomes. Let us call these *social efficiency* and *political efficiency*. The former might be judged by whether employment levels are sustained, whether industrial conflicts decrease, whether income shares to capital and labour or between different status groups remain acceptable, or even diminish over time. The latter involves even more abstruse and complex evaluations, for example, whether certain politicians get re-elected, whether a particular region does not secede, whether violence and 'unconventional political behaviour' is avoided in industrial disputes and, most generically, whether citizens accept the legitimacy of the arrangements that govern them (and their sectors).

If it were not enough to point to these four different generic criteria for evaluating the efficiency of sectoral governance mechanisms (and not to offer any criteria for selecting among or weighing between them), it is patently obvious that specific sectors also have quite specific problems that are thrust upon them by the environment in which they operate. Not just individual firms, but the sector as a whole, will be judged by their consumers and the public at large in terms of how well it copes with such issues as cleanliness, healthiness, pollution, quality control, worker safety, racial and sexual discrimination, and so on.

The above is but a hint at the difficulties that lie ahead in the interdisciplinary evaluation of the performance of sectors. About all we as a group could agree upon at this early stage in our deliberations

is that (1) the mode of governance can hardly be held uniquely responsible for the level of performance – regardless of the criteria used – since changes in consumer preference, technology and, especially, international competition are quite capable of overwhelming even the best-designed of mechanisms; and (2) no single mode is likely to be optimal for a specific sector at a given moment in all countries since different combinations of resources in different national and regional settings may produce equally efficient outcomes. Admittedly, starting out with under-determination and equifinality in the dependent variable places us in a weak position for the subsequent development of 'grounded theory', but it is a concession to the reality of contemporary 'organised-disorganised' capitalism.

7   A NEW SPECTRE HAUNTING CAPITALISM?

At this point, it would be tempting to announce that a new spectre is haunting western societies: *the class struggle is being replaced by conflict between sectors!*[28] Instead of the propertied and the unpropertied facing each other across a broad front, we are headed for a series of skirmishes in which owners, managers, employees and workers in a particular threatened sector will be allied against similarly composed predators from other sectors. To make the scenario seem more dramatic, one could even foresee the formation of rather comprehensive coalitions and the sharpening of rather menacing contradictions: peripherally versus centrally located producers; sunbelt versus rust-belt industries; light versus heavy industry; importers versus exporters; manufacturers versus service-providers; domestically protected versus internationally exposed sectors; national versus foreign-owned firms; high versus low tech producers; 'Fordists' versus 'Flexible Specialists' *e cosi via*.

It is not my purpose (nor is it my conviction) to offer such a cosmic prediction. I suspect that class struggle will persist even in advanced capitalist societies and that trade unions will not enter into 'productivity coalitions' or 'protectionist conspiracies' with firms and business associations without encountering considerable resistance from their rank and file. Moreover, new lines of cross-sectoral solidarity and cleavage are emerging all the time around such issues as monetary policy, fiscal crisis, welfare cuts, environmental protection, and so forth. There seems to be no compelling reason to expect that sectors must win out over class or status in the perpetual competition

to define societal interests and structure collective action.

It *is* my conviction and purpose, however, to suggest that the future of capitalism may not be so 'disorganised' as has been claimed. *Pace* the neo-Liberals and the neo-Marxists, the long-term trend toward the development of ever more complex, non-market mechanisms for governing the transactions between firms, between firms and workers, and between firms, workers and the state has not been reversed. Capitalism is becoming 'reorganised', not 'disorganised', and sectors are providing the principle framework around which this restructuring is occurring.

Perhaps, what has confused many analysts is that the level of aggregation of capitalist self-organisation has changed significantly – not the phenomenon itself. National markets and some of their governance mechanisms are being undermined. But these 'losses' are being replaced by supra-national arrangements and, in some cases, also by sub-national ones. In Western Europe as a whole, the new arrangements are moving beyond the nation-state with the assertion of a more regionally integrated set of sectoral exchanges and norms. In such areas as *la terza Italia*, Catalonia, Southern Germany, etc. producers are moving *beneath* the nation-state through the resurgence of localised, sectorally specialised 'industrial districts', each with its complex forms of intermediary governance. Within the nation-state, the shift has been away from mechanisms at the general economic (*gesamtwirtsschaftlich*) level, such as the negotiation of comprehensive social contracts between peak associations of capital and labour, toward sectorally specific bargaining and institution-building. In our jargon, the movement has been away from macro- and toward meso-corporatism. Moreover, even within highly internationalised and regionalised sectors, capitalists have continued to rely on their specialised national associations, clubs and private governments – rather than switch to defending their interests only at the level of individual firms or organising their exchanges exclusively at the supranational level. Perhaps this is merely transitory, an example of national cultural atavism or organisational inertia that will soon be swept away (in Europe, at least) by the impending deadline of 1992, but I suspect not. Capitalism may not have designed the nation-state and has had repeated difficulty in adapting to it, but it has been very deeply impregnated with this way of organising political authority. It will take more than the removal of barriers to trade, the liberalisation of finance, the globalisation of production and the standardisation of consumer tastes to extirpate capitalism's

national orientation. Firms (not to mention, individual capitalists) will still identify themselves with a particular society and seek the special protection of a particular state for the foreseeable future. They may adventitiously create new supra and subnational ways of doing business at the sectoral level, but they will continue to depend on the considerable variety of national governance mechanisms that they have so painstakingly (if often surreptitiously) constructed over the years.

Notes

1. As far as I can tell, the French and Italian propensity for referring to 'les sciences économiques' and 'le scienze economiche' does not reflect any sensitivity to diversity in institution structure and actor strategy, synchronically or diachronically, but just to the simultaneous presence of various sub-disciplines of economics, especially to distinguish its theoretical and applied versions – something largely accomplished in the USA by the distinction between Departments of Economics and Schools of Business Administration.
2. Even Andrew Shonfield, who was unusual in his sensitivity to the significance of institutional variation and its impact upon economic performance in advanced capitalist countries, nevertheless entitled his magisterial book *Modern Capitalism* – not *Modern Capitalisms*. For a discussion of Shonfield's contribution to several of the issues I intend to raise in this essay, see my 'Corporatism is Dead! Long Live Corporatism! Reflections on Andrew Shonfield's *Modern Capitalism*', forthcoming in *Government and Opposition*.
3. These comments are based on the drafts of various chapters (in Italian and English) given to me by Ezio Tarantelli. I have not managed to get hold of a copy of the Italian version that was eventually published (Tarantelli, 1986) and the English version is not yet in print.
4. The *locus classicus* is contained in the discussions by Rudolf Hilferding at SPD party congresses in the late 1920s. For a recent critical discussion see H. A. Winkler (1974) especially the introduction by Jurgen Kocka. Also Torstendahl (1984).
5. Schmitter and Lehmbruch (1979), Lehmbruch and Schmitter (1982), Goldthorpe (1984), Cawson and Ballard (1984). For a semi-official advocacy of neo-corporatist policies in advanced capitalist societies, see OECD (1983).
6. Cf. Cameron (1984), Garrett and Lange (1986), Lange and Garrett (1985), Schmidt (1982), Schmidt (1986), Schmitter (1981), in addition to Ezio Tarantelli (1986).
7. I believe the same is true of Tarantelli's analysis. I imagine that he was surprised by the 'partisan' opposition of the PCI and the CGL to the *Accordi Scotti* in 1984, since by his calculus they stood to benefit

workers. The subsequent referendum in a sense proved that the Italian mass public agreed with Tarantelli's position – a substantial majority of those voting approved the Agreement – but the crucial point is that the neo-corporatist, organised capitalistic logic of negotiation and compromise does not necessarily concord with the calculations of political parties, their militants and electorates.

8. See Lash and Urry (1987). For a related but different argument, see Offe (1985).

9. Which does not mean that the political desire to negotiate such macro-economic compromises is not still very much alive. Listen to the current French Minister of Labour, Jean-Pierre Soisson:

    > Le dialogue contractuel est le vector essential de la modernisation de la société civile. Les organisations representatives des employeurs et des salariés doivent définir ensemble les voies et les moyens d'un partage equilibré des gains de productivité, qui garantisse la cohésion sociale nécessaire à tout progrès économique. *Le Monde*, 14–15 August 1988

10. One sign of this was the burgeoning number of articles and books by OBI project participants that compare the structure and behaviour of associations representing the same sector in different countries. See Streeck and Schmitter (eds, 1985) for the dairy industry and Grant (1987) on the food industry. Also see forthcoming volumes by W. Grant and F. van Waarden (eds) on the construction industry and A. Martinelli and W. Grant (eds) on the chemical industry.

11. It is important to stress that our collective 'discovery' of the importance of sector is not based on a longitudinal analysis. The time span of the OBI studies is relatively compressed (5 to 8 years) and does not provide sufficient evidence for concluding whether 'sectoralness' is increasing, decreasing or remaining constant. This will be one of the queries for the forthcoming SSRC group.

12. The preceding is a paraphrase of a definition contained in Leifer (1975). This article, along with the work of Harrison White, has proved quite useful in developing my thoughts on sectors – even if the concept itself does not appear in either of their works.

13. *Nota bene* that this does not specify the identity of the actors within any given sector. Its core is formed by the actual producers of the finished goods or services that are competing with (or could substitute for) each other, but around that gravitate a wide variety of other potential members: raw material suppliers; component manufacturers; experts, researchers and technicians; brokers, wholesalers and retail merchants; bankers, venture capitalists and shareholders; transporters; workers at various levels of specialisation and skill; and even government inspectors and regulators. How the domain of a sector will be defined and who will be invited (and who will accept) to join in a particular arrangement is a matter of institutional design and political contingency. Some sectors will come out more vertically integrated and functionally specialised; others may be broader in their interest domain, but

contain a narrower set of productive roles. Needless to say, one of the primary tasks of the working group is to analyse comparatively the 'shape' of sectors in different economies/polities. The previous research of the 'Organisation of Business Interests' project provides both a theoretical and an empirical basis for such an effort.

14.   There is a very interesting 'warrant' for this approach in the economic sociology of Max Weber. For Weber, the drive towards monopolisation was a central feature of capitalism and its feasible limits were established by the structure of producers and professions:

> When the number of competitors increases in relation to the profit span, the participants become interested in curbing competition. . . . the jointly acting competitors now form an 'interest group' toward outsiders; there is a growing tendency to set up some kind of association with rational regulations; if the monopolistic interests persist, the time comes when the competitors, or another group whom they can influence (for example, a political community), establish a legal order that limits competition through formal monopolies; from then on, certain persons are available as 'organs' to protect the monopolistic practices, if need be, with force . . . Such closure, as we want to call it, is an ever-recurring process; it is the source of property in land as well as of all guild and other group monopolies. Roth and Wittich (1978) pp. 341–2

Presumably the sporadic (and unpredictable) appearance of Schumpeterian entrepreneurs within a given sector or profession is what unravels these mechanisms, as do periodic interventions by political authorities not controlled by the monopolists and accountable to other interests, for example, through anti-trust legislation. For a very general argument in favour of a 'social conception' of the market, see Granovetter (1985).

15.   Leifer concludes his article with the following conundrum:

> Which comes first? Is there first a product around which a market forms and producers earn distinct reputations from their volume, revenue outcomes? Or do markets come to shape what we think of as products and the reputations we ascribe to producers? Or is it that producers with distinct reputations come to form a market, and thereby create a product' (p. 473).

The sectoral approach opts for the third alternative and proposes that it is strategic interaction at the intermediate level among producers – sometimes competitive, sometimes co-operative, sometimes imperative – that creates and sustains the basic structure of the economy.

16.   This effort has been helped greatly by an initial attempt at delimiting the alternative forms of sectoral governance by Lindberg, Campbell and Hollingsworth (forthcoming). My typology in this article differs in

significant ways from theirs, although there is a considerable overlap in the two approaches.

17. Although the existing American literature that stresses the hierarchic outcome has been faulted for its relative lack of attention to power calculations in their creation and the subsequent costs of coordinating ever larger enterprises, especially due to their rigidity in responding to changes in consumer preference or production technology (cf. Perrow (1981) pp. 371–86 and Robins (1987)).

18. Another way of putting it in historical terms is that recourse to these intermediate mechanisms may be the unintended product of a demonstrated incapacity to establish one or another of the more 'obvious' solutions, that is, an outcome of either 'market failure' or 'state failure', or both.

19. The work of Bagnasco and Trigilia has been particularly important in alerting me to this type of solution which seems to require, in addition to the physical concentration in the same locality of productive units operating in the same sector, a complex set of social and political identities and exchanges, for which the small towns and medium size cities of the 'Third Italy' are especially well endowed (Bagnasco, 1988 and Trigilia, 1986).

   For a study of the impact of regionalisation and decentralisation on the territorial organisation of business interests, see Schmitter and Lanzalaco (1988), pp. 63–96.

20. See especially the chapters by Sabel and Bagnasco in Schmitter, P. C. (ed.) *Experimenting with Scale in Western Europe* (forthcoming).

21. For a fascinating description of these efforts, see Bonnet (1922).

22. I do know, however, that the associations representing sectoral interests are very much in the business of generating and analysing sectoral data. In some countries, national data-gathering is completely dependent on these sources. Even discounting for possible distortion (especially due to non-reporting by firms not members of the relevant association) this may be a better place to start than official compilations – if only because more discrete breakdowns are available. The problem is often the absence of data comparability between national sectors, although EEC institutions and the growing role of European-level sectoral associations have done much to correct this. In fact, one could regard the increased volume of sectoral statistics as unobtrusive evidence of their growing economic and political importance.

23. This would place *sectoralistes* firmly in the camp of those who believe in what March and Olson have called 'historical efficiency'. This presumes that historical processes of competition and emulation tend to eliminate rules and regimes that do not correspond to an optimal resolution of some common problem. Sectoral arrangements that are rooted in culturally peculiar rules of appropriate behaviour would be eliminated (unless protected by deliberate barriers or subsidies) when they are forced into competition with those that only follow a logic of instrumentally rational behaviour. The *regulationnistes*, as well as the *régionalistes* and the *neo-localistes*, would seem to espouse an epis-

temology of contingency, equifinality and multiple equilibria that stresses the need to accommodate to nationally, regionally or locally peculiar feelings of duty, obligation and symbolic appropriateness (March and Olson, 1984).

24. This may sound like a hopelessly academic controversy, but I have in front of me a clipping from *The Financial Times* 18 July 1988 which informs me that precisely this issue is of great concern to the 'international research bandwagon' of the securities industry. It is entitled: 'Measuring up the world by sector' and relates how security analysts have long disputed whether stock selection is done best by country or by sector. It cites evidence of considerable sectoral variation. For example, shares in heavy engineering worldwide produced a healthy return of 31 per cent while financial services only rose by 9 per cent in the second quarter of 1988. In the UK, however, these rates of return were reversed. Furthermore, the article states that even in 'truly global industries', such as electronics, chemicals and oils, there was substantial national variation. Conclusion: bet on countries not sectors! Nevertheless, the article claims that the present trend is towards sectoral research: first, for the extraneous reason that such experts are useful in assessing corporate merger deals; second, because US investment institutions are structured along such lines at home and expect similar advice from abroad.

25. In a recent paper, Robert Boyer seems to argue that the contrary has been occurring: 'The national differences, already mentioned for the Fordist regime, (have) sharpened within the unstable and rather unpredictable evolutions observed since more than one decade' (Boyer, 1987). He makes virtually no reference to the European community or to the possibility of a restructuring of regimes at this level. The institutional/policy alternative he proposes are either at the firm, the national or at the global levels.

26. I have been alerted to this problem by the paper of Unger and Traxler (1988), in which three different criteria for sectoral evaluation were developed.

27. Although they would not reflect the externalities, negative and positive, that the performance of one sector might produce for its 'neighbours'. This, however, is also a problem for indicators of national economic performance, but the existence of a political and, often, a cultural frontier makes their incidence less salient than in the case of intersectoral externalities which, by definition, are suffered and enjoyed by the same people.

28. Here credit should be given to the economist who first called attention to what he termed 'sectoral clashes': Markos Mamalakis. While the units he referred to in his work on Latin American economies were considerably broader (for example, all of industry, all of commerce, and so on) and he did not mention the likelihood of differences in their governance structure (as well as in their interests), he did suggest that new lines of cleavage were emerging that would cut across the old established ones of social class (Mamalakis, 1969 and 1971).

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2 Changing Unemployment Rates in Europe and the USA: Institutional Structure and Regional Variation

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1 INTRODUCTION

Though one or the other of the familiar macroeconomic theories may explain fluctuations in unemployment over the business cycle, none of them explains the often substantial differences in unemployment rates in different areas of a country, or the dramatically different average long-run unemployment rates across countries, or the contrast between the extraordinary severity of unemployment in some historical periods and the near-absence of unemployment in others. All areas of a country, even if it is very large and diverse, experience the same monetary and fiscal policies, so these monetary and fiscal policies can hardly be sufficient to explain the often persistently different unemployment rates in different regions. Most familiar macroeconomic theories understandably focus on *unanticipated* changes in the money stock or in aggregate demand, but greatly different long-run *average* rates of unemployment in different countries are not likely to be adequately explained by unanticipated differences in the rate of growth of aggregate demand, because any such long-run differences eventually come to be anticipated. In any case, the observed differences in macroeconomic policies do not appear to be able to explain the long-run average differences in underutilisation of resources across countries without suspiciously elaborate or *ad hoc* supplementation; neither do they provide, by themselves, an ad-

equate explanation of why average European unemployment rates
were considerably lower than US rates in the first two decades after
the Second World War, yet have been considerably higher than those
in the USA for more than a decade. The stark contrast in the degree
of underutilisation of labour and other resources in different histori-
cal periods, which almost all economic historians have observed,[1] is
also not explained by familiar monetary and macroeconomic the-
ories, since the near absence of unemployment in the early and
mid-nineteenth centuries occurred in a time of no aggregate demand
management and great monetary instability – the price level in
Britain and the United States, for example, fell by half between 1815
and 1896. In the post-Second World War period of history, more-
over, there has been a secular increase in unemployment rates in the
developed democracies, not only in Europe but also in the United
States. The failure of the familiar macroeconomic theories to explain
the foregoing historical, cross-national, and intra-national differences
in average unemployment rates suggests that they may ignore some
important causal forces.

This chapter uses a conceptual framework that, while it borrows
familiar insights from familiar macroeconomic theories, also takes
account of some forces that are not considered in either the Keyne-
sian or new classical macroeconomic theories. The framework parsi-
moniously explains the following facts:

1. systematic differences in average unemployment rates in differ-
   ent countries;
2. the systematically different rates of unemployment in some states
   of the United States than in others;
3. the change in the relative rates of unemployment and employ-
   ment growth of the United States and of continental Europe
   since the Second World War;
4. the increase in 'natural' or Non-Accelerating-Inflation-Rates of
   Unemployment in the developed democracies since the Second
   World War;
5. the increase in average unemployment rates and in the suscepti-
   bility of economies to macroeconomic shocks in the western
   countries since the first half of the nineteenth century.

The framework offered to explain the foregoing observations has
two features that are not usually combined in analyses of macro-
economics or of labour markets. One is the assumption that all

important individual and firm decisions, including those about the acquisition of information, must be explained in terms of the objectives and constraints facing each of these individuals and firms: as in the new equilibrium macroeconomics, all behaviour must make microeconomic sense. The other is an emphasis on the structure of institutions that is untypical of the macroeconomic and especially the new-classical literatures. There is not space enough here to set out the precise structure of the framework and to compare the full range of its testable implications with the available evidence. But if the arguments in a number of prior publications (Olson, 1965, 1982, 1988) are examined together, every step of the logic can be checked. This paper will rely on references to prior work, plus an impressionistic depiction for intuitive purposes of some of the especially pertinent ideas, to identify the framework. It will then go on to show exactly how this framework explains the five facts set out above.

2   EVOKING THE INTELLECTUAL FRAMEWORK

We must first consider a phenomenon that has been ignored in all but some of the most recent macroeconomic analysis: collective action. We need to consider organisations or collusions that lobby the government or combine in the marketplace to influence prices or wages – professional associations, farm organisations, trade associations, oligopolistic collusions, labour unions, and any other coalitions that attempt to shift the distribution of income in their direction.

Government favours and the monopolistic prices or wages obtained by combination are, analytically speaking, collective goods, in that the benefits automatically go to every firm or individual in some industry or category: a tariff or tax loophole favours every producer in some group and cartelisation and collusion raises the price or wage for every seller in the relevant market. Thus collective action by large groups requires 'selective incentives' – punishments and rewards that are applied to individuals according to whether they act in the group interest. Though the only widely known selective incentives are the closed shop and the picket line, all large and lasting organisations for collective action get most of their membership through selective incentives (Olson, 1965).

Since all collective action must overcome a public good problem, even those groups that have the potential to work out selective

incentives will be able to organise only when they have good leadership and favourable circumstances. Once financial security has been achieved, however, an organisation will normally keep going indefinitely unless it is destroyed by violence or repression. It follows that long-stable societies will have accumulated many of these special-interest groups whereas societies that have been unstable will have relatively few.

2.1 Encompassing Interests

The neglect of the common or group interest in situations of the kind described above does not necessarily hold in situations where one or more of those concerned gets a large share of the total benefit of action in the interest of the group. If there are only a few who would benefit from collective action, it follows that at least some parties in the group must get a significant share of the benefits of collective action. This would be true, for example, of the few large firms in a concentrated industry. Similarly, even if there are many who would benefit from collective action, if one of the beneficiaries obtains a large fraction of the total benefit from a collective good, that one 'large' party will have an incentive to take the group interest into account. Thus the United States has devoted a larger percentage of its resources to defence against the Soviet Union than the smaller members of NATO, Saudi Arabia has done much more to reduce crude oil output and raise oil prices than smaller members of OPEC, and giant firms in industries that include smaller firms are often 'price leaders'. The general point, demonstrated elsewhere,[2] is that (other things equal) the larger the fraction, F_i, of the benefit of a collective good that a party receives, the greater the likelihood it will act in the common interest of the group.

The first implication of this logic is that the firms in concentrated or oligopolistic industries are more readily able to act in their common interest, both through lobbying and through collusive price-setting, than are most other groups in society. Such groups were usually able to act in their common interest long before most other groups were able to do so: Adam Smith described large merchants and master manufacturers as the most important opponents of free competition in his attack on 'mercantilism' in *The Wealth of Nations*. Those larger groups that, if they can overcome the difficulties of collection at all, can do so only with 'selective incentives' take much longer to get organised; unionisation of workers in large firms, for example, came

much later than collective action by the firms in concentrated industries.

2.2 A Conception of Organisational Incentives

The second implication of the foregoing logic is evident the moment we examine the incentives facing organisations, such as labour unions, governments, or corporations. There are important complexities and qualifications (to be considered later) that must be kept in mind when we treat organisations, such as corporations, countries, or labour unions, as maximising entities, because of the possibility of conflicts inside the collectivities; 'poison pill' strategies to prevent take-overs of corporations, for example, cannot be explained in terms of the interests of stockholders. Nonetheless, the assumption that corporations maximise profits has proven to be a most fruitful assumption, and a large part of the results of this paper will be generated from distinctive deductions about the interests of maximising organisations, such as employers' organisations and trade unions.

For easy figuring, suppose in one case that the constituents of an organisation for collective action earn exactly 1 per cent of a country's national income. Y, whereas in another they earn exactly 50 per cent of its national product. If each of these organisations lobbies for legislative changes that will make the country more efficient, the constituents of the former, 'narrow' organisation will, on average, get only 1 per cent of the increase in national income ($F_i = 0.01$), while bearing the full costs of their action in the national interest, whereas the constituents of the latter, 'encompassing' organisation will on average get half the benefit ($F_i = 0.5$) while bearing all of the costs of its action. Now suppose the organisations attempt to obtain a larger share of the national income through special-interest legislation or cartelistic price or wage setting, which will in general generate deadweight losses and normally also entail agreements and regulations that slow innovation. The constituents of each organisation will get the amounts redistributed to them, but in the narrow organisation the constituent's loss from the reduction in the national income will be negligible (0.01 times dY), while in the case of encompassing organisations it will be very important (0.5 times dY). The necessary conditions for optimisation in each case are obvious.

Clearly, encompassing organisations in general have an important incentive to make the deadweight loss and the obstacles to socially

useful innovation from any redistributions to its constituents as small as possible, because $F_t dY$ is large; in our example, the encompassing organisation will refrain from any redistributions to its constituents that cost the society two or more times as much as the amount redistributed. For all practical purposes, the narrow special-interest group will have an incentive to ignore the social costs of its actions even when these are huge multiples of the amount it wins in distributional struggles: the narrow organisation for collective action is simply a 'distributional coalition'. Olson's *Rise and Decline of Nations* (1982) elucidates the full logic of the foregoing argument and shows some of the ways in which the deadweight losses and barriers to innovation from narrow distributional coalitions frequently lead to social losses that are large multiples of the amounts redistributed.

2.3 Some Testable Implications for Economic Growth

If collective action is inherently difficult and can be worked out only in the fullness of time, and if narrow coalitions for collective action have incentives to engage in distributional struggle with virtually no concern for its cost to society, then long-stable societies with many such coalitions should be less efficient and dynamic than comparable societies that have not had time to accumulate organisations for collective action.

As the theory predicts, they are. To take one example, the society that has had the longest period of stability and immunity from invasion and institutional destruction is the United Kingdom. This is also the country with the poorest overall postwar economic performance of all the major developed democracies; it suffers from an 'institutional sclerosis'. The theory also predicts that if repression and defeat in war have destroyed the distributional coalitions in a society, then after a free and stable legal order is established the society should grow surprisingly rapidly, especially if any organisations that are initially set up are relatively encompassing. The 'economic miracles' after the Second World War of West Germany, of Italy, and of Japan and its former colonies are precisely consistent with this implication.

Coalitions for distributional struggle are also undercut when many parochial governments with their own trade barriers are replaced by far larger jurisdictions with internal free trade; local monopolistic combinations such as guilds are undercut by outside firms and lobbies of a different order of magnitude are needed to influence the

integrated jurisdiction. This helps explain the growth of previously-poor Germany after the Zollverein and national unification in the middle of the nineteenth century, the growth of once-backward Japan after the Meiji revolution of 1867–8, the growth of Holland during its Golden Age in the seventeenth century, the growth of Britain during the Industrial Revolution from about 1760 to about 1840, and the commercial revolutions in England and France in the sixteenth century.

Since the Second World War, the Continental European countries and Japan have enjoyed over 40 years of stability and during that time they have gradually acquired more distributional coalitions. As some European economists applying the foregoing argument about institutional sclerosis have put it, the continent of Europe is coming to suffer from 'Eurosclerosis'. As the theory would predict, their lead in growth rates over the long-stable countries has also tended to diminish or disappear (though part of the reason for this is surely also their lesser opportunities for catch-up growth as the gap between their per capita incomes and those of highest income countries diminishes or disappears).

Much the same logic applies to old industries: in a long-stable society, the older an industry is, the more time firms and workers in the industry will have had to overcome the difficulties of collective action and the greater the obstacles to efficiency and innovation. Peter Murrell (1983) has shown that, as the theory predicts, new British industries after the Second World War performed nearly as well as their West German counterparts, whereas old British industries performed much worse than those of comparable age in West Germany. Thus we have an explanation for the tendency for the long-stable United States, which has narrow coalitions, to perform badly in many old mass-production industries in which it once led the world at the same time as it apparently does relatively well in new and often high-technology industries. There is, moreover, conspicuous evidence that some old American industries such as steel or autos have had considerable experience of combination or price leadership (as in the 'Pittsburgh Plus' system) and that cartelisation of the labour forces in these industries has led to wages that have often been two-thirds or more above the average of American manufacturing. By contrast, in new and especially high-technology industries cartelisation and lobbying by firms has less often been a factor and the labour force is usually allocated by competitive markets.

2.4 The Distinctive Impact of Regional Coalitions

The logic also applies, when account is taken of which activities are mobile and which are not, within regions of a country with narrow coalitions. When an industry is constrained by natural resources to a particular region of the country, a lobby or collusion on behalf of the firms in the industry can increase income in that region at the expense of the rest of the country. But when labour or other factors supplied to footloose manufacturing industries cartelise and raise costs, these industries move to less organised areas, with the result that the relatively cartelised region loses much more than the nation does and relatively uncartelised regions gain. Thus the theory predicts that the regions with disproportionate cartelisation of factors used by mobile manufacturing industries will lose population, capital, and total income to the areas with more competitive markets for their inputs.

Though data are lacking on the degree of organisation of some inputs for footloose industry, there are data for each state of the United States on labour unions; they have been less strong in the recently settled West and in the South, where black and racially integrated organisations were essentially prohibited until the civil rights legislation of the mid-1960s. The percentage of the labour forced unionised by state has a strong and statistically significant negative correlation with growth of total income.[3] Some of the migration of labour is paradoxically from high-wage to low-wage areas (Hulten and Schwab, 1984), and this is further evidence of the disequilibria caused by distributional coalitions.

Involuntary unemployment is appropriately considered a disequilibrium phenomenon, and the evidence of disequilibria raises the question of whether the foregoing intellectual framework can help explain unemployment as well as growth. Before that can be accomplished, however, the framework has to be extended to explain the conditions in which involuntary unemployment can and cannot occur.

3 INVOLUNTARY UNEMPLOYMENT AND UNDERUTILISATION OF RESOURCES

If a market is not in equilibrium, parties on both the selling and buying sides of the market must be able to make themselves better off

by making transactions with one another. If the parties are aware of the gains they could achieve by making a transaction, they will be motivated by these gains to make a deal. If they should happen for a time to be unaware of these potential gains, then they know of no transactions that they would like to make that they have not made, and they are accordingly in equilibrium until they obtain information about the unexploited opportunities for mutual gain.

Some economists go quickly from considerations such as this to the conclusion that involuntary unemployment is impossible and to the new equilibrium macroeconomics. But if something happens it is possible! The conclusion that involuntary unemployment is impossible seems, for many economists as well as laymen, to run against all experience. Both the Lucas-new-classical and real-business-cycles versions of equilibrium macroeconomics, moreover, seem difficult to reconcile with the magnitude and duration of underutilisation of resources that actually occurs. Thus the foregoing and undoubtedly correct contention that any disequilibrium price entails that there must be unrealised gains from trade will be used here to go in a different direction: towards a more precise definition and explanation of involuntary unemployment and involuntary underemployment.

As has been shown elsewhere (Olson, 1982), we can define involuntary unemployment strictly and also in a way broadly consistent with common language. The essence of the definition is evident when we note that a worker could not be involuntarily unemployed if the worker placed a higher value on his or her time, when it is used for leisure or production at home, than that time would be worth to any employer. Such a worker would not agree to take a job at a wage any employer could advantageously pay. Similarly, if a worker will accept work only if he is given a wage in excess of his marginal revenue product to any employer, then the worker is asking for a gift rather than a job and is not involuntarily unemployed. There can be involuntary unemployment only if a worker without a job values his own time at less than that time would be worth to some employer – only in the area above the supply curve of labour, given by the marginal opportunity cost of labour, and below the demand curve for labour given by points on the marginal revenue product of labour curves for firms.[4]

Whenever there is really involuntary unemployment, then, both involuntarily unemployed workers and employers will gain from making a deal that puts the unemployed workers to work. It is possible, of course, that it could take some time for the workers and

the employers to find each other, and that they would have to invest some time or other resources in search. But note that workers will have an incentive to devote full time to job search only if the discounted present value of the job they expect to find exceeds the opportunity cost of the time spent searching. In the absence of externalities or institutional arrangements that will be dealt with later, workers will tend to use their time searching only if this is the use of their time that also maximises social welfare. In these special conditions, investments in search are the most productive use of the worker's time, and thus should not be defined as involuntary unemployment any more than investments in education should.

The new equilibrium macroeconomics has been built in large part upon the idea that, if there were a disequilibrium in a market, that would imply unrealised gains from trade. This, in combination with the assumption that expectations and investments in information through search are rational, is taken to imply that there can be no markets that are out of equilibrium and no involuntary unemployment. In essence, the new equilibrium macroeconomics is largely inspired by this question: 'How can there be involuntary unemployment or disequilibrium in any market when this implies that all the parties concerned have an incentive to make deals that would end the disequilibrium?'

3.1 Reversing the Question

We reverse the foregoing question.[5] Macroeconomic theory, it is argued here, should instead begin with the question, 'Are there any actors who have the incentive and the capability to block mutually advantageous transactions among potential buyers and sellers, and thus to prevent markets from achieving equilibrium and eliminating involuntary unemployment?' At some times and places there have obviously been recessions, and sometimes even such deep depressions as the great depression in the United States starting in 1929. At this time real income fell very substantially and there was a consensus that involuntary unemployment was widespread. There was also, in the United States at this time, obvious dissatisfaction with the incumbent political leadership or political and economic system. The widespread belief that involuntary unemployment occurs, along with the severity of some depressions and the frequency of recessions, suggests that it would be worthwhile to ask whether there are ever any actors with an incentive to block the mutually

advantageous transactions that would eliminate any disequilibria and involuntary unemployment.

There is a growing literature in economics on 'the growth of government'. Much of this literature, and important political movements as well, claim that the growth of government is perhaps the most serious economic problem of our time. In view of this, it is natural to ask whether politicians and government officials have an incentive to block mutually advantageous transactions. Are incentives to generate unemployment, or poor economic performance generally, inherent in democratic electoral competition? Or in other types of political systems?

There are certainly circumstances in which governmental leaders would have an incentive to pursue inflationary policies. An incumbent politician might find the political costs of financing governmental spending through budget deficits and printing money lower, at least in a short run that might be decisive for the politician, than would explicit taxation.

By contrast, electoral competition *by itself* does not give a politician an incentive to generate a recession or depression. If a politician were to block a mutually advantageous transaction between an involuntarily unemployed worker and a potential employer, he could well lose the votes of both. Even casual observation, moreover, reveals that incumbent political parties and presidents like to run for re-election on 'peace and prosperity' records. It is hard to imagine how, if other things were equal, an incumbent party's chances of re-election would not be helped by better economic performance. Even in dictatorial systems, the dictator has an incentive to make the economy of the country he controls work better, since this will generate more tax receipts he can use as he pleases and perhaps also reduce dissent.

If incumbent political parties do not have an inherent incentive to block the mutually advantageous transactions that would insure full employment and equilibrium in all markets, then who does?

3.2 Monopoly Arising from Collective Action

Let us now examine monopoly power attained through collective action. It will simplify the exposition if we suppose that the collective action takes the form of collusion or cartelisation, though the argument also applies to the results of lobbying for those types of government intervention that are functionally equivalent to collusion

or cartelisation. The conditions that make collective action possible where there are 'selective incentives' or small numbers, but not in other cases, will not be explained here because they have been set out elsewhere and evoked intuitively earlier in this paper. The argument here builds upon the finding that collective action is possible for some groups and not for others. In the example that will be offered, it is crucial that the sellers in the market can organise for collective action but that the buyers cannot.

Though collective action is much more likely if there is a small or oligopolistic number of sellers, let us suppose for ease of exposition that there is a perfectly competitive market. Supply curves are, of course, derived from the marginal cost curves of firms or, if a labour market is at issue, from the opportunity cost at the margin of the workers' time. If the sellers can organise and act collectively, they will have an incentive to charge a supracompetitive price or wage; in a circumstance where they would maximise the aggregage gain from collective action, they would choose the output given by the intersection of marginal revenue curve derived from the industry demand curve and the industry supply or marginal cost curve.

At this or any other supracompetitive price, there is disequilibrium: each seller would gain from selling an extra unit, and there would also be a gain from entering the industry to sell at the supracompetitive price. Thus the supracompetitive price or wage cannot be sustained unless transactions can be blocked. In large groups, the blockage of transactions requires the same selective incentives that are always necessary for collective action by large groups. Thus by reversing a basic question of the new classical macroeconomics, we have identified a force that often prevents market-clearing equilibria.

We still do not have an adequate explanation of involuntary unemployment, however, for we have not explained why those who are unemployed in sectors where transactions are blocked do not get jobs in sectors in which there is no collective action and thus no force to block transactions. It is to this that we now turn.

3.3 The Secularly Changing General Equilibrium

When the foregoing argument is put in a general equilibrium context, it becomes clear that the macroeconomic problems of involuntary unemployment and underutilised resources can vary greatly from one society and historical period to another. If only a tiny part of the

society is controlled by coalitions, the resources that are blocked from making advantageous transactions in the few markets under the control of organisations for collective action can move to the larger unorganised sector and obtain returns that are normally only a trifle lower than they would have earned had there been no distributional coalitions. But when the density of organisations and collusions for collective action is so great that much of the economy is controlled by them, then such a large quantity of resources are blocked from making transactions in the organised sectors that they greatly depress rates of return in the unorganised sectors. This leads to what has been elsewhere analysed as the 'selling apples on street corners' syndrome; that is, to serious involuntary unemployment or underemployment, including unemployment in the form of searching and queueing for positions in the sectors dominated by distributional coalitions. This searching and queueing is not a socially optimal investment in information, as job search in an economy free of the disequilibria due to collective action is, but a competition for monopoly rents or government subsidies.

More generally, the argument here about blocked transactions must be understood in terms of the 'new general *dis*equilibrium' or new-Keynesian macroeconomics that grows out of the early Barro and Grossman, Malinvaud, and others. It can be regarded as providing a microeconomic and collective-choice underpinning for the disequilibria that are simply assumed in general disequilibrium macroeconomics. If there are major disequilibria in parts of an economy, general disequilibrium macroeconomics proves that this will have major implications for the performance of *other* parts of the economy. Major disequilibria in the *product* markets, for example, can greatly change outcomes in labour markets and thereby also greatly exacerbate the unemployment due to any disequilibria in labour markets. As we saw earlier, firms in concentrated industries can overcome the difficulties of collective action much more easily than large groups of workers can. This is often a matter of great quantitative importance, at least in countries where protection of manufacturers attenuates or eliminates imports from foreign firms, since manufacturing industries within countries (and especially smaller countries) are often highly concentrated, whereas global manufacturing usually is not. In view of the results proved in general disequilibrium macroeconomics and the much lesser difficulty of collusion of firms in concentrated industries, *it is clear that labour unions are by no means necessarily important for the argument here*

about macroeconomic outcomes: they are not even necessary to the result of severe underutilisation of resources, and rarely if ever are the only coalitions that are important even in the unemployment in a national labour force. However, for the reasons explained in the subsection above on 'The Distinctive Impact of Regional Coalitions', they can (along with other coalitions affecting costs of firms in footloose industries) be disproportionately important in *local or regional variations* in unemployment (and growth) rates.

The intellectual framework offered here, when combined with the emphasis in familiar macroeconomic theories about the impact of unexpected shocks in levels of spending (and an assumption of occasional exogenous real shocks) also has testable implications for the business cycle. In part, these rely on the slow decision-making of coalitions, which must make decisions either by bargaining-to-consensus or else under by-laws that also slow decision-making. This makes the supra-competitive disequilibrium prices set by coalitions slow to change, and thus implies that unexpected inflations as well as favourable real shocks improve macroeconomic performance, whereas unexpected deflation and adverse real shocks compound the macroeconomic difficulties growing out of distributional coalitions. Since these aspects of the intellectual framework are not indispensable to an analysis of the five facts that this paper set out to explain, this aspect of the theory will not be discussed further here.

4 TESTABLE IMPLICATIONS FOR UNEMPLOYMENT

The foregoing theory generates refutable predictions about unemployment. When the account earlier in the paper, in the sub-sections on 'Encompassing Interests' and 'A Conception of Organisational Incentives', is combined with the just-completed analysis of blocked transactions as a necessary condition of involuntary unemployment, three very different outcomes are predicted. These are:

1. Little or no collective action that can block transactions, implying no involuntary unemployment, and only Pareto-efficient search unemployment.
2. A dense network of narrow distributional coalitions, implying a high NAIRU or natural rate of involuntary unemployment.
3. Highly encompassing organisations for collective action in whose membership much of the social cost of any socially wasteful

underutilisation of resources is internalised, making low unemployment and generally good macroeconomic performance possible.[6]

Recall also that collective action has to overcome the difficult public good problem and thus will (in the absence of government promotion) emerge only gradually. In addition, it was clear, from putting the analysis of the transactions that are needed for involuntary unemployment in a general equilibrium context, that it is only when there is a dense network of distributional coalitions that serious problems of persistent unemployment and underutilisation of other resources will emerge. So the argument makes testable predictions about the time profile of the emergence of the high natural rates of unemployment that emerge from the gradual accumulation of narrow distributional coalitions.

It is immediately clear that we have at least a partial explanation of the fourth and fifth facts that this paper set out to account for: the secular increases in natural rates of unemployment in many of the Western countries in the more than forty years of stability since the Second World War, and the vast increase in normal unemployment rates and susceptibility to macroeconomic shocks since the first half of the nineteenth century. As the works of Phillip Cagan (1974) and of Jeffrey Sachs (1980) show, there has in the United States, at least, also been a tendency for the macroeconomy to be more susceptible to shocks since 1890, and this is again what would be expected from the theory offered here.

4.1 Differences in Unemployment Rates Across Countries

The implications of the present argument for unemployment and economic performance across the developed democracies will not be tested here because this has, in effect, already largely been done in other studies by other authors. This is most notable in the independent studies by Bernhard Heitger (1987), by Lars Calmfors and John Driffill (1988), and by Bradford deLong and Lars Jonung (1988). Though these studies differ from each other in many important ways, they all (in the process of making other contributions) acknowledge, extend, and test the argument in *The Rise and Decline of Nations*. All three find that there is relatively better economic performance in the countries with either the most competitive, decentralised labour markets, on the one hand, or in those with highly centralised or

encompassing institutions in the labour market, on the other. All find that in-between arrangements perform least well. The empirical work in all three studies supports the implication of the theory here that there will be relatively better outcomes in situations of the first and third categories listed above and relatively poorer outcomes in the second.

There is, none the less, a need for caution in drawing conclusions from these studies and from the argument here. Heitiger's study, for example, focuses on growth and technological gaps rather than unemployment. Calmfors's and Driffill's interesting formal model treats unions at the individual firm level as having virtually no market power, because the firm is unable to increase its output price unless all firms in the industry do so, and thus depicts a situation that is analogous to but not identical with that described in the model of markets without blocked transactions described in this paper. (This situation is perhaps best approximated in Japan, which has mainly enterprise unions, but does not apply very well to Britain and the United States, where narrow coalitions often have monopolies over a craft or an industry.) As centralised cartelisation encompasses the production of a wider range of substitute commodities monopoly power and the losses from it increase, but the logic of encompassing organisations at the same time asserts itself in the Calmfors-Driffill model through the tendency of higher nominal wages to increase overall product prices, thereby giving the union, when it is sufficiently encompassing, an incentive to moderate its demands because its membership internalises much of the cost of these higher prices.

DeLong and Jonung, while pointing out the advantages of both encompassing organisations and competitive arrangements, and finding empirical evidence in support of each, also caution that encompassing organisations can succumb to free riding and rent-seeking by their own subgroups. This caution resonates with an argument Olson offered elsewhere (1986a) to the effect that the stability conditions for encompassing organisations are demanding and their dynamics problematic, so that they will in various circumstances be dominated on particular issues by sub-groups too small to internalise externalities.

The three aforementioned studies all discuss the neocorporatist literature developed and used mainly by political scientists. This literature includes, among other writers, Schmitter (1974), Tarantelli (1983), Streeck (1984), Cameron (1984) and Crouch (1985), and has been brought to the general attention of economists by Bruno and

Sachs (1985). The studies of Heitger and Calmfors-Driffill, at least, explicitly criticise the conclusion from the neo-corporatist literature that the more corporatist an economy is the better its economic performance will be, and the empirical results from all three studies run against this strong corporatist conclusion. At the same time, though the neocorporatist literature is not yet as precise and readily testable as one might wish, it appears that all three studies, in showing that systems with relatively encompassing or centralised organisation do better than those with intermediate levels of centralisation, support one aspect of neocorporatism even as they contradict another. Since the fundamentally cumulative character of science needs emphasis, the most constructive course here seems to be to give the greater weight to the surviving element in neo-corporatism, and to look toward progress by political scientists in developing it appropriately. Such development would require taking into account the employment and efficiency-enhancing attributes of competition, and developing in neo-corporatism the clear deductions that would make evident precisely what accounts for the favourable results of centralised arrangements. In this connection, some neo-corporatists find the concept of encompassing organisations an appropriate building block.[7]

4.2 Tests on Regional Unemployment within Countries

A major problem in testing the argument here on cross-national experience is that the number of comparable developed countries is not very large. This reduces the degree of confidence that one should have in the results. The different countries, moreover, have different monetary and fiscal policies, which in the short run can greatly change macroeconomic outcomes, thereby making it more difficult to test the impact of different institutional structures. We also know from general disequilibrium economics that disequilibria in product markets can change outcomes in labour markets and vice versa, so we cannot be at all sure that the rate of unemployment or employment growth in a country is mainly explained by the institutions in its labour markets.

What is ideally needed is a test on a large sample in which there is great variation in the structure of labour markets, and where all the jurisdictions with the different institutions have the same monetary and fiscal policy. Serendipitously, the accidents of history have provided a surprisingly good approximation to a controlled experiment.

The many different states of the United States often have very different labour market institutions, yet the same national fiscal and monetary policies apply to all of them.

The very different labour market institutions that have characterised different parts of the United States are due mainly to two factors. One is the different dates of settlement and of industrialisation of different parts of the USA, with some eastern parts of the country settled for more than three centuries and industrialised for more than a century, and others settled only in the present century and industrialised only very recently. Given the result that organisation for collective action has to overcome the public good problem and is therefore a slow process, one would predict that the more recently settled and more recently industrialised states would have lower levels of unions and other distributional coalitions. This is generally the case. Of course, the more recently settled states might also diverge from the long-settled ones in other relevant ways.

Happily, the second peculiarity, which grows out of a historical tragedy, tends to overcome this problem. Some of the longest-settled states are in the South, and it was only after the Second World War, and to a great degree only after the civil rights and voting rights acts of 1964–5, that either black or racially integrated labour unions or other institutions were generally permitted. So as recently as the 1960s and 1970s, and to a great extent even now, the southern states have far lower unionisation rates than most of the rest of the country. 'Right-to-work' laws, which prohibit (with only partial success) the compulsory membership or 'union shop' rules that help unions overcome the public good problem, have slowed the growth of unions in many southern states and also in many recently settled states.

The most important period of growth of union membership in the USA was after the passage of the Wagner act in 1937, and especially during the Second World War. During this period relatively strong unions became something of the norm in the industrial states north and east of an arc drawn from Baltimore to St Louis to Milwaukee, but not in most of the more recently settled or southern states. After the voting rights and civil rights acts it was also clear that there had been a definitive outcome to the dispute over what institutions the South would have in matters involving race, so the South after this time provided a stable environment much like that of the rest of the United States except for the density of unions and other mass-based distributional coalitions.

As was noted in an earlier sections, though unemployment and

employment growth in a country depend on the structure of product markets as well as of labour markets, this is not in generally the case in the regions or localities of a country within which there is free movement of labour and capital. Then those industries that are not tied down by natural resources or high transportation costs have an incentive to move away from areas where cartelisation of labour or other local factors raise costs to areas with lower costs. This greatly reduces the *national average impact* of the distributional coalitions that raise producers' costs – it implies that over time more industry comes to be located in the less cartelised regions, and the average rate of cartelisation then declines. It also means that unemployment will be higher and employment growth smaller than it would otherwise have been in the relatively highly cartelised region. So, in addition to their other advantages, local area data are more likely to provide information about the impact of cartelisation in the labour market than are national level data.

The scientifically lucky 'natural experiment' that was described was exploited in a casual way with a few regressions in 1985 by Olson (1986b), and has now been explored systematically and in great detail by Michael Kendix (1988). The data and regressions offered in the remainder of this paper are all drawn from the Kendix study.

4.3   The Regressions

We make use of two sets of US data. Data for the 48 contiguous states are used for the period 1964 to 1985. In addition, data for 34 Standard Metropolitan Statistical Areas (SMSA's) are used for the period 1973 to 1985.

Probably the single most serious potential difficulty in testing the impact of unionisation on unemployment on regional data for the United States arises from the fact that unionisation varies with industrial structure: some industries are much more highly unionised than others. It is entirely possible that those industries that are relatively highly unionised are also industries, such as manufacturing industries (and especially manufacturing industries producing durable goods), that may face unusually unstable product demand, or for other reasons experience a lot of unemployment. Orley Ashenfelter suggested a method that offers good protection against any conflation of the effects of unions on unemployment with industry mixes that might be associated with unemployment. He pointed out that there are national data that apportion the unemployed among the indus-

tries in which they became unemployed. With the unemployed classified by the last industry in which they had a job, and total figures on the employment in each industry, there are then national unemployment rates by industry. Since the composition of employment by industry in each state is known, we can calculate the unemployment rate that would be expected for each state given its industry mix. Notationally, we suppose that P_{rj} is the fraction of employment in industry j in state r. Then we define $IM_r = \sum_j P_{rj} U_j$, where U_j is the unemployment rate in industry j for the USA as a whole. The index IM is then the expected unemployment rate in an area if industry mix is the only variable that is allowed to vary. The coefficient on IM would normally be expected to be positive.

In addition, we attempt to allow for differences in human capital with the measure of educational attainment, ED, the percentage of the labour force with a high-school education; the coefficient on this variable should be negative. The replacement ratio (RR)[8] was used to control for the variation in the generosity of states' unemployment insurance benefit (UIB); this is a crude and possibly inadequate measure, but unfortunately, many of the features affecting UIB generosity, such as eligibility requirements, are difficult to quantify. The sign on this coefficient is expected to be positive.

An oil employment (OIL) variable was used to control for the special labour market conditions created in some areas by oil price movements. In the pooled estimations, the oil variable for region r at time t is defined as

$$OIL_{rt} = OEM_{rt} OP_t$$

where OEM_{rt} is the percentage of employment in the r-th region at time t and OP_t is percentage change in the real price of oil using the US retail price index as a deflator. OEM_{rt} is fairly constant over time, so movements in OP_t are the main source of changes in OIL. A large positive value for OP_t would tend to lower unemployment in a region with a large oil industry and the converse should be true when OP_t is negative. The sign on this coefficient is therefore expected to be negative. In the regressions that use data from only a single year, OP_t is constant and the coefficient on OIL should be negative in years when real oil prices are rising and positive when they are falling.

Due to the potential and actual mobility of the labour force between areas, the unemployment rate in a state may not be a totally accurate measure of the amount of unemployment generated there.

Many workers may leave a region to seek work elsewhere, that is, unemployment may be 'exported'. This problem is more likely to occur in the smaller areas and so one should be particularly aware of this when looking at the results for the SMSAs. A similar problem is faced by Coe (1985, p. 91) in his international study on unemployment. He finds that for Switzerland, the unemployment rate is sometimes underestimated; when there is deterioration in labour market conditions, the migrant workers from countries such as Turkey, Greece and Italy are simply sent home. He uses semi-annual data and instead of unemployment he uses an employment growth variable EG_t, where:

$$EG_t = EM_t/((EM_t + EM_{t-2})/2)$$

and EM_t is employment.

To test for this possibility, the estimations were repeated using the same techniques, except that the annual percentage rate of growth of employment was used as the dependent variable instead of the unemployment rate. Accordingly, compared to the unemployment equations, the opposite sign on the coefficients are hypothesised for the employment growth equations.

A cursory glance at the national data for employment growth and the unemployment rate during the past 25 years would show a rising trend in the former and also in the latter. These simple trends suggest a complication in interpreting the employment growth equations. The primary source of problems from this variable is the possibility of changes in the supply of labour. If labour supply remains constant, then (assuming that the quantity of labour supplied is greater than the quantity demanded) an increase in unemployment will always accompany a fall in employment growth. In reality, however, the data for the United States suggest that labour supply has not been constant. In addition to the overall growth of employment noted above, the participation rate (the ratio of the civilian labour force to the total population) has grown steadily from 58.7 per cent in 1964 to 64.8 per cent in 1985. Various demographic changes in the distribution of the age of the population, increased female participation, and changes in the retirement age are among a number of factors which have contributed to changes in the supply of labour. These sociological and demographic factors are reasons for being cautious when using employment growth to proxy for unemployment. None the less, as explained above, this variable does have redeeming

Table 2.1 Pooled data, 48 states for 1964 to 1985, 1056 observations and 34 SMSAs for 1973 to 1985, 442 observations, using least squares (absolute value of *t*-statistics in parentheses)

Dependent variable	Equation			
	(1) *UN State*	*(2)* *UN SMSA*	*(3)* *EG State*	*(4)* *EG SMSA*
Constant	−1.37	−1.20	10.5	18.28
	(2.44)	(1.03)	(13.0)	(6.85)
UD	0.054	0.083	−0.100	−0.111
	(8.24)	(8.25)	(10.7)	(4.79)
IM	0.745	1.14	−0.620	−2.00
	(23.4)	(16.79)	(13.6)	(12.83)
ED	0.008	−0.036	0.0263	0.050
	(1.30)	(3.12)	(3.13)	(1.88)
RR	−4.05	3.26	−10.0	−10.50
	(3.30)	(1.97)	(5.69)	(2.77)
OIL	0.001	−0.003	0.002	0.004
	(1.05)	(1.44)	(2.10)	(0.85)
$\bar{R}^2$	0.43	0.43	0.22	0.29

qualities, particularly when looking at small, 'open' regional labour markets.

The pooled results are summarised in Table 2.1. In the equation (1) for unemployment using state data, union density, (UD), and the degree of unemployment expected because of a state's industrial mix (*IM*), are significant with the expected sign. The other regressors are either not significant or have the wrong sign. In the SMSA unemployment equation (2) all the variables except *RR* and *OIL* are significant and have the anticipated sign. In the state employment growth equation (3), all the variables are significant with the hypothesised sign. In the SMSA employment growth equation (4), *UD*, *IM*, *ED* and *RR* are all significant.

Most notably, in each of the four equations, the data test strongly in favour of the hypothesis that blocked transactions by narrow distributional coalitions increase unemployment and reduce employment growth. There is a strong positive relation between *UD* and unemployment and a negative relation between *UD* and employment growth.

Tables 2.2 and 2.3 display regressions with unemployment rate respectively by state and by SMSA, and with various subsets of the independent variables that have been described. Union density

Table 2.2   Pooled data for the 48 contiguous states, 1964 to 1985, using
least squares, 1056 observations.
Dependent variable is the unemployment rate for states.
(absolute value of *t*-statistics in parentheses)

Int.	UD	IM	ED	RR	OIL/1000	$\bar{R}^2$
5.45	0.02					.00
(28.9)	(2.50)					
1.83		0.70				.37
(10.7)		(25.2)				
1.45			0.08			.12
(3.89)			(12.1)			
6.44				−1.61		.00
(11.9)				(1.56)		
5.90					1.98	.00
(83.4)					(1.94)	
0.21	0.06	0.76				.42
(0.90)	(9.38)	(27.6)				
−0.13	0.06	0.73	0.01			.42
(0.39)	(9.22)	(23.2)	(1.45)			
−0.12	0.06	0.73	0.01		−0.72	.42
(0.35)	(9.13)	(23.1)	(1.48)		(0.92)	
1.36	0.054	0.744	0.008	−4.03	−.829	.43
(2.42)	(8.25)	(23.4)	(1.31)	(3.28)	(1.06)	

always has the expected sign with statistical significance, and it is clear from these and other results that the finding on union density is quite robust and shows up under any reasonable specification.

To determine whether the relationship between blocked trans-actions from high density of narrow labour unions and unemploy-ment was an artefact of outcomes in particular and possibly untypical years, regressions were run on unemployment by state and by SMSA for each year on which data were available. The results are shown in Table 2.4. Union density again always has the expected sign and is often statistically significant even on the smaller data base for individ-ual years. There are reasons (which Kendix (1988) analyses in detail) why the value of the coefficient should vary in systematic ways with the level of unemployment and the business cycle, but these issues are not important to the facts that this paper sets out to explain and will not be explored here.

Table 2.3 Pooled data for 34 SMSA's, 1973 to 1985. Using least squares, 442 observations. Dependent variable is unemployment rate for SMSA's. (absolute value of *t*-statistics in parentheses)

Int.	UD	IM	ED	RR	OIL/1000	$\bar{R}^2$
5.55	0.06					.30
(18.3)	(5.14)					
0.17		1.01				.30
(0.35)		(13.9)				
8.72			−0.02			.00
(8.73)			(1.71)			
6.82				0.61		.00
(9.73)				(0.28)		
7.05					−9.45	.02
(66.3)					(3.13)	
−2.55	0.09	1.11				.41
(4.65)	(9.07)	(16.4)				
−0.06	0.08	1.14	−0.04			.43
(0.06)	(8.36)	(16.9)	(3.27)			
0.15	0.08	1.13	−0.04		−3.64	.43
(0.16)	(8.12)	(16.6)	(3.37)		(1.56)	
−1.20	0.08	1.14	−0.04	3.26	−3.35	.43
(1.03)	(8.26)	(16.8)	(3.12)	(1.97)	(1.44)	

4.4 Explanations of the Remaining Facts

The foregoing data and other data in the Kendix study explain the regional variations in unemployment and employment growth in the United States. Though it is not possible to find both a similarly rich data base and large variations in unionisation rates in other countries, Kendix was able to find some pertinent data for Canada and for the UK, and found similar though less clear-cut tendencies in those countries. There is also impressionistic evidence that similar processes have been at work in other countries, such as West Germany, where jurisdictions such as Bavaria have had lower than average rates of unemployment.

In general, most of the industrialised democracies do not have the special historical features of the United States that were mentioned above. They usually have not had the same large differences in times of settlement and nothing analogous to a region with a virtual ban on labour unions, later done away with, that included any numerous ethnic or racial group. Many of the industrialised countries other

Table 2.4   Annual estimations: 48 observations per year for the state data
and 34 observations per year for the SMSA data*
Dependent variable is the Unemployment rate.
(absolute value of *t*-statistics in parentheses)

Year	States	SMSAs	Year	States	SMSAs
1964	0.04		1978	0.06	0.05
	(2.16)			(2.48)	(1.70)
1965	0.02		1979	0.09	0.05
	(1.48)			(3.78)	(2.03)
1966	0.02		1980	0.13	0.06
	(1.48)			(5.76)	(1.43)
1967	0.04		1981	0.16	0.07
	(2.48)			(5.94)	(2.16)
1968	0.03		1982	0.20	0.13
	(2.13)			(5.19)	(2.8)
1969	0.03		1983	0.25	0.14
	(2.18)			(5.75)	(2.64)
1970	0.05		1984	0.23	0.13
	(2.59)			(5.73)	(2.8)
1971	0.08		1985	0.17	0.04
	(3.51)			(3.84)	(0.93)
1972	0.09				
	(4.29)				
1973	0.07	0.05			
	(3.5)	(1.36)			
1974	0.06	0.05			
	(2.32)	(1.35)			
1975	0.09	0.00			
	(2.43)	(0.01)			
1976	0.09	0.02			
	(2.71)	(0.43)			
1977	0.07	0.05			
	(2.26)	(1.19)			

Note:
* Only the results for *UD* are shown but *IM*, *ED*, *RR* and *OIL* were
included in the equations.

than the United States also do not have a federal structure and they
are in addition much smaller. All this suggests that, at least if
differences in industrial structure are allowed for, they probably do
not have similarly large variations in union density across different
regions. We have not yet found data needed to determine this for
certain for most countries, but data we have examined (on the UK,
for example) suggest that this is indeed the case.

Accordingly, we have an explanation for the one remaining fact. This was the often-discussed change in position in unemployment of the United States and the countries of Europe. In the 1950s and early 1960s, especially, the USA had systematically higher unemployment rates than the nations of Europe; for more than a decade the reverse has been true.

So far as can be determined, no other OECD country had the large regional differences in rates of unionisation, at least in areas of comparable degrees of industrialisation. Thus none had the large migration away from areas of labour force cartelisation and none experienced a comparable employment-generating and unemployment-reducing force. There has at the same time been a general increase in institutional sclerosis in the United States as well as in other countries. But when we take into account the much more dramatic change on the continent of Europe, from a situation where there was nearly a clean institutional slate after the Second World War (or a few freshly created encompassing organisations), to the present degree of Eurosclerosis, the change in relative unemployment rates is easy to understand.

Notes

1. See, for example, Temin (1969 and 1976).
2. Olson (1965) and Olson and Zeckhauser (1966).
3. See Choi (1983), Olson (1982 and 1983), and Vedder and Galloway (1986).
4. When there is more than one variable factor of production or other complications, the demand for labour is not given by the marginal revenue product of labour curve, but it will always consist of points on marginal revenue product of labour curves.
5. We are thankful to Lambelet (1983) making it clear that the argument in Chapter 7 of *Rise and Decline* really 'reverses the question' posed by the new equilibrium macroeconomists.
6. The reasons why this is a possible rather than a necessary result are referred to later.
7. This is evident, for example, in correspondence of Wolfgang Streeck with Mancur Olson.
8. The replacement ratio is the average weekly unemployment insurance benefit divided by the average weekly wage in manufacturing. For the SMSA data, we use the value of UIB for the state in which the SMSA is situated.

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3 Trade Unions in the Exposed Sector: Their Influence on Neo-corporatist Behaviour*

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1 INTRODUCTION

The importance of organisational centralisation in determining the behaviour of trade union movements and associations of employers has been widely acknowledged, at least since Ross and Hartmann (1960) identified it as a key variable for predicting levels of industrial conflict. Since the 1970s several researchers working within the theory of neo-corporatism have demonstrated the significance of this variable, as an aspect of corporatism, in accounting for the differential behaviour of various national union movements (Bruno and Sachs, 1985; Cameron, 1984; Crouch, 1985; Garrett and Lange, 1986; Hibbs, 1978; Korpi and Shalev, 1979; Newell and Symons, 1986; Paloheimo, 1984; Schmidt, 1982; Shott, 1984; Tarantelli, 1986). The publication of Olson's *The Rise and Decline of Nations* (1982) provided such arguments with an elegant theoretical base in the theory of collective action, through his concept of encompassing organisations.

'Encompassingness' can exist at different levels, and should be defined in terms of the scope of the group concerned. An organisation is encompassing to the extent that its reach, that is, the membership over which it has effective authority, is coterminous with the population that will bear any adverse consequences of its actions. For example, if it is possible for the organisation of labour to be confined

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to the level of the firm, that is to 'company unionism', then such a union will probably act in an encompassing way, avoiding action that may threaten the viability of the firm. This is probably highly relevant to a study of the behaviour of Japanese labour, and to many firms in the United States. Within western Europe it is relevant in some individual firms and, in a much amended way, to the operation of the various dual-representation systems of Austria, the Federal Republic of Germany, Switzerland and the Netherlands.

Calmfors and Driffill (1988) have recently argued on somewhat different grounds that optimal economic behaviour may be associated with either highly centralised or highly decentralised bargaining. Such an account would also be compatible with this possibility of alternative macro and micro 'horizons' for labour. For the most part, however, European labour has effectively organised itself at the national level. While the company level deserves greater analysis, our central purpose here is a different one. The macro-centred debate of recent years also ignored sectoral distinctions: do not different kinds of labour behave in different ways? Are they not sometimes located differently in any scale of encompassingness?

The distinction that will be examined here is that between the exposed and protected sectors of the economy. This uses the analysis of collective bargaining sectors developed originally in Norway in the 1960s (see Aukrust, 1977) and later incorporated within the model developed in Sweden by Edgren, Faxén and Odhner (1973) (the so-called 'EFO' model) which for many years guided centralised negotiations between capital and labour in Scandinavia; for a discussion of the practical application of these models in these and other countries, see Flanagan, Soskice and Ulman (1983).

By the exposed sector these models mean firms producing those goods and services that are traded in international markets. The protected sector includes central and local government, public utilities, railways, postal and telegraphic services and also construction. It should be noted that it is not the ownership of public services that matters, but whether or not they are internationally traded. These two sectors are seen as being vulnerable to very different sets of market pressure. If there are rising prices in world markets, wages in the competitive sector may rise in line with them and be followed by wages in the protected sector which are unable to be financed by rising world prices, leading to the importation of inflation. Alternatively, if wages rise in the protected sector and spread to the exposed sector in the absence of rising world prices, exposed-sector firms may

be priced out of both export and home markets. Those responsible for national bargaining need to take account of the relationship between price levels in the two sectors when reaching collective agreements.

Following Olsonian logic, my hypothesis is that unions representing workers in these two sectors are under very different degrees of compulsion to avoid externalising the negative consequences of their economic disruption. Those in the exposed sector are likely to be more concerned with problems of international competitiveness than those in the protected, more concerned with economic indicators of likely patterns of demand in product markets and less able to treat the consequences of their actions as something that can be absorbed within a general national development.

This does not necessarily mean that wage demands will always be more moderate in the exposed sector; if world prices are rising more rapidly than domestic ones, unions in this sector may take the lead in making demands; the point is that, *ceteris paribus*, their actions will be more constrained by concern for product market developments and will also be more concerned to ensure competitiveness in, for example, manning practices. Further, developments in one labour market influence those in others, and at least within centralised union confederations the behaviour of one union influences others. Differences in behaviour should therefore be evident between *national systems* with different union structures. To the extent that a trade-union movement is dominated by industrial unions in the export sector, 'foreign-trade-conscious behaviour' should characterise the movement as a whole.

It is important to be clear what is meant by 'unions in the exposed sector'. A union's total membership may lie within the sector, but they may represent only a small part of any individual industry within that sector, such that the union can always externalise the consequences of its bargaining to other sections of the work force. This will be the case with many 'craft' unions; these are not encompassing unions within a sector. Alternatively, a union may have members across a wide number of industries, never constituting a large proportion of any given work force despite the possibly large overall size of the union itself. Again, such a union can externalize, and moreover does not have its own fate bound to the future of any individual industry. General and white-collar unions come in this category. Our attention remains limited to industry-level unions.

Union movements dominated by exposed-sector industry-type

unions should therefore represent the type most capable of facilitating the actions of a centralised confederation trying to internalise national economic desiderata.

2 TESTING THE HYPOTHESES

The thesis is that trade union strength is associated with economic disruption except to the extent that union movements are encompassing and/or dominated by exposed-sector unions.

There are two ways of testing this. One is to consider changes over time within individual countries. This would enable us to observe fairly precisely the effects of individual variables and components of variables. On the other hand, the major measurable constituents of the centralised power of confederations are data that change only slowly. For the most part they constitute constants, and their relative importance cannot be directly assessed by diachronic studies of individual countries. The alternative approach, cross-sectional comparisons of countries, has the handicaps of small numbers of cases, a large number of uncontrollable independent variables and the non-commensurability of different countries' statistics. However, it does permit some assessment of the importance of the confederal strength variable. In the present study we shall be restricted to these cross-national comparisons.

The analysis concentrates on the 13 larger Western European countries that have experienced continuous liberal democracy since at least 1945, though for the 1980s it has been possible to add Spain. (Adequate data do not yet exist to enable the inclusion of Portugal and Greece.) Relations among the variables under consideration are studied at three different periods: the 1960s, the 1970s and the 1980s. Since the independent variables change only slowly, while at least some of those being used as indicators of disruption vary widely from year to year, data are taken for the former for a single year (1960, 1970 and 1980), but for the latter from the averages of a number of subsequent years. Table 3.1 shows the basic data.

Four indicators of 'disruption' are considered: a direct industrial relations variable, working days lost per thousand dependent employees in employment (Ds); and three economic variables: average annual inflation (Dp), average annual unemployment (Du), and the annual average of these two combined, Okun's so-called 'discomfort index' ($Du + p$). The industrial relations variable is subject to the

Table 3.1 Basic statistics: economic disruption and trade union characteristics, 13 and 14 European countries

Country	Ds	Dp	Du	C	Uv	Eu
			1960s			
AUSTRIA	59.04	3.91	2.74	10.5	44.45	35.30
BELGIUM	131.50	2.55	2.96	6.0	21.60	23.61
DENMARK	177.30	5.20	1.00	5.0	37.06	16.10
FINLAND	178.80	5.24	1.36	5.0	10.62	18.04
FRANCE	238.80	3.76	0.64	1.0	7.65	17.48
GERMANY (WEST)	16.19	2.89	0.72	6.5	24.05	45.52
IRELAND	737.70	4.25	4.34	2.5	29.84	7.21
ITALY	1250.00	4.93	2.98	2.0	12.18	11.22
NETHERLANDS	13.29	2.46	0.56	9.5	27.00	24.45
NORWAY	78.21	4.07	1.02	9.5	37.17	28.22
SWEDEN	21.45	3.65	1.48	8.5	45.80	24.10
SWITZERLAND	3.26	3.22	0.02	3.0	16.62	25.10
UK	190.9	3.55	1.84	2.0	32.79	17.71
			1970s			
AUSTRIA	9.57	7.30	1.82	10.5	50.46	33.14
BELGIUM	228.60	9.17	3.10	6.0	26.62	22.16
DENMARK	264.60	9.30	2.12	4.5	36.90	14.36
FINLAND	681.50	12.08	2.18	7.5	30.82	24.18
FRANCE	196.70	8.90	2.94	1.0	8.97	10.93
GERMANY (WEST)	53.23	6.14	1.54	6.5	25.03	46.71
IRELAND	665.00	13.36	5.96	3.0	30.21	7.56
ITALY	1461.00	11.48	5.78	3.5	14.09	10.54
NETHERLANDS	36.02	8.64	2.72	7.5	26.16	21.85
NORWAY	47.32	8.42	1.70	9.0	38.18	26.47
SWEDEN	162.70	7.98	2.26	8.0	42.94	27.95
SWITZERLAND	1.92	7.70	0.06	3.0	13.89	23.45
UK	572.30	13.18	3.56	2.0	39.51	16.72
			1980s (until 1985)			
AUSTRIA	2.07	4.89	3.98	10.5	53.10	29.32
BELGIUM	109.61	7.05	11.78	6.0	50.00	20.67
DENMARK	304.80	7.95	9.84	4.5	47.63	12.16
FINLAND	328.40	8.54	5.14	7.5	63.16	21.42
FRANCE	79.82	9.62	8.74	1.0	6.71	21.44
GERMANY (WEST)	53.49	3.99	6.54	6.5	28.96	44.52
IRELAND	477.20	12.40	14.24	3.0	38.56	5.55
ITALY	772.10	13.78	9.56	3.5	20.39	14.22
NETHERLANDS	21.74	4.19	10.86	7.0	19.49	23.36
NORWAY	57.03	9.06	2.74	8.0	38.43	20.16
SPAIN	587.80	12.38	17.66	1.0	5.37	19.70
SWEDEN	39.63	9.00	3.02	8.0	49.25	19.13
SWITZERLAND	0.46	4.29	0.72	3.0	14.48	21.04
UK	439.40	7.22	11.30	2.0	43.22	12.33

Notes to Table 3.1:
Ds = working days lost per 1,000 dependent workers in employment, whole decade or 1981–5;
Dp = average annual inflation rate, first five years of decade;
Du = average annual unemployment rate, first five years of decade;
C = level of centralisation of main union confederation according to amended Visser index;
Uv = percentage of total labour force in membership of unions in main confederation;
Eu = percentage of total unionised labour force in membership of exposed-sector industry-type unions.

widest annual fluctuation, so the average taken is that for an entire decade where possible (1961–70, 1971–80, but 1981–5 for the current decade). For the economic variables a five-year average has been taken (1961–5, 1971–5, 1981–5). The statistics used are those of the International Labour Office (annual) and Organisation for Economic Co-operation and Development (annual).

Turning to the independent variables, research here has been enormously aided by Visser's recent work (1987) on union membership and confederation characteristics in ten European countries. For those not covered by him I have tried to approximate similar data from national sources, viz for Belgium: Spitaels, 1967; Molitor, 1978; Spineux, 1984 and forthcoming; for Finland: Knoellinger, 1960; Lilja, 1983; *Suomen Tilastollinen Uuosikirja*, annual; for Ireland: Hardiman, 1986; Irish Congress of Trade Unions, annual; Institute of Public Administration, 1983; McCarthy, 1977; and for Spain, Rijnen, 1984; and Estivill and Hoz, forthcoming. However, data for these countries are not as refined as those in Visser's study. One of Visser's important contributions was to draw attention to the large number of retired and student members included in the membership figures of many unions, especially Germany and Italy. Unfortunately it has not been possible to use his more realistic figures here as he was not able to obtain clarified data for all his countries, and I have not been able to do so for the four I have added. In the interests of comparability, crude figures have had to be used.

For the first independent variable, union density, I have used two different ratios. When regressing conflict data the appropriate statistic is union density as a percentage of dependent employees in employment, as the latter represents the 'universe' available for strike action. For the economic variables however one should consider union density as a percentage of the total labour force, as we are interested in the overall macro-economic importance of unions.

Visser proposes two separate measures of the power of confederations (1987: ch III): the internal horizontal integration of the movement as a whole; and the vertical integration of the main confederation. We do not need the former because our hypothesis is concerned solely with dominant confederations. I have therefore used his assessment of vertical integration, adding to it from his horizontal dimension a factor taking account of whether there is a single or more than one confederation.

Visser includes in this variable: the locus of control over strike decisions, allocation of finance and staff resources, characteristic bargaining levels, role of officials in bargaining, and organisational concentration. This last deals with the number of affiliated unions in a confederation and the inequalities of size that exist among them. I am replacing this dimension by the new variable concerning the weight of exposed-sector unions, and have therefore excluded this item from the account. I am therefore using an amended version of the Visser index. I have followed him in using an additive score, summing a country's score across the different elements of the variable. This is convenient and produces a result corresponding fairly closely to common-sense expectations, but is of course methodologically dubious as one lacks evidence as to the relative importance of the summed attributes.

Where union movements are divided I have, with one exception, taken the largest and assumed it bears the full burden of achieving encompassingness. This involves under-estimating the degree of inter-confederation co-operation in Belgium, Switzerland and (very briefly in the late 1970s) in Italy. The exception is the Netherlands, where the separate social democratic, Catholic and Calvinist confederations were for many years constrained to bargain cohesively and non-competitively by both law and the practices of *verzuiling*. This began to break down in the 1970s, following which the Catholic NKV and the social democratic NVV merged to form the FNV, while some white-collar Catholic groups joined the Calvinist CNV. As Visser has noted, the distinction between these two confederations increasingly reflects a manual/non-manual distinction, and it is difficult now to regard them as non-competitive. I have therefore treated the former three confederations as acting as one in the 1960s and 1970s, but have treated the FNV as a normal majority union in the 1980s.

The other difficult case is Spain, where two confederations are struggling for dominance: the socialist Uniones Generales de Trabajadores (UGT) and the Communist Commissiones Obreras (CCOO).

Membership figures are unreliable and the two organisations have very different internal structures. However, at the start of the 1980s, when I am calculating these data, the CCOO was probably ahead (EDIS, 1983; Rijnen, 1984).

The exposed sector has been defined to include all those economic branches exposed to competition in export and/or import markets. I have excluded from it agriculture on the grounds that markets and foreign trade here are subject to a high degree of regulation. For practical purposes I have taken account of only the five largest unions in the exposed sector, but in all cases this brings us down to some very small unions, and often there are only three or four such unions anyway.

Visser does not give data on individual unions, so I have drawn on national sources. These vary in quality. In some cases statistics are produced regularly by national statistical agencies: Denmark: *Statistisk Arbog Danmark*; Finland: *Suomen Tilastollinen Uuosikirja*; Netherlands: *Sociale Maandstatistiek*; Norway: *Norges Offisielle Statistikk*; Sweden: *Statistik Arsbok*. Some union confederations publish regular data: Austria: Öesterreichischer Gewerkshaftsbund (ÖGB); Germany: Deutscher Gewerkshaftsbund (DGB); Ireland: Irish Congress of Trade Unions (ICTU); Switzerland: Schweizerischer Gewerkshaftsbund (SGB); UK: Trades Union Congress (TUC). For Belgium I have used the same sources as for the general union data; for Italy Romagnoli, 1980; CESOS, annual; for Spain, EDIS, 1983. French data are particularly hard to come by, and estimates have had to be made based on a variety of sources; this country is probably the least accurately covered.

The size of the exposed sector unions has been calculated as the proportion of the total unionised labour force in the country which is in membership of the five largest industry-type unions in the exposed sector of the economy.

In every case (with the exception of the Belgian textile union in 1960) the single biggest union in the exposed sector is an engineering or metal-working union, which is sometimes significantly larger than any other exposed-sector union. This union normally ranks first or second in overall union size. Its nearest rivals – which (especially in the 1980s) are sometimes larger than it – are protected sector unions, in construction and the public services; or white-collar unions; or, in three deviant cases of trade-union structure (Denmark, Ireland, the UK) one or more very large general unions. Within the exposed sector the other important unions are usually in textiles, chemicals,

printing, food and occasionally mining, wood and paper. The divisions between exposed and protected sector unions are by no means always clear. In particular, food-industry unions often include agriculture, and the wood industry can embrace both carpentry (part of construction) and furniture and other internationally traded wood products. Where the bulk of the membership has appeared to be concentrated in the exposed sector, the union has been counted as an exposed-sector union.

3   THE EVIDENCE

Straight tests of the relationship between levels of unionisation and indicators of disruption yield very poor and often negative correlations. Similarly, taking account of union density adds nothing to (indeed in every case detracts from) the relationship between organisational centralisation and indicators of disruption. We shall therefore ignore this element of encompassingness and concentrate instead on simple centralisation (C) and the strength of external-sector unions (E). (Constraints of space have prevented full presentation of all these statistics here. They are however available from the author.)

In dealing with most of our independent variables it is necessary to give separate consideration to Switzerland. The country's strike level has been exceptionally low, especially during the 1970s and 1980s, and whether it conforms or not to the hypotheses it is such an outlier that it has a distorting effect on the results. The same is true of its unemployment level, though here the reasons are more easily accounted for. Switzerland makes very considerable use of immigrant labour on temporary work contracts to provide its work force (Castles and Kossack, 1985). When without work these return to their country of origin rather than become unemployed, not being eligible for social benefit. This renders Swiss unemployment figures misleading. It is therefore useful to consider the other countries with Switzerland excluded for the conflict, unemployment and discomfort variables. Switzerland is not an outlier in inflation rates, so the same need does not arise there.

Table 3.2 enables us to compare correlations with the indicators of disruption between those of (i) centralisation (C) and (ii) the strength of exposed-sector unions (E). The most striking point to emerge is that the E correlations are in the majority of cases superior. We

Table 3.2 Coefficients of correlation (r) between indices of disruption and of (i) centralisation/encompassingness (C) and (ii) the importance of exposed sector unions (E), (a) with and (b) without Switzerland

	1960s		1970s		1980s (to 1985)		(with Spain)	
	a	b	a	b	a	b	a	b
Strikes (working days lost)								
(i) (C)	−0.4737	−0.7667	−0.3332	−0.6986	−0.3248	−0.7099	−0.3952	−0.7401
(ii) (E)	−0.6804	−0.7871	−0.5391	−0.6735	−0.4555	−0.6045	−0.4441	−0.5826
Inflation								
(i) (C)	−0.2750		−0.4689		−0.3615		−0.4586	
(ii) (E)	−0.5162		−0.6969		−0.6724		−0.6299	
Unemployment								
(i) (C)	−0.1334	−0.2500	−0.3877	−0.6163	−0.4578	−0.6976	−0.5718	−0.7613
(ii) (E)	−0.4184	−0.4251	−0.6512	−0.7206	−0.4347	−0.4889	−0.3723	−0.4064
Discomfort (inflation plus unemployment)								
(i) (C)	−0.2468	−0.3766	−0.4672	−0.6284	−0.5057	−0.7790	−0.6086	−0.8197
(ii) (E)	−0.5860	−0.6081	−0.7278	−0.7635	−0.6498	−0.7505	−0.5487	−0.6120

should not necessarily conclude from this that exposed-sector union dominance is therefore 'more important' than centralisation, since it is being measured on a continuous scale from 'real' data, while the amended Visser index of centralisation embodies some difficult assumptions about the implied relative weight to be accorded its components. Nevertheless, we can learn something from the comparison. Centralisation does explain conflict levels better in the 1970s and 1980s, but the *E* variable becomes more important in predicting the economic variables, where it even achieves some reasonable correlations in the 1960s, when the *C* variable performed very poorly.

However, a striking finding is that in the 1980s centralisation begins to rival *E* in explanatory power, especially when Switzerland is excluded. We are here witnessing the effects of the declining dominance of exposed-sector unions within trade unionism. We shall better see the dynamics of this by considering individual countries.

3.1 The Individual Cases

Table 3.3 presents data in a form that will enable us to consider individual cases. Its purpose is to show how well (or poorly) countries conform to the *C* and *E* hypotheses. We shall concentrate only on

Table 3.3   Standardised residuals, 1960s–80s

	1960s conflict	
	C	Eu
Austria	0.56	0.84
Belgium	0.37	0.43
Denmark	0.40	-0.01
Finland	0.41	0.17
France	-0.04	0.35
Germany (West)	-0.91	0.74
Ireland	0.93	0.32
Italy	1.20	1.08
Netherlands	-0.57	-1.25
Norway	0.58	0.43
Sweden	-0.41	-0.94
Switzerland	-2.50	-2.32
UK	-0.02	0.20

	1970s conflict		1970s inflation		1970s unemployment		1970s disruption	
	C	E	C	E	C	E	C	E
Austria	-0.80	-0.86	-0.18	-0.26	0.26	-0.01	0.03	-0.24
Belgium	0.40	0.42	-0.08	-0.15	0.17	0.18	-0.06	-0.07
Denmark	0.30	0.05	-0.28	-0.77	-1.01	-1.44	-0.75	-1.14
Finland	1.16	1.19	1.56	1.72	-0.21	-0.49	1.02	0.88
France	-0.26	-0.34	-1.08	-1.31	-1.23	-0.99	-1.52	-1.30
Germany (West)	-0.33	0.97	-1.43	0.27	-0.98	0.97	-1.52	0.50
Ireland	0.63	0.20	1.38	0.99	1.75	1.51	1.59	1.23
Italy	1.11	0.85	0.58	0.16	1.73	1.61	1.01	0.73
Netherlands	-0.43	-0.72	-0.07	-0.49	0.24	-0.20	0.02	-0.45
Norway	-0.11	-0.28	0.09	-0.20	-0.22	-0.73	-0.02	-0.44
Sweden	0.44	0.26	-0.30	-0.77	-0.02	-0.53	-0.24	-0.77
Switzerland	-2.53	-2.40	-1.30	-0.89	–	–	–	–
UK	0.43	0.65	1.12	1.70	-0.47	0.11	0.44	1.12

	1980s conflict		1980s inflation		1980s unemployment		1980s disruption	
	C	E	C	E	C	E	C	E
Austria	-1.01	-1.24	-0.31	-0.42	0.13	-0.72	-0.08	-1.03
Belgium	0.29	0.25	-0.19	-0.31	1.40	1.07	0.89	0.73
Denmark	0.61	0.34	-0.08	-0.71	0.23	0.05	-0.04	-0.49
Finland	1.00	0.86	0.51	0.39	-0.44	-0.81	0.04	-0.59
France	-0.42	0.16	0.01	0.84	-1.30	0.23	-1.33	0.68
Germany (West)	0.04	1.16	-1.17	0.57	-0.28	0.85	-1.31	-1.07
Ireland	0.65	0.22	1.20	0.55	1.29	0.96	1.87	1.18
Italy	0.93	0.90	1.73	1.93	-0.20	0.08	1.13	1.24
Netherlands	-0.32	-0.38	-1.01	-1.26	1.41	0.95	0.22	-0.00
Norway	0.24	-0.07	0.75	0.49	-1.13	-1.57	-0.29	-1.24
Sweden	0.07	-0.31	0.73	0.37	-1.03	-1.55	0.23	-1.29
Switzerland	-2.58	-2.41	-1.50	-1.43	–	–	–	–
UK	0.49	0.53	-0.66	-1.01	-0.08	0.48	-0.87	-0.27

Note: for key see Table 3.2.

those equations that have good explanatory power. For each country residuals have been obtained by subtracting the fitted values of the dependent variable from the equation in question to the observed real values. To facilitate assessment and comparison, these have then been standardised in relation to the standard deviation for the equation $(q=(o-f)/s$, where q is the score given in the table, o the observed value, f the fitted value and s the standard deviation). Minus numbers therefore indicate that the equation in question overestimates the disruption level of the country concerned. We shall treat arbitrarily as outliers cases of residuals of $+1.000$ or greater, that is greater than one standard deviation. We can also use the table to consider whether C or E is more important in a particular country, though it must be remembered that since the less good the fit of the equation the higher the standard deviation and hence the lower the average residual, a straightforward comparison will often be misleading. We shall look only at large and persistent differences between the E and C scores.

Our model is unable to capture adequately the changes that have taken place in Austria over the quarter century. From having conflict levels rather under-predicted by our thesis in the 1960s, it was by the 1980s beginning to approach Swiss levels of lower outlier status on most variables. Otherwise it is a reasonably conforming case, with straight centralisation being more important than the exposed sector variable. Austria has after all the most strongly centralised union movement of all those being considered here.

Belgium is a strongly conforming case on both C and E variables until the 1980s, when it becomes an upper outlier on unemployment. If we follow Castles's (1987) argument that unions may often have a choice between inflation- or unemployment-minimising behaviour, the Belgians would seem to have traded employment for low inflation, though the matter will be more accurately seen as the result of the particular power balance in the labour market rather than strictly as a union 'choice'. During the first half of the 1980s Belgium had a right-of-centre government that might be expected to have favoured a low inflation with high unemployment trade-off.

Denmark is an example of a country with rather contrasting positions on the C and E scales, being moderately centralised but having one of the lowest values of E. In Table 3.3, E is often the better predictor of its performance, helping us to interpret the ways in which Denmark departs from the normally assumed Scandinavian model in a manner not fully captured by simple centralisation theories. However, in the 1970s the economy performed considerably

better than predicted on the basis of E, the country becoming a low outlier on the unemployment equation; but by the 1980s this position had changed dramatically. Should one see in the 1970s, a social democratic government maintaining employment levels, with a change of policy following the arrival of a bourgeois government in the early 1980s?

Finland becomes an upper outlier on conflict and inflation in the 1970s, returning to something like conformity with both C and E hypotheses in the 1980s. The earlier move is disappointing from the point of view of our thesis. Between 1960 and 1970 Finnish unions grew in centralisation. The country already had a high level of exposed-sector unionism, and overall density rose sharply during the 1970s. However, both absolutely and in terms of residuals from predictions, the level of conflict and associated indices of disruption also rose. It is possible to account for this by treating Finland as an unusual economy not fully linked to the West, but there is evidence that industrial relations variables will take us further. While union and business leaders were busy trying to organise a Scandinavian form of co-operation, a powerful minority radical movement at shop-floor level, linked to a dissident wing of the Communist Party, was organising opposition. An autonomous and oppositional shop-floor movement is not accounted for in the Visser analysis of centralisation, and it is worth exploring it further.

During the 1970s a rise in shop-floor conflict was evident everywhere in Europe outside the small Alpine countries, but nowhere was it so autonomous of official unionism as in Finland and Italy, and possibly Ireland and the UK. (The dramatic French upheavals of 1968 did not lead to enduring organisations.) To anticipate our discussion, Table 3.3 does indeed show Italy to be an even clearer candidate for special consideration than Finland on this score. The UK and Ireland also had strong shop-floor movements, though never quite as autonomous of unions as the Finnish and Italian.

In both the 1970s and, less strongly, the 1980s, Finland also appears as another country with contrasted positions on the inflation/unemployment trade-off, getting considerably less unemployment than its union structure 'deserves'. It is notable that this is a further case of government being dominated by social democrats.

France becomes an outlier on economic variables in the 1970s, having far less inflation and unemployment than it should, and in the 1980s continuing to have too little unemployment at least as far as predictions based on C are concerned. It is likely that the expla-

nations of this lie outside industrial relations, since French unions are particularly weak. The unemployment/inflation trade-off for the 1981–5 period is consistent with our 'social democratic' thesis, but there is no straightforward way of explaining the 1970s.

West Germany, like Denmark, has rather contrasted positions on *C* and *E*, but the other way round. While centralisation is moderately strong, the dominance of the exposed sector is extreme. Conflict levels and unemployment seem to be explained very well by this combination, *C* variables consistently over-predicting and *E* variables under-predicting the extent of disruption by similar dimensions. Inflation is much more closely predicted by E, and it is of course at this point that we would expect exposed sector unions to be having their main impact. By the 1980s the disparities have however become very wide, making the country an outlier in contrary directions. Behind this lies the rather extreme trade-off of low inflation for high unemployment associated, again, with a right-of-centre government in this decade.

West Germany is the extreme case of exposed-sector domination of a union movement, largely because of the role of IG Metall in the steel and metal-working industries. The only comparably dominant union is Metall and Uhr (metal and watch-making) in Switzerland. The West German employers' associations in the metal and chemical industries have a similarly dominant role. This may well help explain a puzzle concerning West Germany. Nearly all countries associated with a neo-corporatist, consensus-oriented industrial politics are small states. Katzenstein (1985), in an argument compatible with that developed in this paper, has linked this to their dependence on foreign trade. West Germany is the only large country in Europe often classified as neo-corporatist. We can now see that it is also unusually responsive to organised interests in the exposed sector.

Ireland is the extreme low case for *E* scores, and also scores fairly low for *C*, but it is a case in general better predicted by the *E* variable. Our thesis may therefore help explain why it *fails* to conform to the Katzenstein model, even though it is the smallest country in our group. Even then, the country's labour market problems, like those of Italy and Spain, clearly need explanations going beyond industrial relations variables. One is prevented from placing much weight on the shop-floor movement as a cause by the fact that there is no under-prediction of the crucial strike variable.

Disruption in the Netherlands tends to be over-predicted for the 1960s and 1970s, which is rather disturbing as it was during that

decade that our assumption of confederal co-operation might have been expected to lead to under-prediction. Apart from that the only difficulty with this case is the extraordinary divergence of inflation and unemployment prediction outcomes (leading of course to very *well* predicted overall discomfort) in the early 1980s. Again we must look to a political explanation of part of this trade-off: the Netherlands had a right-of-centre government for most of the period.

Norway and Sweden can be considered together. Overall they are high conformers, until in the 1980s they show divergence over an inflation/unemployment trade-off the reverse of that of the Dutch. These countries have of course been the heartland of social democracy, and the interludes of bourgeois government that they experienced for parts of the 1980s did not lead to radical breaks from that approach. The E variable becomes a particularly bad predictor of unemployment, and compared with the C variable grossly overpredicts the balance of the discomfort trade-off. As with West Germany, E remains a fairly good predictor of the outcome with which it should be especially associated, inflation. These are countries in which the earlier dominance of external sector unions has now declined strongly. The continuing ability of E to predict inflation but not unemployment levels is therefore difficult to distinguish from the 'social democratic trade-off' being reached there.

The divergence of Switzerland has already been discussed. Statistics on Switzerland have been included here for conflict and inflation, but not for unemployment, where the character of its statistics are in doubt, and therefore not for discomfort. Inclusion of the exposed-sector factor does begin to make some sense of Switzerland, which the simple centralisation thesis fails to do; were we to have treated its separate confederations as co-operative, *à l'hollandaise*, rather than as competitive – and there would be a case for doing this – the deviance would be reduced further though by no means eliminated.

The UK, a country with very low levels of C and E, by and large conforms to the models, though it becomes an outlier in opposite directions on inflation in the 1970s and 1980s. The latter decade is the easier to explain, with a Conservative government seeking its expected inflation/unemployment trade-off without much reference to union policies. It is tempting to attribute the 1970s performance to the shop-floor movement, as with Finland and Italy; but, as with Ireland, in that case there should also have been an under-predicted strike level.

4. CONCLUSIONS

While the number of cases is too small and the number of independent variables too large to permit drawing any subtle conclusions, the above discussion has shown that exposed-sector unionism is a relevant variable, justifying further research. In particular the independent variables could be refined. We are really interested in the relative weight within a confederation of a particular kind of union. Assessing this is in practice a complex task, and we have here had to take a rough proxy, by considering the membership strength of these unions. This neglects the fact that there are powerful, influential unions with a small membership as well as some 'sleeping giants'. Further, the strategic position of some groups (such as dock workers) gives them an industrial power extending far beyond their numbers. The Scandinavian and Austrian evidence also suggests that some time after they have lost their numerical significance, metal and other industrial unions have retained their hegemony within the confederation. More refined studies could try to capture these non-membership features of union power. An attempt could also be made to assess co-operation between confederations. Finally, perhaps most important, account should be taken of employers' organisations, which may in fact be the really crucial actors.

Our discussion of individual cases has suggested three ways of improving the explanatory power of this approach. First, once we have taken account of our core variables, there was considerable evidence of sharply diverging inflation/unemployment trade-offs, mainly during the 1980s, depending on whether governments of the right or the left were in power. The only countries not to show these trends were either those with governments that it is difficult to identify as pro- or anti-labour (Ireland and Italy) or the two Alpine states (Austria and Switzerland) with elaborate arrangements for consensus-based, non-partisan industrial policy.

Secondly, we have identified a need to amend measures of centralisation to take more account of highly autonomous shop-floor movements, as opposed to mere decentralisation (Finland and Italy; possibly Ireland and the UK).

Finally, there is the question of the decline of exposed sector unions. This is closely related to the phenomenon that several observers have called 'disorganised capitalism', or some similar term (see especially Lash and Urry, 1987). Two major changes have been taking place in the European economies which are relevant to this.

First, the proportion of the work force in non-manual work has been increasing; and white-collar workers are more likely to join status-based rather than industry-type unions, and to join unions in separate confederations. Second, the proportion of the unionised work force in public-service employment has grown significantly, weakening the position of exposed-sector unions.

As Table 3.4 shows, these changes have been undermining the relative place of the main Nordic and Swiss confederations since at least the 1970s. In Sweden and Norway in particular the great Landesorganisation (LO) unions no longer clearly dominate the unionised work force, and by the end of this decade may indeed even become minority confederations. Among the other strong confederations (that is, excluding consideration of countries like the UK or Italy, with low scores on *C*), only the ÖGB, with its complete monopoly, and the DGB, which has skilfully reduced its rivals, retain their former dominance. In the past the manual exclusiveness of the Scandinavian LOs enabled them to pursue far more ambitious political and egalitarian objectives than their more cautious German-speaking counterparts, but in the changed context of the 1980s the advantages to confederal interests of the latter course become clearer.

Within confederations, some time between 1970 and 1980 metal industry unions lost their prime position, to either a white-collar or a public-service union, in the strongest confederations (Austria, Norway, Sweden) (see Table 3.5). In Denmark the metal union had already lost second place by 1970, and in Finland it was in the process of losing first place by 1980. The exceptions are Belgium, where ideological and regional divisions still enable the CSC to dominate the industrial heartland; the Netherlands, where the amalgamation of metal unions within Industriebonden helped them maintain dominance, though under challenge from public-service unions by 1980; Germany, where a combination of the great importance of the metal-working and steel industries within the German economy and the ability of IG Metall to avoid serious rivalry from special white-collar unions has ensured an overwhelming dominance for that union; and Switzerland, where Metall and Uhr maintains a similar dominance.

Clearly, to the extent that we have in this paper correctly identified an 'exposed sector dynamic' in industrial relations, the lion's share of the burden of that dynamic has been borne by manual-working unions in the metal and other industries. To what extent can that kind

Table 3.4 Shares of total unionisation, main confederations, thirteen countries

Country	Union confederations	1960	1970	1980
Austria	Österreichischer Gewerkschaftsbund (ÖGB)	100	100	100
Belgium	Confédération des Syndicats Chrétiens (CSC)	49.6	50.2	50.7
	Federation Générale des Travailleurs de Belgique (FGTB)	41.0	43.6	42.7
	Confédération Générale des Travailleurs de Belgique (CGTB)	6.4	6.2	6.6
Denmark	Landesorganisation i Denmark (LO)	80.1	73.5	71.1
	Faellesraedet for Danske Tjenestemands -og Funktionaer -organisationer (FTF)	12.0	15.0	15.6
	Akademikernes Central organisation (AC)	–	–	4.0[1]
	Others	7.9	11.5	9.3
Finland	Suomen Ammattiliittojen Keskusjaer jestoe (SAK)	53.5	69.9	63.2
	Toimihenkiloe- ja Virkamies- jaer jestoejen Keskusliitto (TVK) (salaried employees)	25.9	22.7	19.9
	Akateeminen Yhteisyoeval- tuuskunta (AKAVA) (professions)	5.4	4.5	9.9
	Suomen Teknisten Toimihenki- loeiden Keskusliitto (STTK) (technical employees)	2.6	2.9	7.0
	Suomen Ammatti jaer jestoe (SAJ) (breakaway from SAK)	12.6	–	–
France	Confédération Générale du Travail (CGT)	58.4	44.1	36.4
	Confédération Française Démocratique du Travail (CFDT)	16.0[2]	17.7	19.2
	Force Ouvrière (FO)	13.6	15.6	18.9
	Others	13.4	22.6	25.7
Germany (West)	Deutscher Gewerkschaftsbund (DGB)	82.5	82.4	83.1
	Deutscher Beamtenbund (DBB)	8.5	8.9	8.6
	Deutsche Angestellten Gewerkschaft (DAG)	5.9	5.7	5.2
	Others	3.1	3.0	3.1

(continued)

Table 3.4 continued

Country	Union confederations	1960	1970	1980
Ireland	Irish Congress of Trade Unions (ICTU)	94.0	94.0	94.0
	Others	6.0	6.0	6.0
Italy	Confederazione Generale Italiana del Lavoro (CGIL)	48.7	48.2	46.0
	Confederazione Italiana dei Sindacati dei Lavoratori (CISL)	25.4	33.1	33.0
	Unione Italiana del Lavoro (UIL)	14.4	13.8	15.0
	Others	9.5	5.0	6.0
Netherlands	Nederlands Verbond van Vakvereningen (NVV)	35.9	36.9	42.0
	Nederlands Katholiek Vakverbond (NKV)	29.6	26.2	18.2
	Christelijk Nationaal Vakverbond (CNV)	16.2	15.7	17.1
	Raad voor Middlebaar en Hoger Personeel (RMHP)	–	–	6.6[3]
	Others	18.3	21.2	16.1
Norway	Landesorganisasjon i Norge (LO)	83.4	79.2	67.8
	Akademikerners Felles-organisasjon (AF)	–	–	9.6[4]
	Yrkesorganisasjon Sentral-vorbund (YS) (white-collar)	–	–	9.0[4]
	Others	16.6	20.8	13.6
Sweden	Landesorganisation i Sverige (LO)	75.3	67.2	60.7
	Tjanstemannens Central-organisation (TCO)	20.1	26.5	29.8
	Sveriges Akademikers Central Organisation – Sveriges Stats-tjanstemannens Riksforbund (SACO-SR)	3.8	5.0	6.4
	Others	0.8	1.3	3.1
Switzerland	Schweizerischer Gewerkschafts-bund (SGB)	57.6	52.5	49.3
	Vereinigung Schweizerischer Angestelltenverbände (VSA)	14.4	15.9	16.6
	Christlich-Nationale Gewerkschaftsbund (CNG)	11.2	12.1	11.9
	Others	16.8	19.5	22.2

UK	Traders Union Congress (TUC)	83.7	89.4	89.6
	Others	16.3	10.6	10.4

Notes:
1. The AC was founded in 1972.
2. Until 1964 the CFDT was the Confédération Française des Travailleurs Chrétiens (CFTC).
3. The RMHP was founded in 1975.
4. The AF and the YS were founded in 1974 and 1977 respectively.

Sources: Visser (1984a) – for all countries except Belgium, Finland, Ireland; for Belgium, Spineux (1984); for Finland, Lilja (1983); for Ireland, ICTU (1961, 1971, 1981)

of labour continue playing such a role as it and its characteristic unions become minorities? Our data here give only a suggestion of a decline in performance; the greater power of centralisation as an explanatory variable over the exposed-sector variable in the 1980s is in part an indication that confederal structures have shown some capacity to shoulder the burden with less help from sectoral structure. But continuing recent evidence of difficulties in sustaining confederal bargaining in the Nordic countries suggests that the problems may be real.

How likely are unions in the exposed part of the tertiary sector (usually white-collar unions) to pick up this responsibility? Can public-service and other protected-sector unions ever be induced to accept a macro-economic burden? Such questions should direct our attention to the so far under-researched white-collar and public-service unions – confederations which are incidentally rarely centralised because, ironically, they have no history of class struggle. It was such struggle that initially encouraged the co-ordinated character of many manual union movements, which factor in turn now renders them so co-operative.

In reducing institutional characteristics of trade unions to a few numerical indicators, the above theory has implicitly assumed that wider political variables are irrelevant, and we have already seen the distortions that this imposes on our analysis of at least some countries. It is also important to consider the differing implications of politically different forms of division in union movements – a feature which our arithmetical approach has forced us to ignore. France, Italy and Spain, for example, obtain low scores for encompassingness because of the divisions in their union movements, and these divisions were (in the French and Italian cases) originally a reflection of the

Table 3.5   Individual union shares of confederation membership, selected countries, 1960–80

Confederation/union[1]	Membership share (%)[2]		
	1960	1970	1980
ÖGB (Austria)			
Metall und Bergbau[3]	18.32	18.99	16.50
Privatangestellten	14.99	17.16	20.35
CSC (Belgium)[4]			
Bois et Batiment	18.5	17.1	15.7
Textil et Vetement	15.3	11.9	10.4
Métallurgique	14.5	17.7	18.6
Employés	8.9	13.4	16.1
LO (Denmark)			
Specialarbejder	32.90	28.68	24.96
Metal	11.40	11.50	9.92
Handel og Kontor	10.75	15.85	21.84
SAK (Finland)			
Metall	16.59	16.31	15.21
Rakennustyoelaeisten (building)	16.59	12.77	8.53
Kunnallisten (KTV) (local govt.)	13.10	10.00	14.34
DGB (Germany)			
Metall	28.89	35.23	33.43
Oeffentliche Dienst (OeTV)	15.03	15.05	14.66
NVV, NKV, CNV aggregated (Netherlands)			
Metal en Elektrotechnik[5]	18.08	17.25	27.94
Bouw en Hout	15.55	17.50	16.76
Ambtenaren	13.83	18.08	24.05
LO (Norway)			
Jern og Metall	12.73	15.15	14.30
Kommune	10.00	13.30	19.25
LO (Sweden)			
Metall	19.99	22.04	20.92
Bygnad	10.79	10.04	7.43
Kommunal	8.26	14.83	25.22
SGB (Switzerland)[6]			
Metall und Uhr	31.86	27.91	28.98
Bau und Holz	20.34	25.71	25.27
Eisenbahn	14.95	12.75	12.42

Notes:
1. Data are presented on those unions which were among the two largest in the confederation in 1960 or 1980.

Notes to Table 3.5 continued
2. Union membership as a percentage of that of the confederation as a whole.
3. Since 1970s includes 'Energie'.
4. Data are for 1962, 1972 and 1977.
5. Since early 1970s amalgamated with unions in textiles and general workers to form Industriebonden.
6. Data are for 1960, 1974, 1981.
Sources: Statistical yearbooks of Denmark, Finland, Norway, Sweden. Sociale Maandstatistiek for Netherlands; annual reports of union confederations for Austria, Germany and Switzerland; Spineux (1984) for Belgium.

exclusion of the Communist labour movement from political respectability – and hence responsibility – after 1947. The Spanish case is more complex, but the outcome similar. This is quite different from the basis of division of the Swiss, Belgian and Dutch movements; and different again from those of the Nordic countries.

Mention of these last returns us to the question of the white-collar unions, which have rarely been linked to political families in the manner of the previously dominant manual or general confederations. We know very little of the *political* potentialities of a union movement in which white-collar unions are almost as important as manual ones, but within the next decade some countries may be providing examples of the phenomenon. While we have remained in this discussion within the bounds of a few narrowly defined phenomena, behind these rest far wider issues of the likely condition of labour politics, or politics as a whole, in 'disorganised capitalism'.

Note

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4 Two Kinds of Rigidity: Corporate Communities and Collectivism

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1 INTRODUCTION

Of all the virtues in the managerial calendar; of all the buzz-words used in the managerial literature to describe the proper preoccupations of those who seek to improve their industrial performance, the word 'flexibility' must surely be among the most frequent. It has become so – over the last decade – because its antonym, 'rigidity', became, in the early 1980s, the favourite word of the neoclassical economists in their attacks on the various deviations from free market liberalism, the *curable* market imperfections, which they saw as responsible for economic stagnation in the western economies – for, in particular, the disease of Eurosclerosis.

And of all the rigidities, it was not so much those in product markets – price cartels, oligopolies, conventional mark-up practices – nor those in capital markets which attracted their attention so much as rigidities in the labour market. They were often attributed to trade union power reinforced by creeping corporatism. Governments, according to this interpretation of events, being unable to control inflation because of poor monetary management, were increasingly resorting to corporatist bargaining with unions in a desperate attempt to control wage increases. And as part of those bargains all kinds of concessions were made – legislation which resulted in increasing union monopolies, and *ad hoc* administrative interference in the economy – leading to unconscionable and costly delays in the closing of redundant steel mills, for instance. These served only to make labour markets more and more rigid and inefficient. Stop seeking chimerical solutions in corporatist manipulation; use markets under a rigidly controlled money supply to cure inflation; liberate yourself

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thereby from the necessity of making concessions to trade unions, then start withdrawing the anti-efficiency concessions which have already been granted. Such was the programme advocated by the right throughout Europe and most thoroughly executed in Britain.

But, in fact, as I have argued elsewhere, what the free-marketeers condemn as labour market rigidity has two quite distinct components. On the one hand are the various interventions in the economy, manifestations of the state in its role as redistributor, as redresser of imbalances in income and power; on the other are the various manifestations of a change in employment relations within large and technically advanced corporations – notably employment guarantees and profit-sharing, as opposed to market-clearing, wages.

The two phenomena – on the one hand collectivism, on the other what one might call micro-corporatism or the growth of the 'community corporation' – are not necessarily intercorrelated, although there are linking mechanisms which will be considered later. This lack of correlation is apparent in the history of Britain in the last decade. There has been a considerable reduction in the rigidities stemming from protective power-redistributing legislation, but no decrease – if anything an increase – in the rigidities coming from trends towards a 'community firm'.

Let us clarify this point with a summary of the main features of the two types of rigidity.

2   RIGIDITY 1: THE WELFARE STATE

Most of these rigidities derive from two sources; various state income-maintenance programmes and statutory guarantees of workers' and union rights.

As for the former, geographical mobility, for instance, is reduced by a number of factors, but it seems reasonable to assume that the availability of a minimum income from the state is one of them. In Europe – but not in the United States or Japan – those without work in a high unemployment region can choose not to take a job in a distant location but to stay at home with their families and still have the guarantee of a basic subsistence income.

And these personal expectations create electoral expectations and the two become mutually reinforcing. Quite apart from the economic arguments about not under-utilising existing social capital, it is a bold politician who will assert that it is not the business of government to

create jobs where the people are, but the duty of the people to go to the jobs. In Britain, a Minister who was believed to have said just that thereby made an invaluable gift to the opposition. 'Get on your bike' (and go where the jobs are) became a stock symbol of government heartlessness.

Next to geographical immobility comes occupational/skill immobility – partly a function of deficiencies in the labour market information system and in the training system – particularly mid-career retraining facilities – but partly a function, also, of income-maintenance schemes. It takes longer for those whose skills have been made redundant to give up looking for jobs which are not there, and settle for some realistic alternative.

Third comes job immobility – the diminishing willingness, or ability, of managers to sack redundant workers, to 'shake out', as the term has it, surplus labour. Full employment has become a major objective of the post-war welfare states of Europe. The sense that job security is something of a right, to be infringed only as a last resort, grew naturally in a social climate which placed so much emphasis on employment and where unions increasingly gained the power to press that claim to job security – even to give it priority over wage claims. It is interesting that a Redundancy Payments Act passed in Britain in the mid-1960s had as its objective to diminish rigidities. By offering compensation for job loss, it was thought, it would reduce union opposition to redundancy dismissals and thereby enhance mobility. It seems, however, to have strengthened the sense of job right and, if anything, to have made redundancy dismissals seem more like an offence, more like a proper object of resistance – so much so that unionised employers have regularly felt obliged to offer *ex gratia* payments over and above the statutorily prescribed amounts in order to soften union resistance.

At any rate, the growth in job-protecting legislation has been general in European economies – largely in the form of tribunals which can award compensation for what is defined as 'unfair dismissal', and in regulations which require official approval of large-scale redundancies. Even in the United States, where the employer's right to hire and fire is least inhibited, a growing body of case law has steadily entrenched rights of job security. Congress recognised a change in the centre of gravity of opinion recently when it added an amendment to a trade bill requiring enterprises to give their employees sixty days notice of impending redundancies and forced it into law as a separate motion when the President tried to veto it.

These trends constitute a rigidity both in so far as they lead to the inefficient retention of surplus labour in firms, and because they lead to hesitation on the part of employers to take on extra workers during an up-turn. Employment suffers because they prefer to rely on the overtime of existing workers rather than face surplus labour costs in a later downturn. Output may suffer, too, if they are deterred by the prospect of inflexible labour costs from making investments in new capacity.

Finally there is wage rigidity; the failure of wages to fall in response to unemployment – or at least for wage rises to abate in response to unemployment – leading to a loss of employment and output and under-utilisation of capital. There are several parts to the argument which relates wage stickiness to economic inefficiency (all hotly disputed). They involve not only relative prices of labour and capital, but also effects on international competitiveness, investment and aggregate demand. As for the *sources* of wage stickiness which prevent markets from clearing, these are plausibly thought to be twofold. One is income-maintenance schemes and minimum wage legislation which provide a floor below which wages cannot be offered (and may have knock-on effects on the wages of more skilled labour). The other is the bargaining power of trade unions, which is also in part a function of the availability of income support during strikes, and in part of the legal framework – the pattern of legal immunities which permit strikes and other means of pressure to be brought against employers without risk.

What all these rigidities have in common is that they involve the *state as redistributor*, using taxation to redistribute income, or interfering in the process of free contracting to alter bargaining rights – and the definitions of property rights – in such a way as to protect the weak against the strong. The trend towards the expansion of such activity on the part of the state has seemed universal, inexorable and pretty uni-directional for the best part of a century. It has been so for well-charted reasons – the increasingly successful organisation of the working class 'movement', attempts to incorporate it in the body politic by judicious concessions – attempts inspired by middle-class fears of social unrest, and the need to mobilise citizen loyalties for mass wars in the 1940s and, increasingly in the 1960s and 1970s, for patriotic drives to enhance national competitiveness in the international economy.

Now, clearly, most countries in Europe are experiencing a trend reversal (Emerson 1988). Whereas, in the 1970s, legislative measures

taken in Europe were almost uniformly in the direction of an expansion and strengthening of the welfare and trade union and worker-protection provisions, in the 1980s the trend has been quite the other way – the amendment of hiring rules in Italy in 1985, for instance, a lengthening of the qualifying period necessary for protection against unfair dismissal, the changes in minimum wage coverage, the changes in welfare entitlements in Britain, the ending of control over redundancies in France in 1985, and so on.

Is this a hiccup in a long-term trend towards ever greater egalitarianism and use of state administration to compensate for inequalities of market power? Or a definitive reversal of the trend itself? The question is one to which we shall return.

3   RIGIDITY 2: THE COMMUNITY CORPORATION

The Japanese economy, in spite of its efficiency as judged by growth rates, employment statistics and cyclical resilience, is full of market imperfections responsible for all kinds of allocative inefficiencies of the sort which orthodox economists are wont to deplore. They exist in product markets: 'customer market' practices prevent producers from switching suppliers to take advantage of price differentials. They exist in financial markets – again because preferential trading ties between bank and corporate customer limit competition and because of multiple forms of state regulation designed to protect certain types of borrowers and depositors.

But above all there are manifest market imperfections, leading to great rigidities, in the labour market. The practice of lifetime employment inhibits mobility, obliges firms to retain workers with obsolete skills, slows, if it does not prevent, the movement of labour out of declining and into expanding industrial sectors. A system of wage payments, even for manual workers, which rewards seniority not job function, makes it impossible for wage offers to reflect changing relative scarcities, and to send accurate signals to the skill-training institutions.

To any 'right-thinking' economist it all adds up to a deplorable situation, a picture of an economy bound to be performing at a good deal less than its potential maximum. But, of course, we are talking about the society with the highest trend-rate of productivity growth among the mature industrial economies, and one of the most resilient

– see its remarkable adaptation to the oil shock of 1973 or the yen revaluation shock of 1985.

The explanation of the paradox seems to be that the X-efficiency gains derived from the social organisation of Japanese economic life outweigh any loss in allocative efficiency. The patterns of motivation, the savings on transaction costs and learning costs which that social organisation makes possible are the source of those X-efficiency gains. Suppliers who have a long-term 'marriage' with their customers (rather than a mere 'one night stand' to adapt a phrase of Robert Solow (1980) – that is, rather than an arms-length relationship which can be broken at any time when they lose out in a price competition) are more willing to invest in special equipment, more likely to be conscientious about quality, more reliable keepers of their customers' commercial secrets, more suitable partners in joint developments where the allocation of costs and benefits could be contentious if there were not give-and-take over the long term.

And likewise in the employment relation. Compare two employees. Worker A is hired (by managerial 'agents' of shareholding capitalist 'principals') for a particular set of skills, at the going market rate for those particular skills (possibly the union-bargained rate), under a contract which can be broken with a week or a month's notice at any time. Worker B has a 'lifetime commitment' to his firm, backed by a perception that his firm has a lifetime commitment to him; his salary level is determined more by his years of service and the extent to which his work performance has been judged over the course of his career to be meritorious, rather than by the nature of the job he is doing.

The contrast is sharp. The one may be described as being in a pure market relation, the other as a member of an enterprise community. Let us speak in shorthand terms of the 'market pattern' and the 'community corporation pattern'. Of the two employees it is fairly obvious which is more likely to care whether his firm makes a profit or not, whether it has a good reputation or not. It is fairly obvious which is more likely to put effort into his work, more likely to co-operate with fellow-employees from other departments to make sure that the work is done quickly and efficiently, more likely to accept new technology which makes his own skills obsolete, and more willing to undergo the training which will make him capable of performing new jobs.

It is the Japanese who have institutionalised this latter 'community

corporation' pattern of employment most thoroughly over the last 80 years. And the institutionalisation is important, because it is only when the lifetime commitment becomes the *norm* – so that job-hoppers are looked on askance and can rarely better themselves – that employers who give guarantees of job security get long service in return – and the assurance of full returns on their training invest-ments.

However, an observer in 1910 might well have concluded that it was the United States, rather than Japan, which was destined to develop these employment patterns. Lazonick (1988b) has recently written about the great American discovery that co-ordination through organisation could be more efficient than co-ordination through the market, the discovery that, with the right kind of pro-fessional managers in a firm which 'looked after' its employees, 'internally generated productivity gains more than offset the burdens of fixed costs and extra rewards to personnel needed to retain their experience and induce high levels of effort'.

> During the first decades of this century, culminating in the 1920s, a relatively small number of companies in the high fixed-cost mass-production industries began to consolidate their oligopolistic mar-ket positions as they used their unique, or 'firm-specific' value-creating capabilities to increase market share . . . As they did so, these firms became both able and willing to use the managerial surplus to provide long-term employment stability to their semi-skilled operatives. These firms then attempted to establish employ-ment, promotion and pay policies that would convince workers that their *investment* of effort in the enterprise today would result in a steady and growing stream of *returns* well into the future.
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> (Lazonick, 1988a)

But the trend was not sustained. The Depression destroyed hopes of plausible guarantees of job security. The growth of unions in the Roosevelt era led to an entrenchment of adversarial relations which militated against such employment policies; unions were not willing to give up the control over work which 'rate for the job' wage systems gave them. (Seniority promotion chains, with each job in the chain supposedly paid its proper going market rate, are very different from a Japanese seniority/merit (nenko) wage system in which it is the man who is evaluated, not the job.) Nor was 'company loyalty' a prom-ising concept in a society where, in the balance between the now

divorced forces of ownership and management it was (unlike Japan) not the managers (workers' fellow-employees in the 'community corporation' view of the firm) but the financial institutions exercising the powers of ownership which held the upper hand.

So in the end it was Japan, where the Depression was less severe, where unions were weaker, where capitalism was more production-oriented, less finance-dominated that the 'community corporation' pattern came into its own, Helped, perhaps, by a cultural factor – greater groupishness and greater readiness to defer to authority making the system more congenial.

Which is not to say that there are no intimations of the emergence of that pattern elsewhere. In the United States, in its IBM version, for instance, it has appeared only in a weak form as a minority phenomenon – and, as explained above, it is only when it is general and institutionalised that employers can reap the full potential gains that the pattern has to offer. The post-war West German firm with its copartnership arrangements, the Scandinavian enterprises after the employee participation provisions of the 1960s, made significant steps towards the pattern. And in recent decades there has been a marked shift towards that pattern even in Britain where the central institutions of nineteenth century capitalism – the absolute property rights of the shareholder, labour unions formed around a wage relationship seen by both sides as inherently adversarial – have been most deeply entrenched.

4 RECENT TRENDS TOWARDS THE COMMUNITY CORPORATION PATTERN: BRITAIN

In a recent (1986) article, William Brown has brought together the evidence that the last decades in Britain, and particularly the Thatcher years, have seen a notable shift towards the 'community corporation' pattern. The major points are as follows. Sentences in quotation marks derive directly from the Brown article.

The division between the 'core' workers of an enterprise and its 'peripheral' labour force has become sharper. Fifteen per cent of British workers were part-time workers in 1971, 25 per cent in 1985. At the same time the 'core' status of the core workers is being increasingly institutionalised. What is called 'harmonisation' – of payment conditions, sickness and retirement benefits *and* work hours – of manual and white collar workers has proceeded apace. Some-

thing like a half of the entire labour force are now 'on a salary' rather than 'paid a wage'.

Pay systems for the core staff are increasingly insulated from external market influences. Salary payments themselves, with their tendency to be on incremental scales, are bound to have 'greater emphasis on the circumstances of the individual employee than of the job that he or she is doing'. The insulation from the outside market still comes largely in the form of 'job evaluation schemes' which continue to be based on the principle of the 'rate for the job' rather than the 'rate for the person', but the main concern of such schemes is a 'fair' system of *internal* differentials, even at the expense of careful alignment with external market rates. Core workers are offered:

> a package of employment, training and payment practices that elicit high labour efficiency [by] . . . cultivating commitment. With the expectation of employment security and with the opportunity to acquire fresh training from the employer as and when required, employees are more likely to cooperate with technical innovation, to comply with flexible working, and to bear with tedium.

Training becomes increasingly enterprise-specific. Nationally organised apprenticeship schemes of a traditional kind have contracted in scope. There were six times as many British apprentices in the 1950s as there are today, and although this undoubtedly represents an absolute decline in craft training, it is also partly a shift to enterprise-specific schemes. Even the national schemes of certification are in a modular form which allows each enterprise to choose combinations most suitable to its own particular needs.

The patterns of collective bargaining continue to shift 'from multi-employer, industry-wide arrangements . . . to single-employer arrangements which have tended to become more formal, self-reliant and idiosyncratic'. The documentation of this in national surveys is clear (Daniel and Millward 1983; Millward and Stevens, 1986). Five aspects of the trend are worth detailing:

1. Plant-bargaining or enterprise-bargaining increasingly replaces national or regional bargaining.
2. External officials bargaining 'from the market' play a lesser role in the negotiations than internal, employees, shop stewards, and with the progressive depletion of union head office resources

there is 'an increasing reliance of workplace organisations upon resources provided by management'.

3. The multi-union negotiating committee which grows out of the transition towards 'community corporation' patterns, gives way to the single-union agreement on all greenfield sites. Five years ago only one union, the Electrical Workers', offered such agreements (and was denounced by other trade unions as condoning slavery and 'denying the basic concept' of trade unions (Bassett, 1986) – that is flouting the notion of the union as part of a movement with goals fundamentally at variance with those of capital). Now it has several rivals among the other unions.

4. The inclusion in single-union agreements of provisions for dispute settlement which make strikes unlikely except in extreme situations – the 'no strike clauses' which left-wing unions have denounced most vehemently of all.

5. A shift in the principles of fairness which affect the outcome of plant wage bargaining – an increasing importance being placed on the firm's ability to pay as revealed by the size of declared profits. This is a shift which I have called elsewhere (Dore, 1987) a shift from the EPEW principle of fairness (equal pay for equal work – no matter in what firm the work is being done) to the ESSE principle of fairness – equal shares for shared efforts. One consequence of this – of great concern to the British government – is the tendency for real wages in the profitable sectors of industry to rise steadily in spite of unemployment rates in double figures and low stable inflation rates. Another is the institutionalisation of the ESSE principle in employee share-ownership arrangements (which now cover nearly two million employees in Britain) and profit-related bonus schemes – both of which have received significant encouragement in the form of tax concessions in recent budgets.

Finally, efforts to increase employees' sense of involvement and commitment to their firm are explicit, as well as being implicit in the changes in pay systems, in the increase in enterprise training and so on. There has also been a considerable spread of joint consultation arrangements and 'widespread use of devices to consult with and inform employees directly, such as through quality circles and video-recordings'. The Employment Act of 1982 requires public companies with more than 250 people to include in their annual reports a statement of what they have done to foster employee involvement by

systematically providing them with information, consulting with them or inviting their financial participation in profit-sharing or share bonus schemes.

All these moves towards the 'community corporation pattern' – towards micro-corporatism – have been reinforced under the post-1979 Conservative governments by the dismantling of macro-corporatism and the loss of strength of the national unions – the strength which in the 1970s had enabled them to claim a voice in those corporatist institutions. Public sector unions in the traded goods sector – in the steel corporation, on the railways and in the mines – have one by one risked all-or-nothing strikes and ended getting nothing. These defeats have changed the climate of industrial relations in Britain, and reduced the already feeble power of unions to prevent the legal reforms which the Thatcher government has carried through – banning secondary picketing and closed shop agreements, reducing immunities, enforcing standard internal rules for the election of officials and for balloting on strikes. The main tripartite organisations have been down-graded in importance or abolished. Government consultative committees which would once automatically have had union representatives among their members do so no longer.

One can only speculate about the relation of these national trends to the prospects for the 'community corporation pattern'. The general lowering of union prestige – reflected in an overall decline in membership figures – tempts firms to try the non-union version of that pattern. If not trying to dispense with unions altogether, they may at least try to avoid any 'microcorporatist' solution which accepts the unions as the main instrument for securing worker co-operation and instead establish worker consultation and participation systems with direct employee representation. At the same time, for those prepared to accept the microcorporatist solution, the decline of the strength of national unions facilitates the focusing of effective union action on the local factory organisation.

5   THE PROSPECTS FOR COLLECTIVISM AND THE WELFARE STATE

The secular trend towards ever greater egalitarianism is of long standing in European societies. T. H. Marshall's (1950) evolutionary phasing of that trend remains an apt one. First came the establish-

ment of civil equality – citizen equality before the law, the most important landmark which has its bicentennial next year. Then came political equality with the nineteenth century achievement of universal suffrage. Phase 3, the move towards greater economic and social equality begins with universal compulsory education, proceeds to the welfare state with an ever-expanding definition of minimum acceptable rights, and to the use of legal immunities to balance the organisational power of unions against the market power of capital.

Is the reversal of this trend in the 1980s – the moves most pronounced in Britain but discernible throughout Europe to cut back on the rights of workers and of unions *vis-à-vis* employers, to restrict welfare benefits, to diminish the role of labour in central macroeconomic decision-making – is this reversal definitive? Or is it just a swing of the pendulum, the one step back after two steps forward; a corrective reaction after a period of rapid advance towards greater equality?

There are a number of arguments to support the 'definitive turning of the tide' interpretation. They are the more persuasive in that they are all rooted in the one undeniable unidirectional evolutionary trend of modern societies – the accumulation of scientific knowledge and the increasing sophistication of technology:

1. Steady improvements in transport and especially communications increase international trade at a rate much faster than the growth of world GNP. This increases international competition. That in itself increases the vulnerability of national economies which is further exacerbated by currency convertibility and the dismantling of frontier controls necessary to accommodate the economy's increasing internationalisation. Hence the emphasis on 'competitiveness' as a dominant goal of national policy – hence increasing state expenditures on science and industrial R & D, even by ideologically committed anti-interventionists of the Reagan stamp. Hence a shift of the emphasis of politics from distribution to production; supply-side economics, not Keynesian stimulation of demand, dominates the prescriptions for economic progress. The welfare of those who contribute nothing very important to the economy's international competitiveness gets pushed to the back-burner, especially when tax reductions and incentives to enterprise predominate among supply-side measures.

2. The growing sophistication of technology in office and factory, hospital and school, leads to a growth in the number of jobs

which only bright people can learn to do after prolonged training – and to a shrinkage, through automation, of the number of jobs that almost anyone can learn to do quite quickly. This alters the pattern of scarcities of human resources. It raises the market value of superior learning talents, depresses the value of lesser talents. Hence one would expect the primary distribution of (earned) income to tend to ever greater inequality. Hence, to sustain any given level of equality of income distribution requires a steadily increasing share of GNP to be taxed out for redistribution.

3. Better medicine, greater longevity, an increasing dependency ratio, have the same effect.

4. At the same time, greater affluence draws the median income steadily further away from basic physiological subsistence levels. Where 'the poverty line' should be becomes increasingly controversial, and the controversy provides arguments for the relative reduction of minimum-income guarantees.

5. Work-disincentive effects of welfare schemes may become more pronounced over time as the stigma attaching to the receipt of welfare benefits disappears – particularly where the generational transmission of deprivation creates a marginalised underclass with its own 'dependency sub-culture' – or alienated, adversarial 'squeeze the state for all its worth' sub-culture.

All this tends to make 'the welfare state' dirty words, though there are countervailing forces since 'welfare' covers a wide range. Income maintenance for the aged draws support from the fact that everyone has the prospect of growing old. Public health services are widely popular. The particular services at issue when the attack on 'rigidities' is under discussion are income support schemes and employment protection for those among the able-bodied of working age whose saleable skills restrict them to a choice between unemployment or low-wage work.

Worker protection measures and income-maintenance schemes were the defence, against the propertied owners of market power, of the propertyless who had nothing but their labour to sell – defences evolved when the latter represented a majority of the electorate and when the 'labour movement' could claim wide enough electoral support to form governments, or to claim a powerful voice in coalitions, or at least force conservative opponents to make concessions as a precondition for retaining power. Today, in most European

societies, a majority own their own houses; have pension fund rights. The genuinely propertyless have become a minority.

And the 'labour movement' which represented the interests of the propertyless majority is weakened not just by the fact that the more affluent workers who always provided the movement's driving force have an increasing property stake in the *status quo*, an increasing tax burden and hence an increasing interest in resisting the taxation cost of redistribution, but also by several other factors:

1. An increasing concentration of union power in the public sector; a public sector, moreover, increasingly characterised by adversarial and ineptly managed labour relations. The typical strike is likely, nowadays, to be one which makes you walk to work, stops your letter deliveries, keeps your child out of school or keeps your holiday 'plane grounded. It is less likely to be the struggle of an abused fellow-worker against a rapacious coal owner or car manufacturer – a struggle with which you can more easily feel solidarity because it has little direct impact on your own daily life.
2. Meritocracy – the bureaucratisation of employing organisations and their recruitment patterns, and the spread of educational opportunity – increasingly narrows the possibility of intellectually able union leaders coming out of the shop-floor working class. In those societies where functioning forms of corporatism give an 'incorporated' labour movement a real share of power (Sweden, Austria, and so on) the unions, too, may develop bureaucratic recruitment patterns, drawing potential leaders from the universities (perhaps through their legal and research departments). But this is unlikely to happen in most societies once the historical 'window of opportunity' – the period when solidaristic, class-conscious 'unionism of the propertyless' was at peak strength – has passed *without* effective corporatist institutions being established. In Japan, one can pinpoint the window of opportunity precisely – 1975, when a more cohesive union movement might have used its strength to formalise the informal consensus-building mechanisms which were used to 'talk down' the rate of wage increases in that year. They failed to do this, and as their power to call workers out on strike has declined, the unions have played a diminishingly effective role. In Britain, the peak period, the 1960s and 1970s, did create formal corporatist institutions, but they were too ineffective and too contentious – too often

made and remade by alternating left and right governments – to have much chance of enduring. It seems hard to imagine that the tripartite bodies created in those years and subsequently dismantled piece-by-piece during the Thatcher years (decisively, in the field of industrial training, only now in September 1988), can ever be reconstructed.

3. And the reason why it is hard to imagine it is because of the third factor which is weakening the labour movement – the spread of the microcorporatism of the 'community corporation' – the source of our Rigidity No. 2. The 'labour movement' as a political movement depends on a sense of class solidarity, and the sense of class solidarity derived from the shared and common experience of an active and 'flexible' labour market in which those who had nothing to sell but their labour were hired and fired as the business cycle and technical change dictated. This remains the situation of that segment of the working population in – to use the terms of the 'dual labour market' theorists – the 'secondary labour market'. They remain still a large segment, but increasingly lack the organisational strength, or the financial resources – or the articulate leaders – needed to dominate the union movement. The core workers in the primary sector, as their (oligopolistic) firms move towards the 'community corporation' pattern, have different concerns, deriving from a different pattern of interests. Their unions become more and more like Japanese enterprise unions, at best federated in industry federations for limited common action. They are unions which start from a basic 'business unionism' acceptance of the need to co-operate with managers to promote the competitive efficiency of the firm whose workers they represent, and represent primarily in arguments over the distribution of the gains of enhanced productivity. Their members, with relatively secure tenures, perhaps internal career prospects which make a long-term career commitment to the firm their best option, are more likely to identify themselves as members of their enterprise community than as members of an occupation group or social class.

The expulsion of the electrical workers union, the EETPU, from the TUC in September 1988 is a straw in the British wind. Its sin was to pursue too aggressively its policy of single union agreements – the most overt and decisive shift towards Japanese-type enterprise unions and one pioneered, in fact, by Japanese firms in the UK. But

the policy itself is now part of the common strategy of the leading engineering industry unions in Britain. The same Congress meeting provided a telling indication of the pessimism among British trade union leaders about the prospects for rebuilding in Britain the political power necessary to regain the worker protection and income-maintenance provisions of the 1970s. It gave a warm welcome to Jacques Delors when he came from the European Commission to talk about the need for a social dimension to the move towards European unity. The thought that there was a better chance of effective worker protection at the European than at the British national level overcame the isolationist reluctance to get embroiled in Europe traditional among British unionists (*The Financial Times*, 14 September 1988).

The same month brought acknowledgement that the world has fundamentally changed from other unexpected sources. The new Italian Communist Party secretary, Occhetto, spoke in a careful interview of the need to reject 'ogni visione classista chiusa' of the Communist Party as a workers' party (*Repubblica* 4–5 September 1988). A policy drafting committee of the British Communist Party has published a discussion document which speaks of the breakdown of traditional blue-collar/white-collar demarcations and a 'new order [which] will be about flexibility, team-work and service-sector work'. 'A great swathe of wage earners and self-employed who control some kind of productive asset – skills, knowledge, organisational power over production – . . . are both exploited and exploiters'. There is a 'dissolution of the traditional constituencies' of the labour movement, and 'class cannot straightforwardly provide the collective interest for modern socialism' (*Marxism Today*, September 1988).

'Is, then, the century of "class unionism" – a unionism that was part of the Labour Movement, the carrier of the grand design of industrial workers as a "general class" – definitely over?' So asks Michele Salvati in a recent paper (1988). Perhaps not, he answers, because there have been ups and downs before. But if yes, 'one could argue that class unionism is not the only way of promoting a "wide" focus of solidarity and that some other can be found based on an equally large, or even larger identity'. Even Japanese society, where the enterprise fragmentation of the union movement goes furthest, has 'over-arching values – Confucian ethic, nationalism – which restrain and channel microcorporatist loyalties and individual effort'.

Catholic doctrines of social responsibility and nationalism for Italy? Christian humanism and nationalism for Britain? Nationalism

was, indeed, in Britain an important ingredient in the recipe that made advance towards social equality sufficiently acceptable for the post-war social legislation to be possible – to capture enough middling support beyond the narrow confines of the labour movement itself to produce large Labour Party majorities. But that nationalism and sense of national unity was a product of war. It is a wasting asset, as the memories of war recede. And as for Christianity, Christian traditions lend themselves as much to Mrs Thatcher's individualistic 'quasi-moral familism' as to love of unrelated neighbours.

There remains, as possible motivator and source of solidarity, the propertied majority's fear of envy, disorder and crime – and revulsion against the alternative defences of double locks, protective walls, and an ever larger share of GNP for the security industry. Perhaps it will be enough to keep the growth of inequality within bounds? In view of the forces promoting it which were listed at the beginning of this section, it seems doubtful.

6   REALLY THE AGE OF THE COMMUNITY CORPORATION?

Essential parts of the argument of this exercise in pessimism are the assertions, (a) that the community corporation pattern both produces greater inequalities in society and erodes the collectivist will to ameliorate those inequalities, and (b) that the community corporation pattern is in fact becoming more widely diffused in modern industrial societies in general for reasons which are common to all such societies. The symptoms of change in Britain which were enumerated earlier are not a purely British phenomenon.

There may well be objections to that last assertion. The undoubted reduction in size of large enterprises and the growth of self-employment; the prediction that the new post-Fordist era will be one of flexible specialisation, and so on, would seem to lead to other prognoses. (See, for example, Piore and Sabel, 1984.) Perhaps most penetrating of the counter-arguments are those which claim that even in Japan, the paradigm of a primary labour market sector dominated by enterprise communities, the exigencies of competition in a technologically sophisticated world are forcing change to more individualistic, market-based forms. This is certainly the view of an influential Japanese management institute, which recently produced a report on the management of the future written by a mixture of university

professors and managers from such firms as Sony, Suntory, New Japan Steel and the City Bank. Its argument is that Japanese firms are moving into 'a world in which "Venture-type management", "levering into post-maturity by R & D", "globalisation" and "network organisation" are the key words' of the restructuring which is necessary for survival and success.

Firms will need to pay more attention to ROI and less to the capture of market shares. They should be willing to have outsiders – including foreigners and women – on their boards. And they will have to change their personnel systems:

> The paradigm of Japanese personnel practices has hitherto been the egalitarianism of the nenko (seniority/merit) system. . . . That egalitarianism is effective when the members of the enterprise are homogeneous in attitudes and abilities. . . . But egalitarianism begins to lose its fairness with the diminishing homogeneity of value outlooks (i.e., presumably, some people wanting to enjoy the fruits of affluence in their leisure lives, some preferring to remain workaholics) and with the need for a diversity of abilities, particularly as the enterprise begins to move into diverse fields of activity. . . . Egalitarianism rejects the person of strong individuality, it nips the buds of creativity and radical change, it fails to use the men and women of unusual talents and lowers the morale of the highly motivated. (KDK, 1988)

The committee urges, consequently, sweeping changes in the personnel practices of Japan's 'community corporations'. There should be more posts for specialist personnel, hired and if necessary fired, on renegotiable annual salaries – the creation of a whole new segment of employment distinct from the career generalist stream. There should be more emphasis on formal qualifications as a prerequisite for fulfilling certain job functions, less weight given to seniority. Middle managers need 'intrapreneurial' qualities of inspirational leadership, and this requires rapid promotion of the young and able and a discarding of seniority criteria:

> There is no doubt that for the traditional employee used to the dependency and the security of the established *nenko* (seniority/ merit) system, the new type of go-out-and-get-it promotion system based on tough competition will pose painful choices. There will have to be a general rethinking of job functions as individualism

and competition come to replace traditional egalitarianism, only thus can the new challenge-type of work attitude allowing full scope for the expression of individuality be established.

The report oscillates between prediction and exhortation. Its emphasis on the alleged increasing heterogeneity of values of the Japanese population as a factor making for change is an interesting twist on the assertion that only the 'groupish' Japanese could ever make the 'community corporation' the dominant form; never an individualistic Western society. As an argument for change, however, it ignores the power of personnel selection techniques to ensure that, however heterogeneous the society, only the homogeneously right kind of people ever become members of the Mitsubishi, or the IBM, or the Olivetti, community. Otherwise, the only forces adduced as reasons why the changes should take place are international competitive pressures and the increasing sophistication – and rate of change – of technology. But it seems to be precisely in the technologically sophisticated and rapidly changing areas of production that Japanese firms, hidebound in their *nenko* systems, seem, by any empirical test known to investment analysts, to have been rather more successful than Western firms, for all that the latter make full use of professional specialisms, personalised leadership, and the motivating fuel of intense interpersonal competition.

One cannot help thinking that there is an element of wish-fulfillment on the part of the Japanese businessmen on that drafting committee. Careful, colourless organisation men are quite likely to feel envious of more assertive, assured, go-getting people, but it is more often their panache that they envy than their efficiency.

At any rate, the evidence of change in the Japanese system is thin. Average job tenures continue to grow longer. The merit spread of salaries for managers of equal seniority remains unchanged, and for manual workers likewise. The comprehensive salary survey shows that the proportion of Departmental Chiefs appointed to their job at a younger age than the modal 45–49, fell from 25 per cent in 1976 to 15 per cent in 1984 (EPA, 1986).

7. IN CONCLUSION

When I suggested, 15 years ago, that there was more evidence of British employment systems growing to resemble the Japanese than

vice versa (Dore, 1973) it was dubbed the 'reverse convergence thesis'. Other people becoming like us is only right and proper, but there is a certain understandable resistance to the idea that Japan might provide a blueprint – even if only a rough outline blueprint – of our future.

And clearly there are many features of Japanese society which are unlikely ever to be reproduced in Europe. And yet, many of the forces which have created modern Japan are at work in all industrial societies. The most notable of these is the increasing role of the educational system – replacing property inheritance and family connections – in determining the allocations of power, prestige and income in society. Top brains are channeled into top organisations; second-level brains into second-level organisations – if not, in other societies (except France, perhaps) with anything like the finely-graduated refinements of meritocratic competition found in the Japanese university entrance system. But it is not just a thin élite crust which is involved; a quite broad segment – the most able 30 or 40 per cent – find their appropriate – ability-appropriate – place in organisations which are secure, and which offer them careers. This is a society which has hierarchy, within organisations and between organisations, but there are no clear stratal, class, divisions; only a sprectum of gradations between those who are firmly and securely favoured workers in the primary sector, and those – the least favoured 20 or 30 per cent, (and increasingly the 20 or 30 per cent who did not do very well at school) – who bear the full brunt of the insecurity, low pay and frequent unemployment of the secondary sector.

Contrast this with the paradigm of the society which created 'the labour movement' – a society more unequally and more sharply divided; on the one hand a small minority of owners of capital with a restricted cadre of their trusted managers, on the other the sellers of labour whom the former hire and fire as their needs dictate.

Both are gross simplifications, but the difference the two caricatures illustrate is a real one, and a crucial one for the shaping of the political agenda. The principle of ascription which in the traditional paradigm gives power and wealth to those who inherit capital has seemed, for many centuries, an obvious source of injustice. It provides an obvious target for a labour movement, justifying revolutionary rejection of the *status quo*. By contrast, the meritocratic principle of the new paradigm, rewarding as it does what is universally recognised as personal achievement, is not so obviously vulnerable. It is

easier to argue that the losers are, quite fairly, getting their just deserts.

National societies, competing with each other in our neo-mercantilist environment, will find that they can happily live with the rigidities (type 2) which come from the 'community corporation' characteristics of the primary sector organisations. In so far as they derive principally from the need to offer security and career prospects to their members, there is likely to be adequate compensation for those rigidities in greater flexibility, cooperativeness, diligence. The question is whether those who manage the society from their primary sector fastnesses are going to continue to tolerate those rigidities (type 1) in the secondary labour market which derive from the political system – from legislation and administrative action designed to protect the least favoured workers from the full market consequences of their powerlessness – and (increasingly) lack of what the market counts as competence. Mentions of the need for 'social solidarity' seem to be cropping up more frequently in the agenda-setting speeches of European statesmen, recently, thereby, perhaps, strengthening the probability that the answer to that question might be: yes, *noblesse*, if now *du diplôme* rather than *de l'épée* or *de la robe*, will continue to oblige. One would have more faith in that prognosis, however, if these references to social solidarity showed a little more clarity about what, in a Europe of eroding nationalisms and rampant individualisms, the moral and political basis of that sense of social solidarity is supposed to be.

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5 Between Liberalism and Corporatism: The Effect of Trade Unions and Governments on Economic Performance in Eighteen OECD Countries

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1 INSTITUTIONS AND ECONOMIC PERFORMANCE

During the last ten years, a lively discussion has developed on the determinants of economic slowdowns and the reasons for increasing cross-national variation in economic performance. According to most discussants, such institutions as interest groups and governments make a difference. But what kind of difference? This question is a source of great disagreement.

In this paper I will test four alternative hypotheses on the effect of interest groups and governments on economic performance.

First, there is the *Liberal-pluralist hypothesis* claiming that economic performance and economic adjustment is better in countries where the scope of both trade unions and governments in economic life is highly limited.

Secondly, there is the *corporatist hypothesis* claiming that in organised economies economic performance and adjustment is better in countries with centralised and consensus-prone interplay between interest groups and government.

Thirdly, there is the *U-curve hypothesis* claiming that economic

performance and economic adjustment is better both in highly centralised and highly decentralised economies and worse in economies somewhere in between centralisation and decentralisation.

Fourthly, there is the *hypothesis that there are interactive, conditional relations in collective action* between different strategic actors, such as unions, employers and the government.

The *liberal-pluralist hypothesis* is based on neo-classical economic theories as well as some sociological and political science theories on overloaded government. Writers in this group blame interest groups and also over-large and over-active governments for contemporary economic maladies.

In competitive markets, where interest groups are weak, firms set their prices according to market conditions. In the same way, the price of labour fluctuates according to market conditions. In organised markets, where employers and employees are members of interest organisations, both wages and prices become rigid downwards. Where there is decreasing demand, firms sell smaller quantities of goods (with fixed prices) and buy smaller quantities of labour (with fixed wages). As a result there may be sluggish economic growth, unemployment and inflation at the same time, in short: stagflation.

Decision-making in organised markets also gives rise to slowness and rigidity. Decision-making on wages and sometimes on prices and changes in production is based on bargaining between different interest groups. There may be disagreements between the partners and the agendas of bargaining may be long. Groups can never make decisions as fast as individuals. The vested interests of organised groups may prevent modernisation of contemporary technologies.

According to liberal-pluralist writers, large and over-active governments are also a source of contemporary economic problems. Powerful government draws resources out of the market system (OECD, 1985, p. 21). Overdeveloped welfare states makes people passive in the market system (Rose, 1980). For example, it is not necessary to work in order to make a decent living. Over-extensive and intensive regulation disturbs the proper functioning of the market system. In the late 1970s it became popular to talk about the crisis of the welfare state (OECD, 1981).

The *corporatist hypothesis* is based on politological and sociological theories on corporatism and corporatist decision-making in highly organised market economies (for example, Schmitter and Lehmbruch, 1979; Lehmbruch and Schmitter, 1982). According to these

theories, in organised markets a co-operation between large and encompassing interest groups improves economic performance (for example, Schmidt, 1982; Goldthorpe, 1984; Paloheimo, 1987).

Corporatist theories analyse the role of large and encompassing interest groups especially in the Nordic countries and also in some other countries. In these countries, well-organised employer and labour organisations collaborate with each other and with the government. All economically important social groups are represented in this co-operation by their interest group organisations.

Corporatist decision-making is based on consensual agreements between the partners. The system of consensual decision-making guarantees that the interests of every collaborating group will be respected. In this kind of decision-making optimisation is based on Pareto criterion.

Corporatist decision-making has also been analysed as an institutional way of getting co-operative solutions in many Prisoner's Dilemmas of economic life. The problem of inflation, for instance, may be analysed as a set of Prisoner's Dilemmas (Maital and Yael, 1980). There are wage-wage Prisoner's Dilemmas between different sections of the labour force. In a non-cooperative world wage maximisation is a rational strategy as opposed to wage restraint, but still a co-operative solution with wage restraint has been, at least under certain conditions, even more beneficial giving better pay-offs in employment and perhaps also in real wages. But a co-operative solution is always problematic. If other groups cheat you by demanding highly inflationary wages, you will be even worse off compared to a non-cooperative strategy.

The same kind of Prisoner's Dilemma will be found in the wage-price inflation between workers and employers.

Both in political and in scientific discussions liberal-pluralism and corporatism have been competing theories. There are, however, some theories in between liberal-pluralism and corporatism.

Mancur Olson's *The Rise and Decline of Nations* (1982) has its roots in the liberal-pluralist tradition, but there are some theorems which converge on corporatist ideas. Olson postulates that the size of interest groups is of crucial significance for determining the style of group actions. Small groups are in a position where they usually need not think about the social effects of their redistributive pressure policies. Large and encompassing interest groups, on the other hand, are in a position where it is in their own interest to think about both the redistributive effects and the social costs of their pressure policies.

According to Calmfors and Driffill (1988) wage setting is as important as government policy for macroeconomic performance. They claim that real wage flexibility is an important precondition for economic adaptation and low unemployment. They also claim that both heavy centralisation and far-reaching decentralisation in wage bargaining are conducive to wage flexibility and wage restraint in poor economic years, whereas intermediate levels of wage bargaining are harmful. So there is claimed to be a *U-shaped relationship between the level of wage bargaining and economic performance*. This is the third hypothesis of this paper.

Theories between liberalism and corporatism are on the right track. Disagreements between liberal-pluralist and corporatist writers are partly due to a lack of understanding on the conditional relations in collective action. Such factors as unionisation, level of wage bargaining or party complexion of the government should not be analysed as independent determinants of economic policy and economic performance. On the contrary, their effect is conditioned by the combination of different institutional factors. The fourth hypothesis of this paper is that there are conditional relationships between the rate of unionisation and the level of wage bargaining as well as between the party complexion of the government and the level of wage bargaining.

Interactive relations between the level of wage bargaining and level of unionisation may be presented as four different types:

A. If the level of wage bargaining is centralised and the labour market is highly unionised, trade unions have only limited possibilities in searching for benefits with pure redistributive strategies. Pure redistributive strategies would probably have negative effects on some groups in the trade unions. In a highly unionised economy with centralised wage bargaining unions probably are encompassing, in Olson's meaning of the word, and are willing to choose a growth-oriented economic policy strategy. Pay rises are not the only goal of unions' wage policy. Unions also keep price development and unemployment in mind. There are favourable conditions for limiting negative externalities. This increases possibilities for fair economic adjustment.

B. If wage bargaining is decentralised and the labour force is highly unionised there are a number of groups looking mainly at their sectional interests. There are Prisoner's Dilemmas in decision-

making both between different unions and between unions and employers. Co-operative, growth-oriented solutions are difficult to achieve because of a lack of co-ordination in decision-making. Redistributive strategies are easier to mobilise. Different small groups have good possibilities for externalising the negative side effects of their redistributive policies. There is a trend towards a rent-seeking society (Buchanan *et al.*, 1980).

C. It is also possible that wage bargaining is centralised, but that only a small proportion of the labour force is unionised. In a situation like this, centralisation of decision-making does not mean that kind of inclusiveness as in case A. It is easier to choose those kinds of redistributive strategies where negative side effects are externalised to other groups in society. Therefore, I suppose that there are favourable conditions for high negative externalities, pure redistributive policy strategies and poor economic adjustment.

D. There are countries where wage bargaining is highly decentralised and the rate of unionisation is low. In this case the power of trade unions is smaller than in the three other cases. Trade unions have a smaller effect on the functioning of the market system. This case resembles most closely the neo-classical model of perfect competition. Perfect competition, in turn, is a sufficient condition for an optimal allocation of resources (Lane, 1985). In this case we can therefore expect market-oriented economic policy strategies and economic adjustment by market mechanism.

There are also interactive relations between the level of wage bargaining and party complexion of the government. Policy strategies of left-wing governments are different in highly-organised economies compared to those with a low level of organisation. In the same way, policy strategies of right-wing governments are different in highly organised economies than in those with poor organisation.

In a society with powerful trade unions, both governments and trade unions are highly dependent on each other. Governments cannot implement a growth-oriented economic policy without the support of trade unions and the strategy of trade unions is dependent on their relations with government. In a highly unionised country with centralised wage bargaining, unions are prone to choose growth-oriented policy strategies. But if unions do not trust government's economic policy their interest on growth-oriented strategies

declines. Modern governments do use massive redistributive instruments. Unions are hardly willing to support growth-oriented economic policy if they are afraid that government will redistribute the benefits of growth against the interests of union members.

Consensual interaction between government and trade unions is probable especially in economies with centralised wage bargaining. All the partners can bargain on a national level. Left-wing governments benefit from these mutual dependencies. It is easier for trade unions to have mutual understanding with left-wing governments than with right-wing governments. In the same way, it is easier for left-wing governments to have mutual understanding with trade unions (Lange and Garrett, 1985).

Therefore, I suppose that in countries with centralised wage bargaining left-wing governments have better possibilities in implementing growth-oriented economic policy with a fair economic adjustment.

If trade unions are weak and fragmented, prospects for active consensual interplay between government and trade unions are low. Trade unions are more inclined to choose pure redistributive strategies. Left-wing governments cannot co-operate with trade unions in the same way as in countries with centralised wage bargaining. On the other hand, left-wing governments have an ideological antipathy towards a highly market-oriented economic policy. Therefore, left-wing governments are generally willing to choose interventionist redistributive strategies in favour of their supporters.

Right-wing governments have traditionally been inclined to implement market-oriented economic policies. In countries with decentralised wage bargaining and a low rate of unionisation, the market mechanism is more efficient than in countries with centralised wage bargaining. Therefore, in countries with weak and fragmented trade unions right-wing governments have better possibilities in implementing market-oriented economic policies.

2 DATA

The above mentioned hypotheses are tested using data on 18 OECD (Organisation for Economic Co-operation and Development)-countries. A cross-section, cross-time research design has been used in this study. Data has been collected from two time-periods: 1974–9 and 1980–5. Cutting points between time periods follow the general

cyclical development of OECD-countries. There is the business cycle following the first oil price shock and the business cycle following the second oil price shock. There are then 36 cases altogether.

As *independent variables* I use data on union membership, centralisation of wage bargaining and party complexion of the government.

Data on *trade union membership* seem to be rather unreliable. When calculating rates of unionisation there may be several percentage points difference from using different sources. However, crossnational differences seem to be rather stable irrespective the source.

Different sources have been used in collecting data on union membership (Borg, 1980; Visser, 1984; The Europa Yearbook; The Statesman's Yearbook). Figures on the wage-dependent labour force have been collected from OECD Labour Force Statistics.

Data on trade union membership as a percentage of wage dependent labour force has been collected for two different years: 1975 and 1980. In empirical analyses these data are connected to economic data for the periods 1974–9 and 1980–5, respectively.

Quantitative data on the *level of wage bargaining* is even more problematic than data on unionisation. There are some countries having collective bargaining at national and industry level at the same time and there are others with collective bargaining at both firm and industry level. In extreme cases, such as Italy, there may be collective bargaining on national, industry and firm level all at the same time.

Several scholars have made cross-national scales on the level of wage bargaining or on the centralisation of decision-making in labour federations (for example, Headey, 1970; Wilensky, 1976; Blyth, 1979; Schmitter, 1981; Cameron, 1984; Bruno and Sachs, 1985; Calmfors and Driffill, 1988). I have chosen to use Calmfors' and Driffill's index of the level of wage bargaining because it is the newest one. Calmfors' and Driffill's scale does not include Ireland at all. I have myself coded Ireland as a decentralist country with some centralist tendencies.

Party complexion of the government is measured with left-wing cabinet seats as a percentage of total cabinet seats in the two time periods studied (Paloheimo, 1984; Keesing's Contemporary Archives). Figures are averages for the periods mentioned. If party complexion of the cabinet has changed during the period under consideration, weighted averages have been calculated using periods of office as weights.

All the above mentioned independent variables seem to correlate

rather highly. In the data set of 36 cases the correlation between unionisation and the level of wage bargaining is 0.74. Countries with centralised wage bargaining are also generally highly unionised. Correlation between unionisation and left-wing office is 0.43 and correlation between the level of wage bargaining and left-wing office is 0.69. Governments in countries with centralised wage bargaining are generally left-wing oriented.

As *dependent variables* I use data on economic growth and its components, consumer price inflation, unemployment as a percentage of labour force, growth of employment and participation rate. Standardised unemployment rates have been used as extensively as possible. Participation rate is the same as labour force as a percentage of population aged from 15 to 64. Figures are averages for years 1974–9 and 1980–5. Data has been collected from OECD statistics (OECD, 1987).

In addition data have been collected on economic policy during the two time periods. Fiscal policy is measured with public sector borrowing requirement (PSBR) as a per cent of GDP. PSBR is the difference between total outlays of government and current receipts of government. Monetary policy is measured with the growth of money supply ($M1$ plus quasi money). Wage policy is measured with average increases in hourly earnings in manufacturing (*WAGE*). Currency policy is measured with changes in the effective exchange rate from 1973 to 1979 and from 1979 to 1985 (*EXCRATE*).

3 ECONOMIC GROWTH

Real GDP growth may be divided into three parts: growth of employment, growth of investments and growth in economic efficiency. Economic efficiency is in fact a residual category which measures that part of economic growth that cannot be explained by employment or investments.

In this paper, economic efficiency is calculated with the following formula:

100*(GDP growth rate per person employed)/investment rate

In Table 5.1 figures of unionisation, centralisation and left-wing office are correlated with figures on economic growth and components

Table 5.1　Correlations between economic growth, components of
economic growth and political power structures

Centralised and intermediate economies ($N=20$)				
	GDP growth rate	Growth rate of employment	Rate of investment	Economic efficiency
Unionisation	0.19	0.11	–0.01	0.10
Centralisation	0.27	–0.04	0.26	0.20
Left-wing office	0.49	0.10	0.49	0.29

Decentralised economies ($N=16$)				
	GDP growth rate	Growth rate of employment	Rate of investment	Economic efficiency
Unionisation	–0.07	–0.34	–0.09	0.40
Centralisation	–0.17	–0.75	0.19	0.67
Left-wing office	–0.49	–0.41	–0.21	0.14

of economic growth in two country groups: countries with centralised
or intermediate wage bargaining systems and countries with decen-
tralised wage bargaining systems.

This method enables us to test all the four hypotheses of this paper
simultaneously. If the liberal-pluralist hypothesis is true we should
have a negative correlation between unionisation and economic
growth, between centralisation and economic growth and between
left-wing office and economic growth in both country groups. If the
corporatist hypothesis is true we should have a positive correlation in
both country groups at least between centralisation and economic
growth and maybe also between unionisation and economic growth.
If the U-curve hypothesis is true we should have a positive corre-
lation between centralisation and economic growth in countries with
centralised wage bargaining systems, and a negative correlation
between centralisation and economic growth in countries with decen-
tralised wage bargaining systems. If there are hypothesised con-
ditional relations in collective action, then in centralised economies
we should have a positive correlation between unionisation and
economic growth, between centralisation and economic growth and
between left-wing office and economic growth. In decentralised econ-
omies we should have negative correlations respectively.

Correlations in Table 5.1 mainly support the hypothesis of the
conditional relations in collective action and maybe also the U-curve
hypothesis. Correlations between independent variables and econ-

omic efficiency in turn give support to the corporatism hypothesis.

Party complexion of the government seems to have a clearly different effect on economic growth in countries with centralised or intermediate bargaining systems compared with countries with decentralised wage bargaining systems. As was supposed in hypothesis four, left-wing office is conducive to economic growth in centralised and intermediate economies, while in decentralised economies centre or right-wing office is conducive to economic growth. In centralised and intermediate economies, left-wing office tends to have a positive effect both on the level of investments and on economic efficiency. In decentralised economies, left-wing office seems to be detrimental to employment.

Figure 5.1 gives a more detailed picture on the relationship between left-wing office and economic growth. In this scattergram, there are two scatter plots for each country. Scatter plot number one illustrates averages for years 1974–9 and scatter plot number two averages for years 1980–5.

Correlations in Table 5.1 also give some support to the U-curve hypothesis. Extreme centralisation as well as extreme decentralisation in wage bargaining seems to be better than medium levels of bargaining. However, statistical relationships are weaker than statistical relationships between left-wing office and economic growth.

In decentralised economies independent variables seem to have a clear effect on the components of economic growth. If the economy is lowly unionised and very decentralised as in Canada and the United States, economic growth is based more on the growth of employment. If unionisation is higher or wage bargaining is on an industry level, as in Ireland and the United Kingdom, economic growth tends to be based more on economic efficiency.

There is a positive relationship between centralisation and economic efficiency both in centralised and intermediate as well as in decentralised economies. The pressure of labour in centralised wage bargaining seems to be an incentive for firms to improve their economic efficiency. This idea has for decades been a deliberate part of the so-called Swedish economic policy model (Pekkarinen and Vartiainen, 1983, p. 14).

The effect of economic policy on economic growth is analysed with regression analyses in Table 5.2. In each regression, there are four predictors: public sector borrowing requirement as a percentage of GDP (*PSBR*), increase in money supply (*MONEY*), wage increases in manufacturing (*WAGE*) and changes in the effective exchange rate
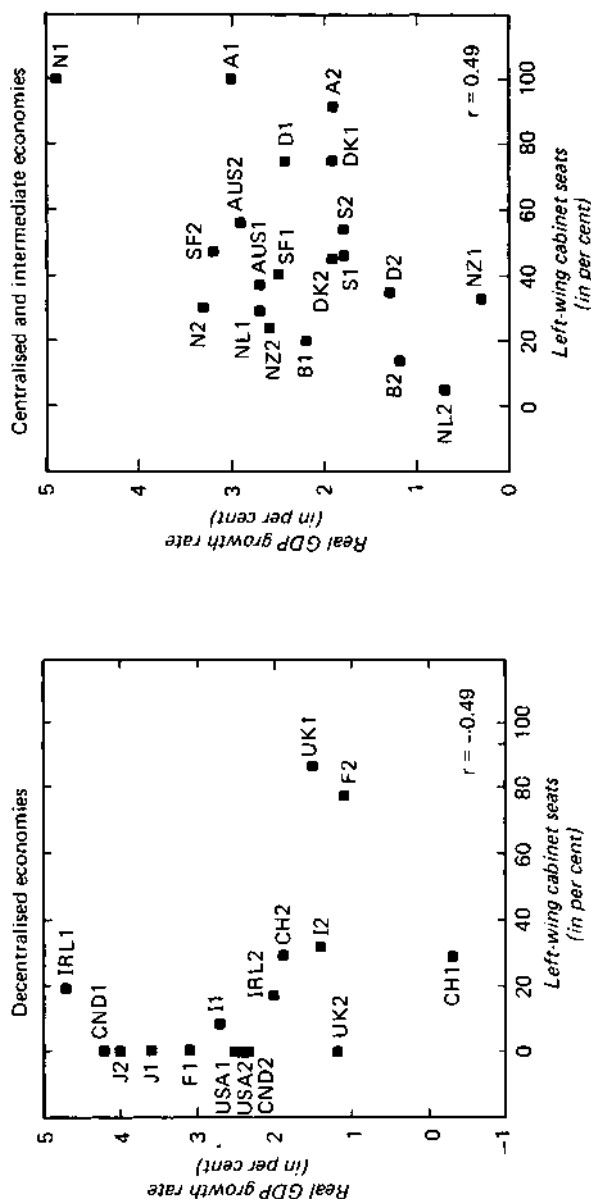
Figure 5.1 Party complexion of the government and economic growth

Key:
A = Austria, AUS = Australia, B = Belgium, CH = Switzerland, CND = Canada, D = Federal Republic of Germany,
DK = Denmark, F = France, I = Italy, IRL = Ireland, J = Japan, NL = Netherlands, N = Norway, NZ = New Zealand,
S = Sweden, SF = Finland, UK = United Kingdom, USA =United States of America.

Number 1 = Average for years 1974–9.
Number 2 = Average for years 1980–5.

Table 5.2 The effect of economic policy on economic growth: regression analyses

	GDP		EMP		GFCF		EFFI	
	Beta	r	Beta	r	Beta	r	Beta	r
PSBR	–0.13	–0.29	–0.32	–0.36	–0.29	–0.36	0.30	0.17
MONEY	0.58	0.50	0.50	0.33	0.11	0.22	0.16	0.22
WAGE	0.09	0.23	–0.36	0.04	0.36	0.11	0.43	0.24
EXCRATE	0.40	0.16	–0.19	–0.03	0.41	0.25	0.59	0.14
R^2=	0.41		0.27		0.27		0.27	
N=	30		30		30		30	

Notes:
GDP   = Real GDP growth rate
EMP   = Growth rate of employment
GFCF = Gross fixed capital formation as a percent of GDP
EFFI   = Economic efficiency
Beta   = Standardised partial regression coefficient
r   = Pearson's correlation
R^2 = Squared multiple correlation
N   = Number of cases

(*EXCRATE*). In these cross-time, cross-section regressions the number of cases is reduced to 30, because of missing data on wage increases in Australia and missing data on PSBR for New Zealand and Switzerland.

Economic policy regressions in Table 5.2 explain 41 per cent of the cross-national, cross-time variation in economic growth rates and less than 30 per cent of the variation of the components of economic growth. Growth rate of money supply seems to be the best predictor of economic growth and growth of employment.

There also seems to be a *U*-curve relationship between the level of wage bargaining and increases in real money supply. In centralised and intermediate economies the correlation between centralisation and real growth of money supply is 0.47, while in decentralised economies the similar correlation is −0.23. The result is due more to levels in price inflation than to changes in nominal money supply. Countries with highly centralised or highly decentralised bargaining systems have succeeded better in controlling inflation rates compared with countries with intermediate levels of bargaining. Therefore, increases in real money supply have been bigger in highly centralised and highly decentralised economies.

There have been two ways to high economic growth. One is based on efficient utilisation of market forces in countries where trade unions are weak and where centre or right-wing governments are

willing to implement highly market-oriented economic policies. This may be called a liberal-pluralist way to economic growth.

The other way to economic growth is based on an interplay between strong and centralised trade unions, employers and government, often a left-wing government. In this interplay all the relevant economic policy sectors are tied to macro packages. There is much planning in the making of economic growth. This way may be called a corporatist way to economic growth.

4 INFLATION

Inflation rates are clearly dependent on the rate of unionisation, on the level of wage bargaining, and on party complexion of the government.

Correlations between unionisation and inflation give support to the liberal-pluralist hypothesis. Unionisation has an increasing effect on inflation both in centralised and decentralised economies, as can be seen in Figure 5.2. Just as in Figure 5.1, there are two scatter plots for each country. Scatter plot number one refers to period 1974–9 and scatter plot number two refers to period 1980–5.

The relationship between the level of wage bargaining and inflation gives support to the U-curve hypothesis, as can be seen in Figure 5.3. Inflation rates have been low both in the most centralised economies as well as in the most decentralised economies.

In decentralised countries the relationship between unionisation and inflation is stronger than in centralised countries, and especially in decentralised systems of industrial relations where higher levels of unionisation are conducive to inflationary distributive conflicts. In centralised economies the situation is more ambivalent. Centralisation of industrial relations makes it easier to implement anti-inflationary economic policies (Figure 5.3). But centralised economies are also highly unionised. Therefore, the agendas of centralised bargaining are crowded with inflation-prone sectional interests.

It is also time to modify the old-fashioned belief that left-wing office is generally conducive to higher inflation. This seems to be true only in countries with decentralised wage bargaining ($r = 0.31$). In countries with centralised or intermediate levels of wage bargaining the party complexion of the government does not make much difference, and it is rather left-wing office which is conducive to low inflation ($r = -0.17$).

Centralised and intermediate economies

Decentralised economies
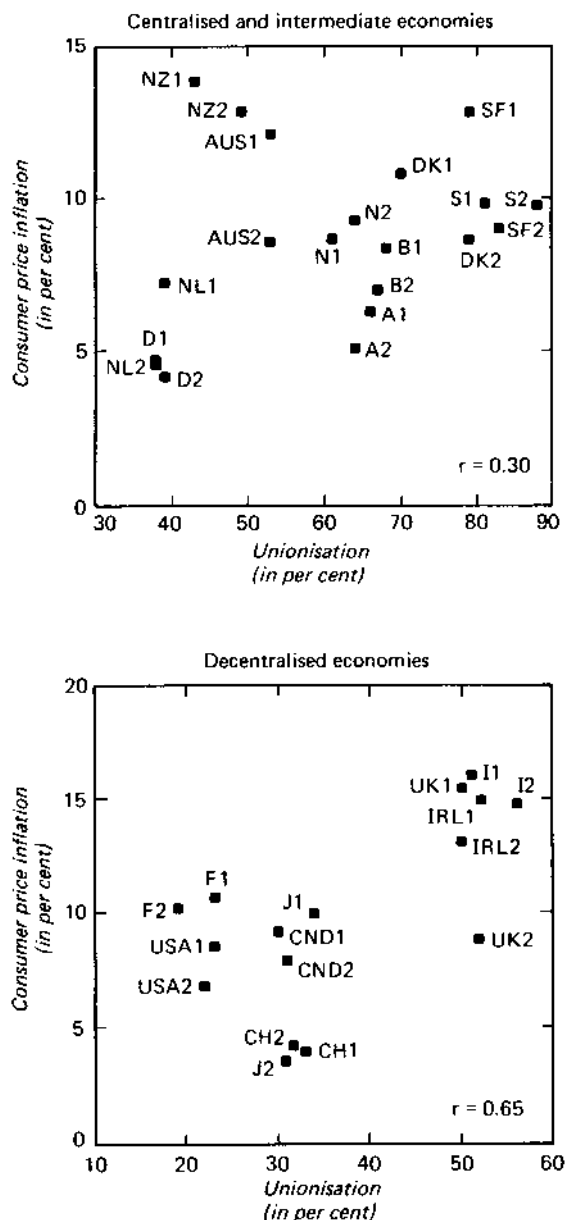
Figure 5.2 Unionisation and inflation

Note: Abbreviations as in Figure 5.1

Corporatism and Economic Performance

Centralised and intermediate economies

Decentralised economies
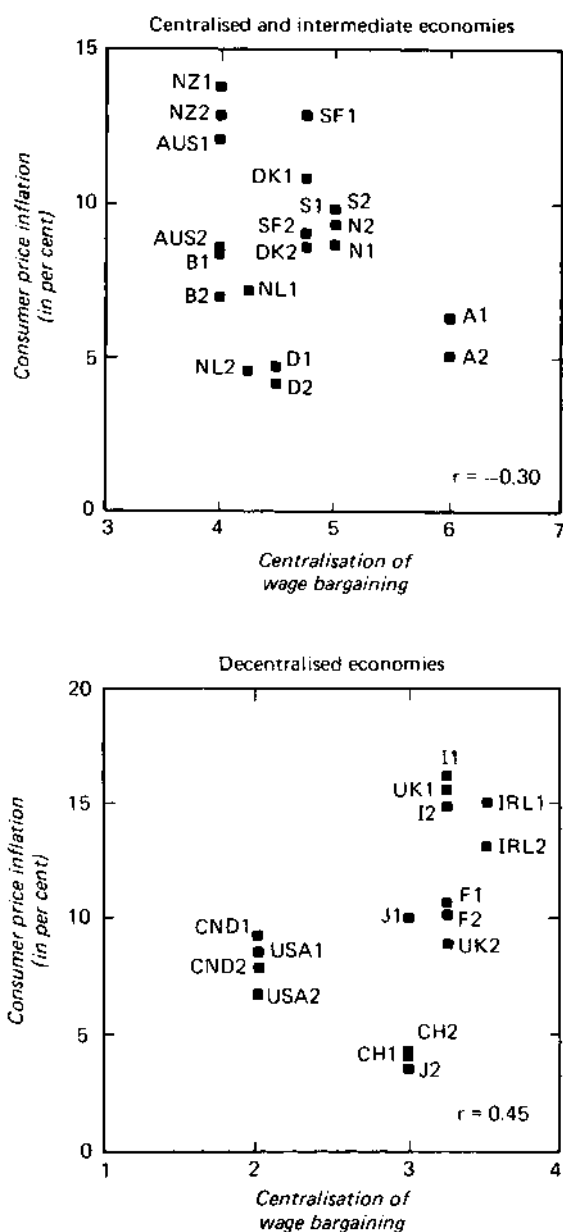
Figure 5.3   Centralisation of wage bargaining and inflation

Note: Abbreviations as in Figure 5.1

Table 5.3 The effect of economic policy on inflation: regression analysis

	Beta		
PSBR	-0.02		0.03
MONEY	-1.12		0.57
WAGE	0.80		0.91
EXCRATE	-0.30		-0.76
$R^2 =$		0.88	
N=		30	

Note: Abbreviations as in Table 5.2.

In table 5.3 there is a regression analysis on the effect of economic policy on inflation. Wage increases are clearly the best predictor of inflation rates. The relationship between wage increases and price inflation is not, however, a one-way causal relationship. Wage increases are a reason for price inflation, but inflation, in turn, is a reason for wage increases.

Changes in the effective exchange rate are the second best predictor of inflation. Some countries have tried to help their export industry via a devaluation of the currency. At the same time they have imported foreign inflation into their own country. Some other countries implemented hard currency policy in order to prevent foreign inflation from coming into the country.

There have been three ways to price stability, two of which will be found in decentralised economies and one in centralised economies.

One way to price stability in decentralised economies is based on a consensus-prone interplay between unions and employers in Japan and Switzerland. In these countries paternalist industrial traditions with full employment have been a way to achieve consensus on moderate wage policies. In both of these countries interest rates have been relatively low, hard currency policies support stabilisation and public sectors are small. Let us call this way the *decentralist, consensual way to stabilisation*.

The second way to price stability in decentralised economies is more conflict-prone, as in Canada and the USA. In these countries traditions of industrial conflict increased inflationary pressures in the late 1970s. Stabilisation was based mainly on monetary policy with high interest rates. Stabilisation has been successful, but at the expense of higher unemployment. This is a *monetary way to stabilisation*.

The third way to price stability may be called a *corporatist way to*

stabilisation. It is based on a corporatist interplay between highly unionised sectors with centralised unions, employers and government, often left-wing government, as in Austria, Norway and Sweden. A more or less centralised wages or incomes policy has been a typical instrument of corporatist stabilisation, although the term incomes policy is not used in all the corporatist countries.

5 EMPLOYMENT AND UNEMPLOYMENT

During the contemporary period of slow economic growth, cross-national differences in unemployment have diverged. Some countries have been driven to mass unemployment, while some others, especially Switzerland, Japan, Norway and Sweden have been able to sustain full employment.

In this section I analyse to what extent differences in employment and unemployment can be explained with the four hypotheses of this paper.

Correlations between independent variables and the rate of unemployment (Table 5.4) give some support to the hypothesis of the conditional relations in collective action. In centralised and intermediate economies, centralisation of wage bargaining as well as left-wing office are conducive to low unemployment. In decentralised economies, centralisation of wage bargaining or party complexion of the government do not explain levels of unemployment. Scattergrams on the level of wage bargaining and unemployment are presented in Figure 5.4.

The relations between independent variables and participation rate are clearly conditional. Both unionisation, centralisation and left-wing office have an increasing effect on participation rate in countries with centralised or intermediate levels of wage bargaining. In countries with decentralised levels of wage bargaining both unionisation and centralisation have a negative effect on participation rate.

In Table 5.5 we have regression analyses on the effect of economic policy on unemployment, on growth of employment and on participation rate. In these regressions, public sector borrowing requirement is the best predictor of unemployment. But in this case, too, there probably is not any unilateral causal effect from PSBR to unemployment. As a result of crowding out effects, large budget deficits may be a reason for high unemployment. But large budget

Table 5.4 Correlations between political power structures, unemployment and employment

Centralised and intermediate economies ($N=20$)			
	Rate of unemployment	Growth rate of employment	Participation rate
Unionisation	–0.07	0.11	0.80
Centralisation	–0.46	–0.04	0.39
Left-wing office	–0.51	0.10	0.33

Decentralised economies ($N=16$)			
	Rate of unemployment	Growth rate of employment	Participation rate
Unionisation	0.33	–0.34	–0.48
Centralisation	–0.04	–0.75	–0.42
Left-wing office	–0.05	–0.41	–0.02

deficits may also be deliberate Keynesian actions to counter high levels of unemployment.

It is interesting to find that high pay rises seem to have a negative effect on employment and participation rate, but a declining effect on unemployment. The last finding is clearly contrary to the popular neo-classical wisdom, according to which contemporary wage pressures are excessive and a reason for rising unemployment. But the negative *Beta*-coefficient of wages on unemployment is a result of high intercorrelations between the independent variables. High wage increases are generally combined with high budget deficits, high increases in money supply and falling effective exchange rates. And high pay rises may be a reason for large budget deficits, increases in money supply and falling exchange rates. It is therefore difficult to evaluate the overall effect of pay rises on unemployment.

However, real wage increases in all the full employment countries have been moderate. There is no full employment country where real wage increases would have been large during the contemporary period of economic slowdown. Moderate wage policy seems to have been a necessary condition for full employment. But it is easy to see that moderate wage policy is not a sufficient condition for full employment. In Germany, for example, pay rises have recently been low and profitability of the business sector has increased. But at the same time unemployment has increased.

Centralised and intermediate economies

Decentralised economies
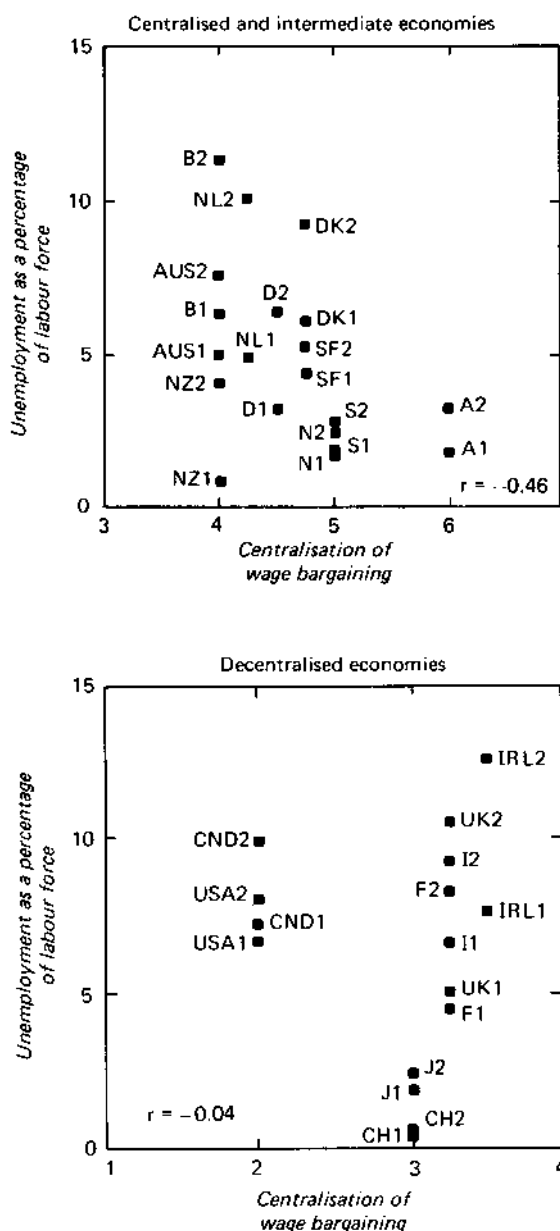
Figure 5.4 Centralisation of wage bargaining and unemployment

Note: Abbreviations as in Figure 5.1

Table 5.5 The effect of economic policy on unemployment and employment: regression analyses

| | UNEMP | | EMP | | PARTRATE | |
	Beta	r	Beta	r	Beta	r
PSBR	0.65	0.68	−0.32	−0.36	−0.59	−0.53
MONEY	0.12	−0.09	0.50	0.33	0.12	0.03
WAGE	−0.45	0.03	−0.36	0.04	−0.41	−0.19
EXCRATE	−0.37	0.38	−0.19	−0.03	−0.42	0.02
$R^2=$		0.55		0.27		0.39
N=		30		30		30

Notes:
UNEMP   = Unemployment as a per cent of labour force
EMP   = Growth rate of employment
PARTRATE = Labour force as a per cent of working age population
Other abbreviations as in Table 5.2.

There have been two ways to full employment. One is based on the paternalist industrial relations in Japan and Switzerland. In these countries firms are like big families: they have a social responsibility to their workers. In bad years the profitability of firms may decline dramatically without the firms firing their workers. In Japan this tradition lives mainly in the sector of big industry, and in Switzerland this social responsibility does not concern foreign workers.

Correspondingly, workers in Japanese and Swiss firms have a social responsibility towards their firm. In bad years real wage increases have been low, sometimes negative. Following Manfred Schmidt (1988) this way may be called the *conservative-reformist way to full employment*.

The other way is the *corporatist way to full employment* in Norway and Sweden, and also in Austria before the recent decline in her labour market performance. It is based on a centralised interplay between powerful labour and employer federations and on an interplay between interest groups and the government. In these corporatist countries, too, moderate wage increases have been an important instrument of employment policy. Unions have submitted to wage restraint because of the supposed trade-off between pay rises and employment. To a large extent the responsibility of full employment has been directly in the hands of the government.

6 CONCLUSION: BETWEEN LIBERALISM AND CORPORATISM

The aim of this paper was to test four hypotheses of the effect of political power structures on economic performance during the contemporary period of slow economic growth.

If we analysed the decentralised economies only, there would be much evidence in favour of the liberal-pluralist hypothesis. If we analysed the centralised economies only, there would be much evidence in favour of the corporatist hypothesis. There is some rationality both in the liberal-pluralism and in corporatism. The effectiveness and efficiency of both liberal and corporatist economic policies is highly dependent on the institutional context.

Therefore, it is now time to build a bridge between liberal-pluralist and corporatist theories. Both *U*-curve hypothesis and the hypothesis of the conditional relations in collective action pave the way for this bridge-building. Most evidence in this paper is in favour of these hypotheses. Because unionisation, centralisation and party complexion of the government are highly correlated it is sometimes difficult to say whether it is the *U*-curve hypothesis or the hypothesis of the conditional relations which is mainly supported by empirical analyses.

However, in centralised economies, there is a bias in favour of left-wing governments, which have generally had better possibilities of resolving economic problems. Therefore, centre-right governments have been more infrequent and short lived.

In decentralised economies, on the other hand, there is a bias in favour of centre-right governments which have generally had better possibilities of resolving economic problems. In these economies therefore, left-wing governments have been more uncommon and short lived.

In decentralised economies, governments sometimes try to centralise their systems of industrial relations. These attempts are hazardous, because they may lead to the medium level of industrial relations where economic problems may be even worse compared to highly decentralised economies.

Similarly, centre-right governments in centralised economies sometimes try to decentralise their industrial relations. These attempts are hazardous, too, because they too may lead to the medium level of industrial relations where the advantages of both centralisation and decentralisation are lacking. There is no short cut from

highly centralised to highly decentralised industrial relations, or vice versa.

Mainly it is countries with medium levels of industrial relations that should think about either a decentralisation or centralisation of their industrial relations on the one hand, and either a liberalisation or a corporatisation of their economic policies on the other. But we also know that national economic policy regimes seem to be quite resistant to change.

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6 Social Conflict and Populist Policies in Latin America*

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1 INTRODUCTION

One of the great themes of Ezio Tarantelli's research was that social conflict can be a major impediment to successful economic performance. He recognised that the industrial economies differed markedly in their mechanisms for resolving social conflicts, particularly in the institutions for regulating the distribution of income between labour and capital. These differences, Tarantelli pointed out, could help to account for the differing success of the various European economies in adjusting to the adverse shocks of the 1970s.

Tarantelli was one of the first to recognise that the neocorporatist institutions of Northern Europe provided a particularly successful mode of moderating social conflict, that allowed the Northern European economies to absorb the shocks of the 1970s without a major rise in unemployment. Tarantelli's insights have been supported in a number of later studies, including those by Bruno and myself (1985), McCallum (1983), Calmfors and Driffill (1988), and others.[1]

This paper is about the Latin American economies, almost all of which demonstrate a continuing *inability* to moderate social conflict, in stark contrast to the corporatist economies of Northern Europe. In the corporatist welfare states, labour militancy is low, and a broad-based consensus exists on the distribution of income and the redistributive role of the public sector. In Latin America, by contrast, bitter economic conflict is one of the central phenomena of economic life. In Argentina, for example, there has just occurred the twelfth general strike during the Presidency of Raul Alfonsin, and like many of the others, this one was marked by widespread mobilisation, deep political rancour, and violence. Economic policy-making in Latin

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America remains a battleground of conflicting interests of class, sectors, regions, and ethnic groups. It is not by accident that one of the most highly regarded studies of Argentina is titled *Economic Policymaking in a Conflict Society.*[2] This title could apply equally well throughout most of Latin America.

Because of the salience of distributional issues in Latin America, leading Latin American economists have long specialised in dissecting the distributional implications of macroeconomic policies, and have often made such distributional analysis the corner-stone of their theorising. Examples include Diaz-Alejandro's (1965) celebrated analysis of 'contractionary devaluation', based on the idea that devaluation reduces real wages, and thereby transfers income from low-saving workers to high-saving landowners; Albert Hirschman's (1971) remarkable essay on the political bases of the import-substitution strategy; and the highly influential 'dependency theory' of Cardoso and Faletto (1979) among others.

The bitterness of class and sectoral conflicts throughout Latin America almost surely reflect the extreme inequalities of income throughout the region. As shown in the first column of Table 6.1, the income inequalities in Latin America tend to be much larger than in other regions in the world.[3] The difference is particularly marked with respect to East Asia, which has an unusually low degree of income inequality in comparison with the rest of the developing world. As discussed below, we can also note in the second column of the table that countries with high income inequality were especially prone to suffer a debt crisis in the 1980s (as indicated by the need to reschedule their external debt payments).

Many of Latin America's economic ills seem to be rooted in the intense conflicts prompted by the extremes of income inequality, just as East Asia's economic successes seem to be tied to the social stability engendered by the greater income equality. In Latin America, necessary devaluations are frequently delayed because of their adverse impact on real wages in favour of rents earned on land and primary commodities. Trade policies remain excessively inward-oriented in many parts of the region, in part because of the presumption that outward orientation reduces urban wages at the expense of profits of exporters, who include wealthy landowners and producers of primary commodities. Fiscal austerity is often rejected, even in highly inflationary circumstances, because of the fear that the austerity will provoke widespread unrest. Whether these concerns are

realistic or not, they form much of the basis for widespread opposition in Latin America to the 'orthodox' recipes for adjustment to macroeconomic disequilibria.

The paper looks in some detail at one common type of policy failure in Latin America: the populist policy cycle. Diaz-Alejandro provided a brilliant and succinct account of economic populism in a 1981 essay on Latin American Stabilization Plans, that is very much in line with the findings of this paper. This particular type of Latin American policy-making, characterised by overly expansionary macroeconomic policies which lead to high inflation and severe balance of payments crises, has been repeated so often, and with such common characteristics, that it plainly reveals the linkages from social conflict to poor economic performance.[4] Economic populism helps to explain the fact that in 1988, no less than four countries (Argentina, Brazil, Nicaragua, and Peru) in Latin America had inflation rates of several hundred per cent or more, while in the rest of the world there was not a single case of triple-digit inflation.[5] Four other Latin American countries had inflation rates between 50 and 100 per cent: Ecuador, Mexico, Dominican Republic, and Uruguay. Of course, external factors also contributed importantly to Latin America's current crisis.[6]

The paper is highly critical of the populist approach, and provides considerable historical evidence that populist experiments tend to end in economic and political disaster. But the paper should not be read as an indictment of the aims of the populist leaders (for example, a more equal distribution of income in societies with extreme income inequality), but of the specific macroeconomic strategies used to try to achieve the aims. Neither is it an endorsement of the extreme forms of 'orthodoxy' that often follow the collapse of a populist experiment (for example, in Pinochet's Chile, after the fall of Allende in 1973). The swings from populism to extreme orthodoxy, more than anything else, prove the failure of Latin America to have found a basic consensus, and middle way, in political, social, and economic terms. Note, finally, that economic populism (at least as the term is used in this study), has been adopted by governments representing a wide range of the political spectrum, and has not been the exclusive province of the left or right. Governments of the right (as in the case of the Brazilian military in 1979–80) have employed populist economic tactics of the same style as employed by left-wing governments (such as in Chile under President Allende). Also,

Table 6.1 Income distribution and debt rescheduling middle-income countries

	Lowest	Highest	Ratio	Rescheduler
		Quintiles		
	Lowest	*Highest*	*Ratio*	*Rescheduler*
		Latin America		
Argentina	4.4	50.3	11.43	yes
Brazil	2.0	66.6	33.30	yes
Chile	4.5	51.3	11.40	yes
Colombia	2.8	59.4	21.21	no
Costa Rica	3.3	54.8	16.61	yes
Ecuador	1.8	72.0	40.00	yes
Mexico	4.2	63.2	15.05	yes
Panama	2.0	61.8	30.99	yes
Peru	1.9	61.0	32.11	yes
Trin.&Tob.	4.2	50.0	11.90	no
Uruguay	4.4	47.5	10.80	yes
Venezuela	3.0	54.0	18.00	yes
Average	3.2	57.7	21.1	83%
		East Asia		
China	7.0	39.0	5.57	no
Hong Kong	6.0	49.0	8.17	no
Indonesia	6.6	49.4	7.48	no
Korea	6.5	45.2	6.95	no
Malaysia	3.5	56.0	16.00	no
Philippines	3.9	53.0	13.59	yes
Singapore	6.5	49.2	7.57	no
Taiwan	8.8	37.2	4.23	no
Thailand	5.6	49.8	8.89	no
Average	6.0	47.5	8.7	11%
		Other		
Egypt	4.6	48.4	10.52	no
Hungary	10.0	34.0	3.40	no
India	4.7	53.1	11.30	no
Israel	8.0	39.0	4.88	no
Ivory Coast	2.4	61.4	25.58	yes
Kenya	2.6	60.4	23.23	no
Mauritius	4.0	60.5	15.13	no
Morocco	4.0	49.0	12.25	yes
Portugal	5.2	49.1	9.44	no
Spain	6.0	45.5	7.58	no
Sri Lanka	6.9	44.9	6.51	no
Tunisia	6.0	42.0	7.00	no
Turkey	2.9	60.6	20.90	yes

The header spans: *Income distribution* over Quintiles (Lowest, Highest), Ratio, and Rescheduler.

Table 6.1 continued

Yugoslavia	6.6	41.4	6.27	yes
Average	5.3	49.2	11.7	29%
Overall average	4.8	51.7	14.1	43%

Definitions:

Rescheduler: Countries which are reschedulers rescheduled their foreign debt owed to commercial lenders between 1982 and 1987; *Source:* World Bank (1986, 1987b).

Income Distribution Data: Data is originally from surveys of households, yielding estimates of the country-wide size distribution of income by household. The surveys were generally taken in the late 1960s or early 1970s.

Source: Taken from Berg and Sachs (1988). See that essay for further details on primary sources.

'revolutionary' governments, such as in the case of the Sandinistas in Nicaragua, often follow in their macroeconomic tactics a fairly traditional populist mode.

2 DISTRIBUTIONAL CONFLICT AND MACROECONOMIC POLICIES

The central hypothesis of this paper is that high income inequality in Latin America contributes to intense political pressures for macroeconomic policies to raise the incomes of lower income groups, which in turn contributes to bad policy choices and weak economic performance. The chain of causation from inequality to economic policy to economic performance is, of course, highly complex and variable across time and countries. It is also difficult to prove. Before turning to the central example of populist policies, it is useful first to examine some circumstantial evidence.

In a recent paper, Andrew Berg and I (1988) looked for structural characteristics of middle-income developing countries that helped to account for which countries succumbed to a debt crisis in the 1980s and which ones did not. The paper developed a cross-country statistical model of debt rescheduling, which linked the probability that a particular country rescheduled its debts in the 1980s to several structural characteristics of the country, including the extent of income inequality (as measured in Table 6.1). Our most striking

finding was that countries with high income inequality had a significantly greater likelihood, *ceteris paribus*, of having rescheduled their debts than did countries with low income inequality.[7]

We attribute the correlation between high income inequality and debt rescheduling to the nature of political management in economies with extreme inequalities of income. Berg and I listed several reasons why countries with extreme income inequality might be prone to excessive foreign borrowing. We suggested, among other reasons, that high income inequality:

> raises the pressures for overly expansionary redistributive budgetary policies;
>
> enhances the power of economic elites to resist taxation needed to balance the budget;
>
> contributes to direct, destabilising labour militancy;
>
> decreases the political support for export-promotion measures, which tend to threaten urban real wages in the short run.

It is probably true as well that high social conflict, rooted in high income inequality, contributes in many countries to weak political institutions and a rapid turnover of governments. Moreover, governments with a brief expected tenure, representing particular constituencies, may find it attractive to maximise the current income of those constituencies by running down the country's future purchasing power (for example, by depleting the international reserves). Alesina and Tabellini (1987) have demonstrated this point in a formal theoretical setting.

The debt crisis of the 1980s is only the most recent case in which the Latin American countries have displayed a special proneness to large budget deficits that produce high inflations and balance of payments crises. There are numerous cases in Latin America where governments have *rapidly and significantly* increased budget deficits in order to meet various distributional goals. I term these extreme cases 'populist' episodes. In all of these experiments, governments have explicitly argued that the policies are necessary to correct glaring inequities in the income distribution, and to raise the living standards of the poor. Much of the temptation of such policies (despite the fact that they generally fail to achieve their goals except in the very short term) relates to the factors just outlined: high

pressures for increased living standards of the lower income groups; short tenure of governments; inability to tax elites in order to cover social spending, and so on.

There is also a particular structural characteristic of many Latin American economies that increases the populist temptation. Because of the sharp sector division in many Latin American countries between a labour-intensive non-tradables sector and a primary resource-intensive export sector, monetary and fiscal expansions can raise urban real wages markedly in the short run, as well as profits in the non-tradable sector, at the expense of the wealthy primary-resource owners. In the context of the deep and ongoing distributional battle between these groups, expansionary policies are thus particularly attractive in the short run for governments based on an urban, working-class constituency.

Before turning to a macroeconomic framework for understanding economic populism, it is worthwhile to note some of the historical roots of these policies. As described by a large number of studies in political science and economic history, Latin American politics underwent an enormous change in the 1920s and 1930s with the rise of extensive urbanisation.[8] After a long history in Latin America of elite-based politics centred on a rural landowning class, a new wave of *urban-based* political leaders emerged, drawing their support on a multi-class base of the urban proletariat, urban government employees of a growing public sector, and the marginalised urban population (that is, the informal sector). In political terms, 'populism' signifies these urban, multiclass movements, which at least initially were headed by a charismatic leader who arrived to power through electoral competition with the support of the newly-enfranchised urban proletariat. As stressed by Drake (1982, p. 218), the leaders of the new populist movements came to power promising the 'immediate psychic and material gratification of the needs of society's underdogs'.

As summarised by Conniff (1982) and Drake (1982), the early populist movements, such as in Argentina under Juan Peron and in Brazil under Getulio Vargas, shared many basic characteristics, including: the urban, multiclass base; the accession to power through electoral competition based on an extension of suffrage to the urban working class population; the charismatic leadership; and the focus on *state activism* to incorporate workers 'in a process of accelerated industrialisation through ameliorative redistributive measures' (Drake, 1982, p. 218).

Interestingly, these populist leaders and their successors generally relied more on *distributive* policies rather than *redistributive* policies, that is, they looked for ways of raising the incomes of the bottom part of the income distribution without resorting to explicit taxation or confiscation of property of the upper classes. Sometimes, this neglect of taxation of the upper incomes was the result of the temperament of the populist leader and his followers, and sometimes it resulted simply from the fact that the populist leader lacked the political power to implement and enforce new forms of progressive taxation.

2.1 A Macroeconomic Framework for Economic Populism

Consider the following macroeconomic model, which is spelled out in more detail in Sachs (1989). Suppose, as is typical of Latin America (at least as a crude simplification), that the economy has two major sectors: an export sector based in primary commodities and a non-tradable sector of services and manufactures (where many manufacturers survive behind a protectionist barrier). The non-tradables sector is heavily labour-intensive relative to the export sector. Aside from labour inputs, the non-tradables sector also relies heavily on imported intermediate inputs in the production process. In the export sector, there is an important fixed factor of production (for example, land in the Argentine Pampas) whose ownership is highly concentrated among wealthy households. It is assumed that the export sector also uses some of the non-tradable good (for example, transport) in the production process.

Assume fixed exchange rates in the short run, and capital controls on private outflows. The exchange rate is fixed by the central bank as long as the central bank has foreign exchange reserves available for that purpose. When the central bank runs out of reserves, the exchange rate collapses and there is a shift to floating rates. During the time that the nominal exchange rate is fixed, the domestic currency price of commodity exports, as well as the price of imported inputs for the non-tradable sector are both fixed, under the assumption of purchasing power parity (PPP) and a given world price for these goods. When the exchange rate eventually depreciates, after the loss of reserves and a balance of payments crisis, the domestic prices of the tradable goods rise in equiproportion to the exchange rate depreciation.

Now consider a monetary expansion (for simplicity, assume that the money growth is increased on a sustained basis in order to finance

a higher level of real government transfers or subsidies to the private sector). With capital controls in place, the money expansion raises real money balances, lowers domestic interest rates and expands demand. Because the exchange rate is fixed, the domestic price of the import and export goods remains unchanged. The rise in domestic demand pushes up the demand for non-tradable goods and that in turn leads to a rise in demand for labour used in the non-tradable sector. The rise in labour demand pushes up the nominal wage. Higher wage costs in turn push up the price of non-tradables.

Under reasonable assumptions, the nominal wage will tend to rise by a greater proportion than the increase in the non-tradables price, since the non-tradables price is a mark-up over both wage costs and imported input prices, and the latter do not increase. The nominal wage therefore rises relative to the price of non-tradables, imports, and exports. We can therefore safely conclude that the expansion leads to an increase in *real consumption wages*, defined as the ratio of nominal wages to the price of consumption goods.[9] To put the same result another way, real wages rise as the real exchange rate appreciates (where the real exchange rate is defined as the ratio of tradable goods prices to non-tradable goods prices, and an appreciation signifies a *fall* in the relative price of tradables).

Several other phenomena will accompany the real exchange rate appreciation. The price of exports will fall relative to the price of non-tradables. To the extent that the export sector uses the non-tradable good as an input, the real appreciation will lead to a profit squeeze in the export sector, and to a decline in export production. This export decline will accompany a rise in import demand for the input to non-tradable production, leading to an overall trade deficit. Note that in some countries (especially Argentina, which exports food), export goods are also important consumption goods. In this case, the rise in the wage relative to the export good is another reason to expect a rise in the real consumption wage.

If this were the end of the story (as most populist leaders want to believe!), there would be a happy ending to the expansion. Real wages and non-tradable output go up. If household labour supply rises in response to higher real wages, so too does overall employment. Profits earned in the export sector would go down, but since the ownership of resources in the export sector is highly concentrated among upper income groups, the political ramifications of the profit squeeze would be slight, or even favourable, for a government based on urban wage labourers. The problem, however, is the trade deficit

that accompanies the expansion. That must be financed by a loss of foreign exchange reserves (or equivalently, a growing foreign debt, if foreign creditors are willing to make new loans). And eventually, the reserves or the borrowing capacity will run dry.

The overall expansion may continue until a balance of payments crisis hits, when the economy runs out of the foreign reserves and borrowing capacity needed to continue to peg the exchange rate. At that moment, the nominal exchange rate depreciates sharply, by enough to create a *real depreciation* that lowers real wages, restores export profitability, and reduces internal demand by reducing the level of real money balances and thus tightening credit once again. The real wage gains of the expansion phase are eliminated. The real depreciation must be large enough to bring the economy back immediately into trade balance, since there is no more external financing available to run trade deficits. Under realistic circumstances, in fact, the real depreciation must be greater than the initial real appreciation, since in the expansion phase the economy has lost the income of its initial stock of foreign exchange (which is now depleted), and has probably lost capacity in the export sector, due to decapitalisation in that sector. By extension, the fall of the real wage on the way down must almost surely be greater than the initial real wage boost.

If the initial budgetary expansion which started the process is not reversed at the time of the balance of payments crisis, the economy will be left with an expansionary monetary policy under floating exchange rates. The results will be a sustained rise in inflation. In effect, after the exchange rate collapse, the budget deficit is financed by the inflation tax under floating exchange rates, rather than by running down reserves under fixed exchange rates.

It should be noted that populist governments in the collapsing phase of the cycle tend to improvise to try to forestall a reversal of the initial gains. Instead of allowing a discrete devaluation of the currency, for example, at the moment that reserves dry up, they may implement exchange controls to ration the scarce foreign exchange. This leads to a black-market premium on foreign exchange that tends to raise the domestic price of importables (which are paid for, on the margin, with black-market dollars) relative to exports (which must be remitted to the central bank at the official rate). The short-term result is a further anti-export bias, and the incentive for export underinvoicing and smuggling. Eventually these distortions prompt an official devaluation and a reunification of the exchange rate for current

account transactions. Governments almost always flirt as well with wage and price controls in the final stages of the populist cycle, in order to try (unsuccessfully) to prevent the collapse of real wages. As with the exchange controls, the price controls simply lead to black markets, hidden price premia and shortages, and eventually to an elimination of the controls after the distortions become unbearable. They may even turn to more extreme measures, such as the national-isation of the banks in Mexico in 1982 and in Peru in 1987.

Note that it is the environment of unresolved social conflict that spurs this kind of populist policy cycle. In practice, there are always voices of opposition to excessive domestic expansion, who warn correctly that the benefits are likely to be short lived because of the balance of payments constraint. It seems to be the *urgent political pressure* for real wage increases that pushes the policy-makers in favour of an otherwise risky, indeed imprudent, strategy. Moreover, the expansionary policy is attractive only when the interests of the non-tradables sector politically dominate the interests of the tradables sector, and when there is no basic social norm for the distributive shares between these two sectors. In other words, there needs to be a fairly stark battle over distributive shares between sectors to make the policy attractive, and the advocates of the non-tradables sectors must have political control.

Countries with a diversified export sector or a politically important import-competing sector (one that is not fully protected by trade barriers), are likely to have political constituencies that would fiercely oppose the real appreciation. The agricultural sector in many East Asian countries, for example, is based on millions of small-holders, whose sheer number gives them political power. As sug-gested in Sachs (1985), this difference with Latin America, where the agricultural sector is seen to be in the hands of a rural 'oligarchy', may explain the greater political opposition to currency overvalu-ation in East Asia, and the overall greater resistance to populist measures.

2.2 Historical Episodes of Latin American Economic Populism

The populist cycle in Latin America has been often repeated, always with disastrous effects. The theme of this section is that the mechan-isms of expansion and collapse in the several cases have been so similar as to justify a clear common description of these experiences. To demonstrate the point, we focus on four historical episodes:

(1) Argentina, 1946–9, under Juan Peron; (2) Chile, 1971–3, under Salvador Allende; (3) Brazil, 1985–8, under José Sarney; and (4) Peru, 1985–8, under Alan Garcia. There are many additional cases that could have been included, such as Bolivia, 1982–5, under Hernan Siles Suazo; Brazil, 1962–4, under Joao Goulart; Chile, 1952–5, under Carlos Ibanez; Mexico, 1979–82, under Lopez Portillo; and Nicaragua, 1980–87, under the Sandinista government.[10]

(1) Argentina, 1946–9

Juan Peron began his rise to power in the 1943 military coup, which toppled the conservative regime which had been in power since the military coup of 1930. The old regime, centred on the conservative, landed interests in agriculture, was replaced by a nationalist and illiberal movement with the goal of rapid industrialisation. Peron served first as a labour adviser to the new government, then successively as Labour Secretary, Minister of War, and Vice-President, before winning a resounding election as President in 1946. Peron cultivated the political base of the urban workers as his steppingstone to the Presidency. As Labour Secretary he pressed for a dramatic extension of social security benefits, collective bargaining, a system of wage bonuses, and increases in the minimum wage. The main labour confederation, the CGT (Confederación General del Trabajo), grew enormously in strength, and supported Peron's bid for the Presidency.

Peron's economic policies during the period 1946–49 virtually define the mechanics of urban-based populist policies. Monetary and fiscal spending were highly expansionary. The exchange rate was maintained at a fixed nominal rate, which became highly overvalued in real PPP terms. Real wages rose both because of the expansion, and also because of direct government backing of the negotiations of the CGT. Trade policies were highly protectionist, with the intent of building a domestic industrial base behind tariff walls.

The redistributive goals were explicit, including both the aim of raising the urban wage and of squeezing the former agricultural oligarchy for the benefit of the ascendant urban sector. The share of wage income in GNP grew from 38.7 per cent in 1946 to 45.7 per cent just three years later in 1949. Real wages grew by 62 per cent in these three years.

The end of the boom became evident as early as 1948, when agricultural production began to drop, and foreign reserve holding

dwindled (falling from US$1.11 billion in 1946 to just US$258 million in 1948). Inflation accelerated and GNP fell by 4.5 per cent in 1949.

In 1952, when Peron finally turned to a more orthodox strategy, he was candid about the social and political motivations of his original programme. In a speech to a workers delegation, cited by Mallon and Sourrouille (1975, p. 12), Peron stated:

> The *justicialista* [that is, Peronist] economy asserts that the production of the economy should first satisfy the needs of its inhabitants and only export the surplus; the surplus, nothing more. With this theory the boys here, of course, eat more everyday and consume more, so that the surplus is smaller. But these poor guys have been submerged for fifty years; for this reason I have let them spend and eat and waste everything they wanted for five years . . . but now we undoubtedly must begin to reorder things so as not to waste any more.

In the event, Peron had little time for such reordering, since he was ousted in a coup in 1955.

(2) Chile, 1971–3

Salvador Allende, like Peron, came to power on a base of urban workers. Allende received a slight plurality of the vote (36 per cent) in the 1970 Presidential election, and was voted into office on the basis of that plurality after the electoral decision reverted to the Chilean Congress. Allende's programme was expansionist and redistributive in the same mould as Peron's, though there were also formal Socialist goals (for example, widespread nationalisation, and extensive land reform) motivating the programme. The Popular Unity government identified three major problems with the Chilean economy: (1) the concentration of ownership of the means of production; (2) the dependence of the economy on foreign markets; and (3) the unequal distribution of income.

In the first year of the government, the fiscal policy turned highly expansionary, with the budget deficit rising from 2.7 per cent of GNP in 1970 to 10.7 per cent in 1971. By the fourth quarter of 1971, the rate of credit expansion to the public sector exceeded 300 per cent at an annual rate. GNP growth boomed (9 per cent in 1971, compared with 2.1 per cent in 1970), and real wages grew by an astounding 17 per cent in 1971! The share of labour income in GNP rose in one year

from 52.3 per cent in 1970 to 61.7 per cent in 1971.

The crash phase came fast, however, even faster than in Argentina. By 1972, GNP growth turned negative, and inflation jumped to 163 per cent. International reserves collapsed, leading to the implementation of a system of tight exchange controls, with 15 different exchange rates (with a ratio from top to bottom of 60 to 1). By 1973, GNP growth was a −5.6 per cent, with inflation averaging 500 per cent for the year. Allende was overthrown in a military coup in September 1973.

(3) Brazil, 1985–8

After 21 years of military rule, the military ceded power to a civilian president elected by an electoral college, whose members had been chosen by election in 1982. Because of the death of the President-elect, Tancredo Neves, on the eve of his inauguration, Vice-President-elect José Sarney became President. Sarney was truly an accidental President. He had been selected as Vice-President by Tancredo to assuage the military, as Sarney had long been a member of the conservative party that had supported the previous military regime. Sarney now headed Tancredo Neves' government, which was supported by a broad-based progressive opposition party, the PMDB (Partido de Movimento Democrático Brasileiro), which had opposed the military rule. Popular demands ran high at the time of democratisation, particularly after two decades of military rule that had suppressed worker rights, and after four years of austerity in the midst of the Latin American debt crisis.

In early 1986, Sarney endorsed the goals of the PMDB in backing a 'heterodox' stabilisation programme, called the Cruzado Plan. Whatever the original intentions of the programme with regard to fiscal and monetary instruments, the Plan was implemented in a highly populistic fashion, with significant real wage increases, an overvalued currency, and a large budget deficit. As in the Argentinian and Chilean cases, the early outturn of the programme was outstanding: rapid growth, higher real wages, and low inflation. The pro-worker rhetoric of the regime increased markedly as the Cruzado Plan achieved its early successes.

The Cruzado Plan collapsed very fast, no doubt because of the highly unfavourable initial conditions, especially the very high inherited external debt. The Brazilian trade surplus shrunk from a monthly average of about US$1 billion in 1985 to a deficit of US$326

million in the last quarter of 1986. As the reserve situation deteriorated, the exchange rate had to be devalued sharply in late 1986, which led to an explosion of inflation, and a reversal of the real wage increases and real GDP growth that had been achieved at the outset of the programme.

By 1987, a new finance minister, Luiz Carlos Bresser Pereira, attempted to shift policy towards stabilisation through a reduction in the budget deficit (see Bresser Pereira, 1988a, for details). President Sarney, in the midst of a political battle to maintain power for as long as possible under a new constitution then in preparation, failed to back his minister, and bowed instead to the continuing populist pressures that were widely supported in the Congress. Moreover, as Bresser has written (p. 28), real stabilisation would require a social pact, but:

> I always have been very skeptical about a social pact in Brazil, because first you need a political pact – a broad agreement between the main political forces in the country regarding, besides wages, social reforms.

By the fall of 1988, and the accession of yet another finance minister, the prospects for Brazil to avoid a hyperinflation still hang in the balance, with inflation during the summer months running at a 1000 per cent annual rate.

(4)   Peru, 1985–8

After 12 years of military rule, Peru reverted to civilian rule with the election of President Fernando Belaunde in 1980. The Belaunde government vacillated between the conventional austerity *cum* liberalisation policies favoured by the IMF, and 'developmentalist' policies (involving heavy expenditure on public works) favoured by the President. In 1983, adverse weather conditions combined with heavy external debt payments and internal macroeconomic imbalances to produce a remarkable 12 per cent decline in GNP, combined with domestic inflation of 125 per cent. By the end of Belaunde's term in 1985, inflation was running at an annual rate of over 150 per cent, and real wages had declined by about 40 per cent between 1980 and 1985.

Alan Garcia came to office in July 1985, intent on slowing inflation while reviving real wages and growth. The President's APRA (Alianza Popular Revolucionaria Americana) party had a long populist

tradition, and had previously been kept out of the Presidency by the military fearing the APRA's populist tendencies. Garcia began with a policy based on: (1) a unilateral partial suspension of debt-servicing payments, limited to 10 per cent of export earnings; (2) a modest devaluation and increase in public sector prices, followed by an exchange rate and price freeze; (3) a large increase in public sector wages, with the stated goal of raising internal demand.

Under this policy mix, the economy boomed in 1986, with GDP growing by 8.6 per cent, and real wages growing an astounding 26.7 per cent in the year. The public sector deficit went from 4.4 per cent of GDP in 1985 to 7.9 per cent of GDP in 1986. Under the restraint of a fixed nominal exchange rate, domestic inflation slowed markedly, from 158 per cent a year in 1985 to only 63 per cent in 1986. As might be expected, the President's personal popularity soared, reaching an approval rating of more than 90 per cent in 1986. As is typically true of such programmes, the only telltale signs of trouble were on the external front. The trade balance went from a surplus of US$1172 million in 1985 to a deficit of US$65 million in 1986. The real exchange rate appreciated markedly.

In 1987, the financial aspects of the situation deteriorated further, with inflation approximately doubling relative to 1986, back up to a level of 114.5 per cent for the year. The public deficit widened (to over 10 per cent of GDP); the trade balance became more negative (US$460 million deficit); and the real exchange rate appreciated even more. Nonetheless, growth of real wages and real GDP remained high for the year.

By 1988, the foreign exchange reserves were depleted, and the situation fell into total collapse. Real GDP is widely forecast to be −4 per cent for the year 1988, while inflation might top 1000 per cent. In the month of September 1988 alone, prices rose by approximately 117 per cent! The President's popularity plummeted to a 16 per cent approval rating in the fall of 1988, and the press reported rumours of Garcia's offer to his cabinet to resign.

2.3   Common Features of the Historical Episodes

A major theme of this paper is that the populist episodes have a common economic and political dynamic, despite the fact that they take place in very different countries and even in different decades. We have noted several common factors. On the political side, the experiences all involve the accession to power of an urban-based

government, intent on raising – sharply and quickly – the living standards of the urban workers. In three of the four cases (Argentina, Brazil, and Peru, but not Chile), the new government took power after a long conservative interlude, so that social pressures were highly pent-up. On the economic side, all of the programmes were characterised by: an early phase of rapidly rising GNP and real wages, with fairly stable prices; and a late phase of falling GNP and real wages, with explosive inflation.

The turning point comes with the collapse of the fixed exchange rate, at the time that the government runs out of foreign reserves and access to new foreign credits. Indeed, the length of the upswing phase is almost wholly a function of the foreign exchange reserves on hand for the government. In the case of Argentina under Peron, the wartime trade surpluses of Argentina meant that Peron inherited an enormous stockpile of reserves, so that his programme could continue for years without grave collapse. In Chile, Allende had a more modest initial reserve position. In Peru, Garcia *created* the part of the needed reserves by a policy of unilateral debt servicing suspension. In Brazil, the Cruzado Plan was especially short lived, since it was entered into in the midst of a serious external debt crisis, and since Brazil did not choose to emulate Garcia by suspending debt servicing during the Plan (interestingly, Brazil waited to suspend debt servicing until after the collapse of the programme, at a time of much more limited international bargaining power and less internal political cohesion).

Figures 6.1–6.6 provide a striking visual confirmation of many of these common attributes (the basic data and sources are given in the data appendix). In these figures, we superimpose the experiences of the four episodes, dating them according to the start of the populist policy measures. Figure 6.1 shows the GDP growth. In all cases, growth starts high, and turns negative in year four. Note that the 1988 growth rates for Brazil and Peru are forecasts taken from the financial press as of September 1988. In Argentina, Chile, and Peru, growth actually accelerates from year one to two, then slows in year three, and turns negative in year four. In the Argentine, Chilean, and Peruvian cases, the downturn in the fourth year was very sharp, with GDP falling by more than 4 per cent.

The second figure shows the inflation experience, which once again looks similar across the cases. In all four countries, the populist episode begins with a *slowdown* of inflation, which seems to come about because of the fixity of the nominal exchange rate during each
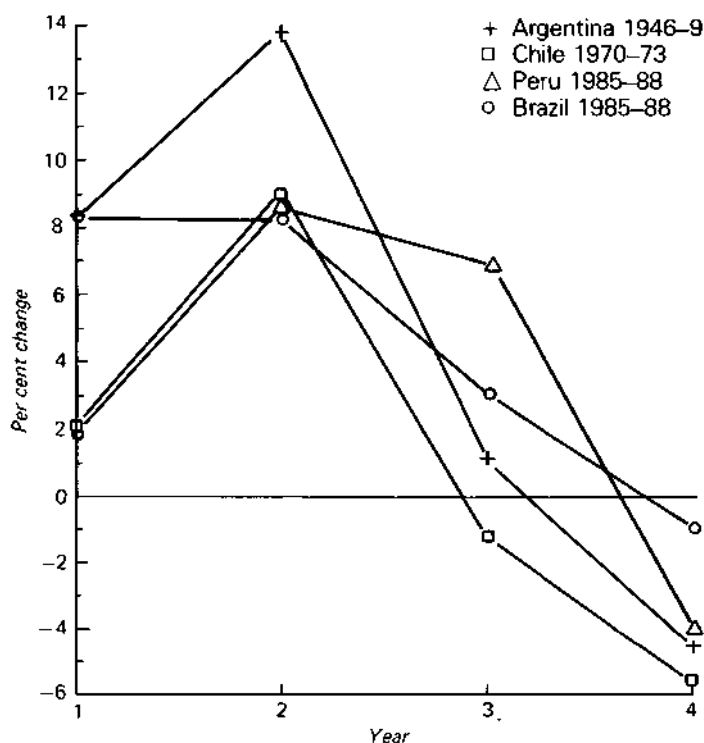
Figure 6.1   GDP growth in populist experiences

Note: Data on pp. 160–3

episode. By year three, the inflation begins to accelerate, especially
sharply in the case of Brazil (where the Cruzado Plan collapsed with
remarkable speed). Remarkably, by year four in Brazil, Chile, and
Peru, the inflation has reached several hundred per cent. In Argen-
tina under Peron, inflation reached levels (just over 30 per cent) that
were high by comparison with the price stability in Argentina in the
late 1930s and early 1940s, but very low in comparison with later
years. Peron started with in an economy with very low inflationary
expectations and a large inherited stock of international reserves.

Figure 6.3 focuses on a crucial target of the populist policies: the
real wage. The chart shows the percentage change in the wage each
year of the policy. Real wage growth is strong at the beginning of the
programme, through the first two years, and then slows down in the
third year, and finally collapses as the balance of payments crisis hits
the economy. In Chile in 1973, real wages fell by 32 per cent; in Peru
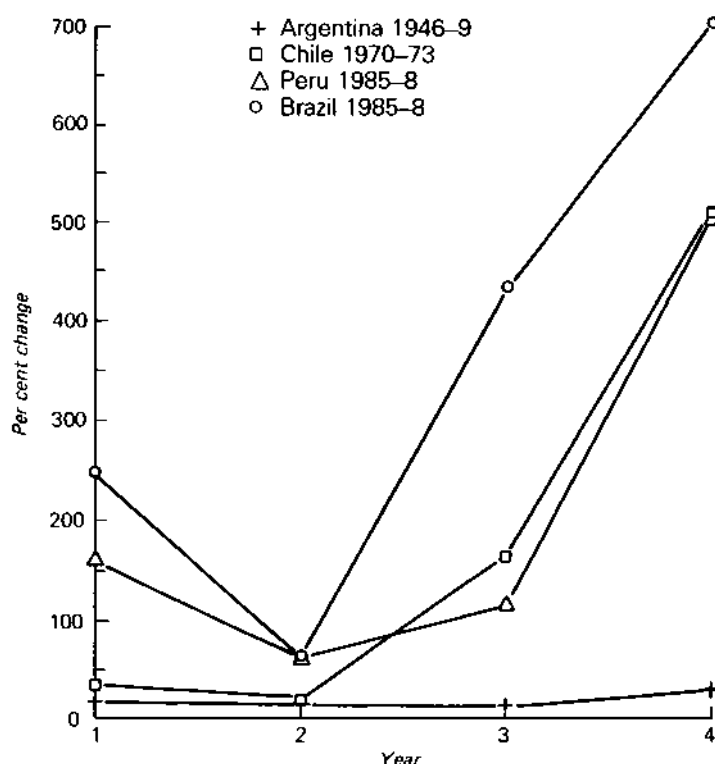
Figure 6.2 Inflation measured by consumer price index

Note: Data on pp. 160–3

in 1988, real wages fell by 34.5 per cent; and in Brazil in 1988, real wages in Rio de Janeiro fell by 12.8 per cent, following a decline of 16 per cent in 1987.[11]

Figures 6.4 through 6.6 demonstrate the Achilles' heel of all of the experiments: the external sector. As shown in Figure 6.4, export volumes fall relative to GNP in all of the countries, and in Figure 6.4 we see that the ratio of international reserves to imports plummets in the second year of the programme in each of the countries. One major reason for this collapse is shown in Figure 6.5: the steady and significant appreciation of the real exchange rate, where the real exchange rate is defined in this figure as the nominal exchange rate *vis-à-vis* the dollar, divided by the ratio of the consumer price index of the home country to the consumer price index of the USA. In all of the countries the real exchange rate appreciates sharply in the course
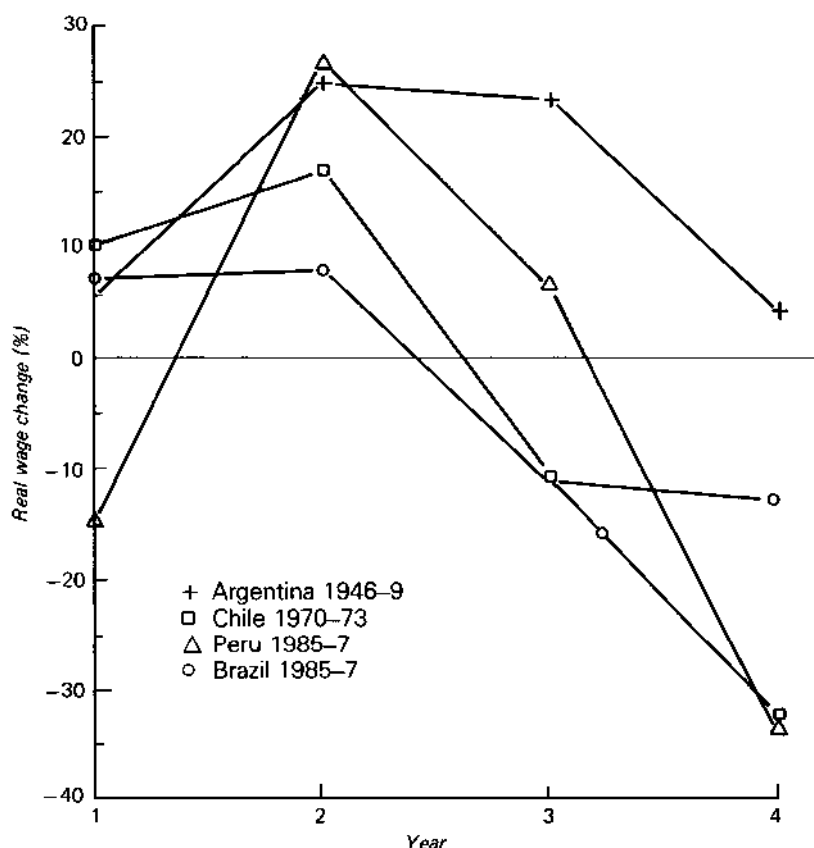
Figure 6.3   Real wages

Note: Data on pp. 160–3

of the programme, by as much as 25 to 30 per cent in real terms by the third and fourth years. We have already noted that this appreciation helps to explain the initial rise in the real wage, as well as the decline in net exports and international reserves.

3 CONCLUSIONS AND EXTENSIONS

A great many of Latin America's economic problems in the 1980s are due to external factors. World real interest rates reached unexpected and unprecedented levels in the 1980s, resulting in an enormous drain of resources from Latin American debtor countries to the
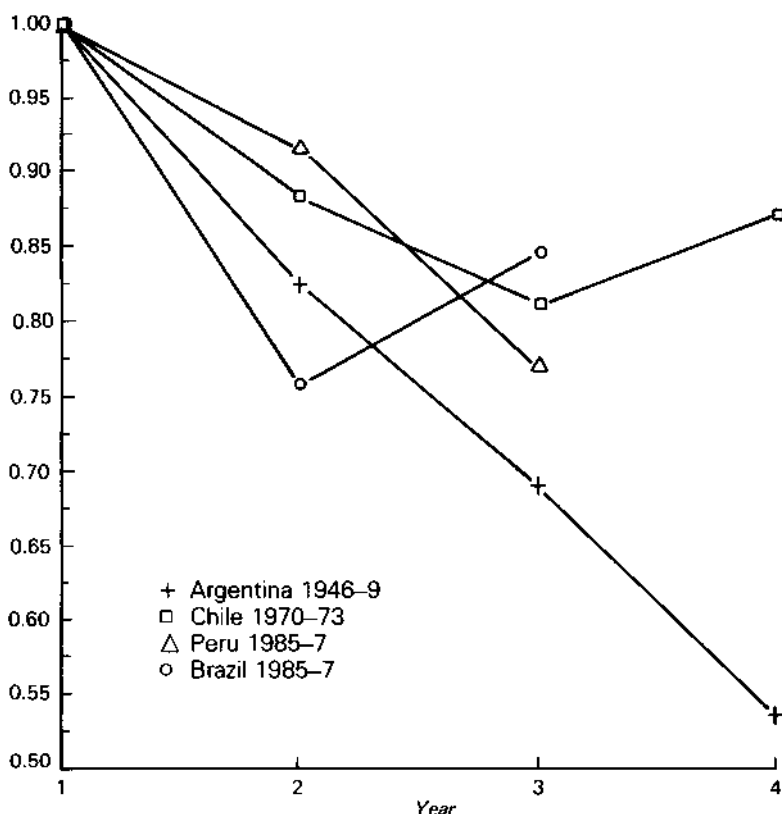
Figure 6.4   Index of export volume/index of GDP

Note: Data on pp. 160–3

creditor world. Commodities prices for Latin America's leading exports collapsed, often falling in real terms to the lowest levels in half a century or more. And in many countries, fragile democratic governments had to try to pick up the pieces from the rubble – in human, political, and economic terms – left by earlier military regimes.

None the less, Latin America cannot fully escape the responsibility for the current crisis. The debt crisis has hit hardest in countries with a long tradition of fiscal laxity. In many cases, that laxity has hit shocking proportions, particularly when governments have used drastic fiscal expansions in order to try to solve deep-seated problems of economic inequality and poverty. We have seen in this paper the evidence that these populist measures tend to collapse in a remarkable
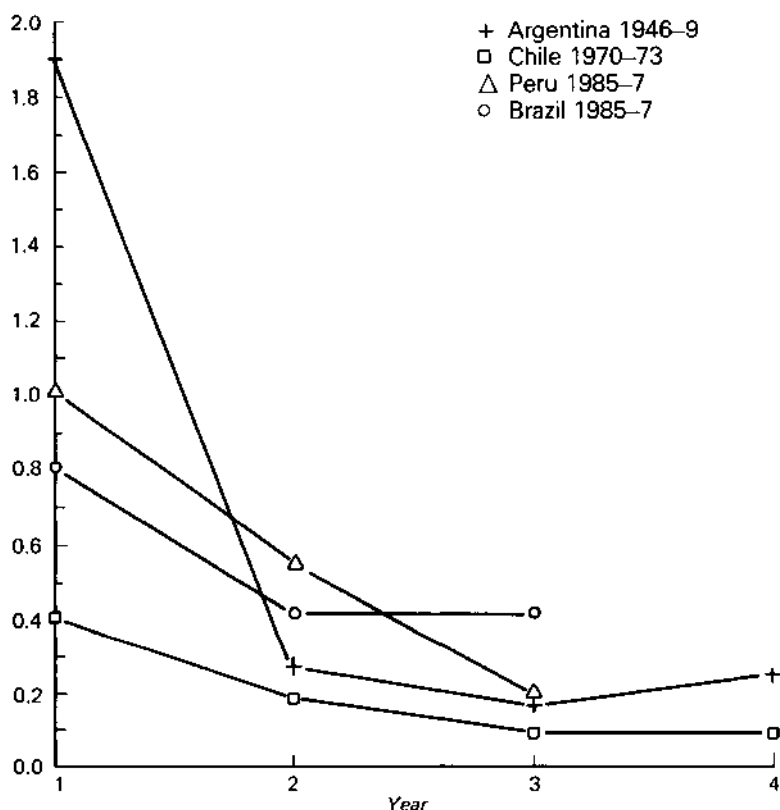
Figure 6.5   Internal reserves/imports

Note: Data on pp. 160-3

burst of inflation and falling real wages, at the moment when the fiscal expansion hits the balance of payments constraint.

We have suggested that the impulse for populist measures follows from several factors, including: an environment of deep economic conflict, rooted in a highly unequal distribution of income; political instability, leading to governments with short expected tenure and equally short time horizons; and a deep perceived cleavage in sectoral interests, with the urban working class sharply opposed to the exporters of primary commodities.

And yet, a major puzzle remains. The populist episodes we have reviewed ended in collapse, sometimes even in tragedy. Peron was forced into exile, leaving a weakened economy and a society both
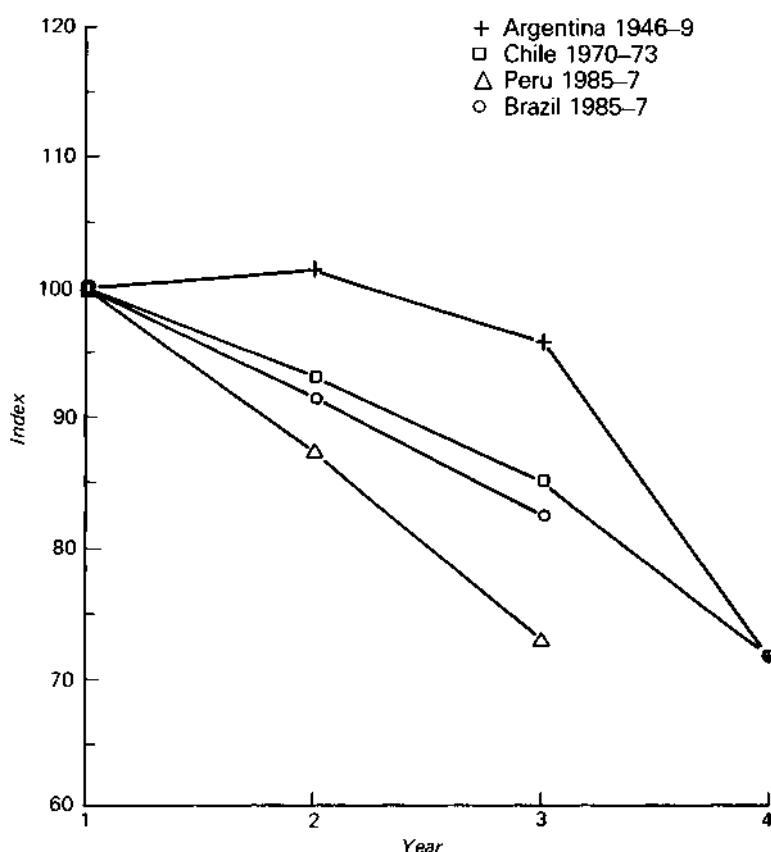
Figure 6.6   Real exchange rate index (average of each period)

Note: Data on pp. 160–3

politicised and deeply divided; Allende died in a military coup that destroyed democracy in Chile for the next 15 years; Sarney and Garcia now preside over failed regimes, each now facing the real danger of a hyperinflation and economic collapse. Why did these leaders opt for such a dangerous strategy? At least Brazil and Peru should have had the benefit of the lessons of the other two experiences.

Perhaps the most accurate, and also simplest, answer is that these leaders, and even more their followers, did not understand the riskiness of the course that they selected. Populist policies look remarkably good at the beginning of the populist cycle. It is only the

Basic Data for Figures 6.1 to 6.6

ARGENTINA

Year	(1) GDP growth (%)	(2) Real wages change (%)	(3) Inflation (CPI) (a) (%)	(4) Reserves/ imports	(5) Quantum index Exp/GDP index (1946 = 100)	(6) Quantum index Imp/GDP index (1946 = 100)	(7) Real exchange rate index (1946 = 100)
1946	8.3	5.7	17.7	1.90	100.0	100.0	100.0
1947	13.8	25.0	13.5	0.28	82.4	177.0	101.3
1948	1.1	23.6	13.1	0.17	69.1	179.7	95.8
1949	-4.5	4.6	31.1	0.25	53.6	129.7	71.8

Note:
(a) Represents Buenos Aires change in cost of living (year average).

Sources:
(1), (2), (3), (4), (5), (6): Diaz-Alejandro (1970).
(7): Diaz-Alejandro (1970).
Economic Report of the President, USA.

CHILE

Year	(1) GDP growth (%)	(2) Real wages change (%)	(3) Inflation (CPI) (Dec.-Dec.) (%)	(4) Reserves/ imports	(5) Quantum index Exp/GDP index (1970 = 100)	(6) Quantum index Imp/GDP index (1970 = 100)	(7) Real exchange rate index (1970 = 100)
1970	2.1	10.2	34.9	0.41	100.0	100.0	100.0
1971	9.0	17.0	22.1	0.19	88.3	94.3	93.2
1972	-1.2	-10.1	163.4	0.10	81.1	85.8	85.1
1973	-5.6	-32.1	508.1	0.09	87.1	86.9	71.7

Note:
* As of August.

Sources:
(1), (2), (3), and (7): Central Bank of Chile.
(4) IMF and ECLA.
(5) and (6) ECLA and Central Bank of Chile.

PERU

Year	(1) GDP growth (%)	(2) Real wages change (%)	(3) Inflation (CPI) (Dec.-Dec.) (%)	(4) Reserves/ imports	(5) Quantum index Exp./GDP index (1985 = 100)	(6) Quantum index Imp./GDP index (1985 = 100)	(7) Real exchange rate index (1985 = 100)
1985	1.9	−15.0	158.3	1.01	100.0	100.0	100.0
1986	8.5	26.7	62.9	0.55	91.4	127.0	87.5
1987(a)	6.9	6.7	114.5	0.19	76.9	130.7	72.9
1988(b)	−4.0	−34.5	500.0	n.a.	n.a.	n.a.	n.a.

Notes:
(a) Preliminary figures.
(b) Estimation.

Sources:
(1) and (7): Apoyo SA.
(2) ECLA.
(3), (5) and (6) Apoyo SA and ECLA.
(4) IMF and Apoyo SA.

BRAZIL

Year	(1) GDP growth (%)	(2) Real wages change (%) (R. Janeiro)	(3) Inflation (CPI) (Dec.-Dec.) (%)	(4) Reserves/ imports	(5) Quantum index Exp./GDP index (1985 = 100)	(6) Quantum index Imp./GDP index (1985 = 100)	(7) Real exchange rate index (1985 = 100)
1985	8.3	7.2	248.5	0.81	100.0	100.0	100.0
1986	8.2	8.1	63.5	0.41	75.6	106.4	91.5
1987(a)	3.0	−16.0	432.0	0.42	84.5	106.1	82.6
1988(b)	−1.0	−12.8	700.0	n.a.	n.a.	n.a.	n.a.

Notes:
(a) Preliminary figures.
(b) Estimation.

Sources:
(1), (2), (5) and (6): ECLA.
(3) and (7): IMF.
(4): IMF and ECLA.

Basic Data

ARGENTINA

	1945	1946	1947	1948	1949	1950	1951	1952	1953	1954	1955
Money (M1) growth*	20.3%	30.8%	21.2%	34.3%	27.7%	25.4%	21.3%	13.8%	24.0%	16.3%	17.6%
Fiscal deficit (% of GDP)	n.a.	n.a.	n.a.	n.a.	n.a.	1.5	0.5	-0.1	0.8	2.5	2.0

Note:
* End of year to end of year.
Source: Diaz-Alejandro (1970).

CHILE

	1969	1970	1971	1972	1973
Money (M1) growth*	35.2%	66.2%	113.4%	151.8%	362.9%
Fiscal deficit (% of GDP)	0.4	2.7	10.7	13.0	24.7

Note:
* End of year to end of year
Source: Central Bank of Chile.

PERU

	1984	1985	1986	1987	1988 (Est.)
Money (M1) growth*	116.0%	285.5%	85.7%	86.7%	n.a.
Fiscal deficit (% of GDP)	8.0	4.4	7.9	10.9	9.0

Notes:
* End of year to end of year
(a) As of November.
Source: Apoyo SA and IMF.

BRAZIL

	1984	1985	1986	1987
Money (M1) growth*	201.9%	304.3%	303.8%	5.3%
Fiscal deficit (% of GDP)				
Nominal	22.2	27.1	9.9(b)	n.a.
Operational	1.6	3.5	4.1(b)	n.a.

Notes:
(a) As of June.
(b) Estimate.
** December–December.
(a) As of June.
(b) Estimate.
** December–December.
Source: Central Bank of Brazil; Dornbusch, R. and Cardoso, E. NBER, Working Paper no. 2142

hopeless pessimist that raises doubts in the midst of a boom that causes real wages to rise sharply while keeping inflation under control (or even cutting inflation, as in Brazil and Peru)! Presidents Peron, Sarney, and Garcia reached remarkable levels of popularity in the early stages of their programmes. The problem of falling foreign exchange reserves looks like a technical nuisance at this stage. Something will come up, each of the leader reasoned: new loans, a cut in world interest rates, a surge of exports (*deus ex machina*), even a debt moratorium or exchange controls if necessary. After all, what is a little inconvenience in foreign trade if the benefits are a real wage boom and rapid growth?!

In truth, the situation may be difficult even when the leader understands the difficulties, if his followers (in congress, in the unions, and on the streets) do not. The pressures for redistribution may be too much to resist, if the congress is pushing hard for more spending, and siding with important constituencies towards that end. In Brazil, the finance ministers in 1987 and 1988 understood well the dangers of the fiscal expansion, but were powerless to resist a President that in turn was bowing to populist pressures in the Brazilian Congress.

The lack of perspective is not limited to politicians. Various schools of 'structuralist' thought in economics continue to advocate measures along populist lines. There is no better evidence of this than the self-congratulatory volume *El Peru Heterodoxo: Un Modelo Economico* (D. Carbonetto), published in 1987 by the technical analysts that designed the ill-fated Peruvian programme. Just on the eve of the collapse of the programme (as liquid foreign exchange reserves were finally depleted), the book appeared, with the following pronouncement:

> At the moment of sending this book to print we close the first year and a half of the application of the reactivation policies in Peru. The [economic] data obtained corroborate on the whole the thesis that it is possible to reactivate an economy (when one has excess capacity) and at the same time to reduce the level of inflation.

> In this year and a half, Peru reduced its inflation from 250 per cent to around 65 per cent annually, and raised its GNP by more than 8 per cent per year.

> Nonetheless, the same success obtained in this process of reactivation open unknowns which could be called the second stage of

development of the Peruvian economic model. These unknowns refer to the extent of savings-investment and of exports capacity of the Peruvian economy in the immediate future. (p. 16, my translation)

Unfortunately, the authors failed to recognise that the failure of the second stage (to develop adequate savings and exports) is the logical result of the 'success' of the first stage. Sadly, by September 1988, Peruvian exports had collapsed and the economy had entered into a hyperinflation! As of September 1988, the government was attempting to make an emergency turn towards fiscal stabilisation.

This problem of understanding is undoubtedly complicated by the absence of adequate 'institutional memory' in most of the governments in Latin America. With every change of government there is a complete overhaul in public-sector personnel, extending far down into the bureaucracy. In modern Japan, by contrast, one man per ministry is subject to change when the government changes – the minister himself (all other positions are based on internal promotion within the ministries)! The result in Latin America is the absence of normal bureaucratic restraint in the design of major initiatives. The President and his immediate advisers can launch a fundamental change in direction, subject of course to his maintaining office.

In closing, it is important to stress a point of view also expressed at the beginning. The political and moral impulses underlying the populist policies are understandable and indeed often noble. The income distribution in Latin America is a reason for moral concern and a provocation to action. Moreover, many actions of populist governments (such as the debt moratoria of Peru and Brazil in the 1980s, or the 'heterodox' shocks that attempted to control inertial inflation), may be meritorious even though they are highly controversial and a part of an otherwise ill-designed programme.[12]

Finally, the populist excesses do not prove the merit of extreme orthodox policies that often follow the populist collapse. Too many opponents of populism dismiss real problems over income distribution, and are content to balance budgets without concern for the distributional consequences. The failures of Latin American populism should prompt a search for a middle path, rather than being read as an endorsement of unfettered orthodoxy.

This paper has naturally raised more questions than it has answered. Do the social and political factors described in the paper not only explain the Latin American temptation towards populism,

but also the relative absence of populist policies in East Asia? Do the 'pacted democracies' of Colombia and Venezuela provide a model for achieving political stability in other countries in the region, and do the experiences of those two countries support the hypothesis that political stability contributes to fiscal responsibility? What are the most effective ways for Latin America to address the long-standing crisis in income inequality, and at the same time to encourage price stability, private investment and accumulation? These great issues provide an agenda for future study of the political economy of the region, an agenda that would have benefited greatly from the attention and insights of Ezio Tarantelli.

Notes

*   I have benefited from conversations with Felipe Larrain and Luiz Carlos Bresser Pereira. I also thank Rodrigo Vergara for very able research assistance.

1.   As mentioned in Bruno and Sachs (1985, p. 222): 'Tarantelli's work was a major stimulus to our own investigation of this topic'. I first benefited from Tarantelli's research in an unpublished paper on 'The Economics of Neocorporatism', 1981, which was an early draft of the beginning chapter of Tarantelli (1986).
2.   The study is Mallon and Sourrouille (1975).
3.   This remains true after controlling for per capital income. See Berg and Sachs (1988) Table 3.
4.   Note that the term 'populism' has several meanings, both in the economic and the political sphere. I will not be much concerned here with the concept of populism in its various political usages, but mainly with regard to the management of the macroeconomy. Of course, as explained below, a crucial point in understanding economic populism is a proper understanding of the political base and political objectives of populist leaders.
5.   The countries were Argentina, with inflation of 372 per cent for 1988 over 1987; Brazil, 816.1 per cent; Nicaragua, 7778.4 per cent; and Peru, 1307.1 per cent. Data are from ECLAC (1988) Table 5, p. 21. Data are November to November, except for Nicaragua which are September to September. Mexico had triple digit inflation in December 1987 over December 1986 of 159.2 per cent, but that rate came down to 70.5 per cent for November 1988 over November 1987.
6.   Much of the reason for high inflation and internal instability results from the vast overhand of external debt. The reasons for this debt accumulation are complex, but include both domestic factors (including populist policies which are at the focus of analysis in this paper) and

external shocks. The external factors include extraordinarily high world interest rates throughout the 1980s; the sudden cutoff of external finance in the early 1980s; the collapse of commodities prices in world markets, reducing the terms of trade of many Latin American countries to the level of the Great Depression or lower; and a debt management strategy of the creditor governments since the early 1980s that undermines political support in Latin America for needed economic reforms. The debt overhang has been particularly difficult to manage in many Latin American countries in view of the fact that a great proportion of the debt was incurred by unpopular military regimes of the 1970s, and has been inherited by fragile democratic governments in the 1980s.

7. Other variables that helped to account for the cross-country pattern of debt reschedulings were (1) the nature of trade policy (more outward-oriented economies were less likely to have rescheduled); (2) the importance of agriculture in the economy (countries with a large share of agriculture in GNP were less likely to have rescheduled); and (3) per capita income (wealthier countries were less likely to have succumbed to debt rescheduling).

8. For an excellent series of articles on the politics and history of Latin American populism, see the volume edited by Conniff (1982).

9. In the model in Sachs (1989) consumption is assumed to fall exclusively on non-tradables. All production of exportables goes abroad, and all imports are used as intermediate inputs in non-tradables production. The specific assumptions about the consumption basket should obviously be varied by country. In Argentina the primary commodity exportable (mainly grains and meat) is also a consumption good; in Chile, the traditional primary exportable (copper) is not. On the import side, most imports are either intermediate goods or capital goods. Because of the tradition of import-substitution, the import of consumer goods is usually highly restricted.

10. The Sandinista experiment is often interpreted as a distinct, revolutionary experiment. In my view, such an interpretation exaggerates the novelty of the Sandinista policy direction, which is firmly rooted in the Latin American populist tradition. Note that by 1987, the combination of populist initiatives and the heavy wartime burden contributed to an inflation rate of about 11,000 per cent.

11. The 1988 data for Peru, and the 1987 and 1988 data for Rio de Janeiro are from ECLAC (1988). The 1988 data are provisional. Note that in Brazil there is a big discrepancy between the sharp fall of real wages in Rio de Janerio and the much more moderate decline in Sao Paolo (where wages fell by only about 2 per cent between 1986 and 1988.

12. Alan Garcia's declaration in 1985 that Peru needed debt relief, and that the choice for Peru was 'debt or democracy', was accurate. Given the collapsed state of the Peruvian economy and society as of 1985, the possibility of servicing debt on the terms of the international community was negligible. Thus, the debt moratorium need not be dismissed as wrong simply because it was accompanied by unwise internal macroeconomic policies. Peru's neighbour, Bolivia, has demonstrated during 1985–8 the utility of a mixed strategy of debt moratorium

combined with orthodox internal policies. See also Bresser Pereira, 1988b, for a cogent explanation of the Brazilian debt-servicing moratorium of 1987.

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7 Reinterpreting Corporatism and Explaining Unemployment: Co-ordinated and Non-co-ordinated Market Economies*

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1 INTRODUCTION

1.1 Existing Theories and the Evidence

What is the role of institutions in economic performance? Neo-corporatist economists gave a clear answer to one specification of this question: namely the role of institutions in explaining unemployment in advanced industrial societies. They answered that economies with neo-corporatist institutions, in particular with strong, centralised systems of industrial relations, were more likely than other economies to produce low unemployment.

Their argument was based on three axioms:

1. There was a technical macroeconomic trade-off between aggregate wage restraint and unemployment: Governments had the Keynesian policy instruments to produce low unemployment. The major constraint was price inflation. This was because price inflation was determined by nominal wage inflation; and the latter (in the original Phillips formulation) or changes in the

latter (in the NAIRU version) were a decreasing function of the rate of unemployment, in the absence of wage restraint. Thus suitable wage restraint (nominal in the case of Phillips, expected real in NAIRU) permitted low unemployment.

2. Strong centralised unions could impose wage restraint without affecting *ex-post* real wage outcomes: such unions had the ability to sanction affiliates or workplace organisations. The latter would otherwise have had and rationally used the power, at suitably low levels of unemployment, to secure expected real increases in excess of productivity growth. But actual real wage increases were assumed to be determined by cost-plus pricing behaviour. Cost-plus pricing implied that real wages rose proportionately with labour productivity, independently of wage restraint.

3. It was in the interests of centralised unions and governments to choose wage restraint and low unemployment strategies respectively. The objectives of the centralised union were low unemployment and high real wages. Those of the government were low unemployment and low price inflation. Since wage restraint produced low inflation without affecting real wages, it paid union and government to exchange wage restraint for Keynesian policies producing low unemployment.

Of these three axioms, the first two set out how government and unions should behave for full employment and low inflation to be *feasible*. The third shows how, given feasibility, government and unions would agree to adopt the appropriate *strategic behaviour* to implement full employment. This account will be referred to as macro-corporatist theory or MCT, to underline the macroeconomic and macro-institutional weight of the argument.

Macro-Corporatist Theory provided important insights into successful economic performance in the 1960s and 1970s. One of Tarantelli's most important contributions was to put MCT into both rigorous and accessible economic form. But it has become clear, as the 1980s have proceeded, that it no longer captures the key elements which enable modern economies to perform successfully. The emphasis today is instead on policies and institutions which promote the innovation and rapid adjustment demanded by increasingly competitive world markets. This has led influential commentators to advocate deregulated markets, in which individual agents are minimally constrained. Empirical support for this position was provided by the apparent success during the last ten years of the UK and the US, the

two major economies which adopted such a strategy. A complementary analysis, Eurosclerosis, explained what was seen as the failure of continental Europe as an inability to 'set companies and markets free'.

A careful look at how advanced industrialised countries function in the present decade does indeed downplay the role of MCT; but it rejects Eurosclerosis as even more wide of the mark. If success in the 1980s is measured in exporting terms, the most successful countries, such as West Germany, Japan, South Korea and Sweden, have institutional structures widely different from those prescribed by advocates of deregulation or textbook models of atomistic competition. The good performance of Japan and South Korea is well known, as is the lack of success of the USA outside of trade in high-technology goods. The detailed study of trade performance in four major countries in West Europe by Lawrence placed West Germany and Sweden ahead of France and far ahead of the UK in the last decade (Lawrence, 1987). The analysis of Pavitt and Patel on the innovative capacity of countries, based on the work of the Science Policy Research Unit, ranks West Germany, Japan and Sweden as high fliers against the poor performance of the UK, the US and France (Pavitt and Patel, 1988). The institutional structures of the successful economies are at micro- and macro-levels. They include wage restraint. They cover institutions such as educational and vocational training systems, export marketing, research and development, and finance; internal organisation of companies and the interrelation of companies; representation of both business and employees; and commonly shared conventions and understandings about behaviour. They embody mechanisms whereby high-level agreement on the part of unions as well as business on the importance of international competitiveness filters down to individual workers and companies. As the key work of Katzenstein has shown, the small corporatist countries of Western Europe have this range of institutional structures and understandings. Economies which function in this general way will be referred to in this chapter as co-ordinated market economies or CMEs (Katzenstein, 1985).

Success in the 1980s might alternately be measured in terms of low unemployment. It is a remarkable fact that all the five advanced industrialised countries with low unemployment in the 1980s (Austria, Japan, Norway, Sweden, Switzerland) were co-ordinated market economies.

1.2 The Contents of This Chapter

This paper has two goals. The first is to give some idea of how co-ordinated market economies function and why this enables them to be successful at innovation and wage restraint in the world of the 1980s. This first goal is set within the answer to the second, which is to explain the pattern of unemployment across advanced industrialised countries (AICs) in the 1980s.

Simple political economic explanations of cross-country unemployment in the 1980s run up against two obstacles. There is no correlation between unemployment performance and position of government on the political spectrum; nor is there a correlation between unemployment performance and degree of neo-corporatism (at least not a strong one). As with Lange and Garrett, though in a different way, this paper argues that both institutions and political complexion are important and interact (Lange and Garrett, 1985). The argument follows MCT in distinguishing between the feasibility of low unemployment in the 1980s and the strategic behaviour of government, business and unions in those economies in which low unemployment was a feasible option. The nature of both feasibility and strategic behaviour is quite different from that proposed by MCT.

(a) The Feasibility of Low Unemployment

The argument consists of three main points.

1. The fundamental constraint against sustained low unemployment in the last two decades has been the requirement of external equilibrium: controlling inflation has not sufficed. This became the basic problem of the 1970s and 1980s because of the slowdown in world trade. Feasibility has first of all required institutions adapted to promoting non-price competitiveness in international trade in a range of ways (see Section 2), and secondly, institutions capable of improving price-cost competitiveness through wage restraint (see Section 3). The comparative effectiveness of both types of institutions has increased in CMEs.

2. In Section 2 it is argued that the technological revolution based on microprocessors has dramatically raised the potential for rapid product innovation and variation across the whole range of manufacturing; in large and small companies; not confined to 'high-tech' sectors of the economy; and in part based on the

possibility of new patterns of work organisation. Studies of innovative companies have shown various common characteristics, such as long-term decision-making, a skilled and co-operative work-force and so on. It is argued that the closer an economy moves to textbook perfect competition the more hostile will be the economic environment to such companies; and that co-ordinated market economies can supply to a greater extent the necessary external environment, in terms of institutions and understandings; (the paper looks at long-run finance, marketing and R&D, education and training, management occupational flexibility and work-force-management co-operation). Non-coordinated market economies have become less capable in this respect, as their financial markets have imposed tighter constraints on management. Thus the comparative institutional advantage of co-operative market economies has increased.

3. The comparative institutional advantage of CMEs in wage restraint has also increased and it is investigated in Section 3. First, it is more firmly based in the CMEs; it depends not just, as MCT supposes, on centralised unions with sanctions, but on a richer network of employer co-ordination and co-operation and on the education and understanding of the work-force; and it is aided by the vocational training systems. Secondly, wage restraint was a possible option for some non-CMEs before the 1970s when labour productivity was growing rapidly; but when it is needed to reinforce much slower or negative real wage growth non-CMEs have not been able to sustain it.

4. Section 4 draws together the arguments above and looks forward to the second major goal of the paper in Section 5.

(b)   Strategic Behaviour of Governments, Business and Unions

This subject is pursued in Section 5 and the effects of the political complexion of governments investigated. The striking facts here are that all CMEs with left-wing governments in the 1980s choose low unemployment. Why do all left-wing governments (in full control) in co-operative market economies choose low unemployment (Austria, Norway, Sweden), while some right-wing governments (Germany, the Netherlands) choose high unemployment and others (Japan, Switzerland) low unemployment? I argue that two games are being played between government and labour, a broad one and a narrow one.

In the broad framework game, the union is given an important presence in labour market institutions and in companies in exchange for ideological acceptance of the open-market imperative, wage restraint, and underwriting the co-operative behaviour of workers. In the Japanese case, this takes place largely within the company.

Within the broad framework game a narrow game takes place. If unions are in a powerful position within the broad game, they will be able to bring about many policies/decisions/interventions which business will not want; for example, there will be wage restraint but business would like more; unions will allow redundancies, but they will press business harder on them than if their position was weak; they may push business into more apprentices than business wants; and so on. The power of unions within the broad game will depend on many factors; but the most important factor over which the government has some control will be the level of unemployment. The narrow game relates to the choice of unemployment. So long as the government is left, it will see no reason to raise the rate of unemployment since the unions' goals within the framework game are likely to coincide with its own.

It is assumed that right-wing governments are as concerned politically about unemployment as left-wing governments (whether or not that is true). They will allow unemployment to rise only if the benefit to business is sufficiently great to outweigh the political cost. Where unions are weak, as in Japan and Switzerland, it is argued that this situation will not occur, since within the limits imposed by the framework game businesses do as well as they want: the further weakening of unions which would arise from higher unemployment would not significantly help business. Where unions are stronger (West Germany, the Netherlands) a right government might be prepared to raise unemployment – or to allow it to increase – where there is a real business need within the limits of the framework game: that need, it is argued, arose in the last decade over the pace of restructuring.

Thus the chapter explains high unemployment in the non-CMEs because of a failure to satisfy balance-of-payments feasibility conditions in the 1980s; of course individual governments might have had other reasons. CMEs were able to satisfy external constraints at low unemployment, and those with left-wing governments chose to do so. CMEs with right-wing governments chose low unemployment if unions were too weak to constrain the desired pace of restructuring; if not they allowed unemployment to rise.

The approach of the chapter is not to provide a grounded theory or a convincing explanation of the motivations behind the behaviour of individual governments. Nor is it designed to produce hard empirical evidence of the institutional structure of CMEs and non-CMEs. What it does do is to suggest a rather different approach to the problems of economic performance than that provided by the Eurosclerosis school, and to use the approach together with a theory of strategic political behaviour.

The analysis here concerns countries; interestingly there is a potentially similar analysis of regions and industrial districts (Brusco and Sabel, 1981; Dei Ottati, 1988; Putnam *et al.*, 1988).

2   CO-ORDINATED MARKET ECONOMIES IN THE 1980s: COMPARATIVE ADVANTAGE IN NON-PRICE INTERNATIONAL COMPETITIVENESS

All of the five AICs with low unemployment in the 1980s have been CMEs. This is because the major constraint on full employment through the last decade and a half has been, by contrast to the 1950s and the 1960s, the balance of payments; and, it will be argued in this and the next section, because the CMEs have been better placed to surmount this constraint than other AICs. The first of the two reasons for the comparative advantage of CMEs is addressed in this section, and relates to non-price competitiveness.

CMEs have always been well placed in world competition, but so too in the 1950s and 1960s were other AICs, for instance France and Italy. The central contention of this section is that the comparative advantage of CMEs has increased. The underlying reason for this is the revolution in information technology, which came to be applied and applicable at an accelerating pace during the 1970s and 1980s. The IT revolution has had two relevant and related effects on non-price competition in international trade among AICs:

- It has shifted the emphasis of competition towards product innovation, a greater variety of more sophisticated and higher quality products, and more rapid responses to changing market demand conditions. The potential ubiquity of the microprocessor has meant that these changes have occurred in almost all industrial sectors.
- The new technology has enabled those companies who can take

advantage of it to adopt a method of work organisation, usually referred to as 'flexible specialisation', which is more suited to rapid innovation and responsiveness than more hierarchic methods of organisation of which Fordism is the standard example. Flexible specialisation, interpreted broadly provides the potential for companies of all sizes and in most sectors to engage in innovative activities. To realise the potential requires an appropriately skilled, adaptable and teamwork-oriented work-force and management. When allied to other requirements of successful innovation, notably a long-term perspective and access to good marketing and R&D facilities, companies of all sizes are capable of export success. The argument of this section is that co-ordinated market economies have been generally more capable of providing a labour force with the right characteristics, and the type of external supporting institutions to satisfy the other requirements. By contrast, more atomistic market approaches have failed.

2.1 Conditions for Innovation within Companies

The ability of companies to innovate depends on a wide range of factors. Evidently there is not an academic consensus, in part because much economic work on innovation starts from theoretical models. But in recent years, a number of case-study-based reports have shown some convergence on the factors favouring product innovation and the adoption of flexible specialisation at company level. Three factors on which there is some agreement are the following:

(a)   Long-term perspective. Companies need a long-term perspective for several reasons. First, as the work of SPRU has clearly shown, the likelihood of successful innovation in a company depends upon its past history of innovation, and the related expertise stored in its personnel. This is contrary to the view of technological knowledge as a collection of 'blueprints', which a company can buy: thus, companies which resort to licensing can quickly lose innovating capacity.

Secondly, successful product innovation benefits from long-run relations between a company and its customers, as well as between a company and its suppliers. This is because product innovation in the goods produced and in components used requires joint expertise to marry market needs with technologi-

cal possibilities. This joint expertise accumulates over time as a result of co-operation between companies. A related phenomenon, particularly for small companies selling directly to end-users rather than to larger companies, is the need for long-term co-operation between companies and marketing agencies.

Given the above, there is, thirdly, a need to maintain long-term market involvement. If a company drops out of a market it loses the benefit of the joint expertise; and it may in addition render obsolete its own innovative expertise unless it can be deployed in other markets. Thus it is advantageous for a company which wants to maintain its innovative capacity to react to declining profitability by increasing innovative activity rather than reducing it.

(b) *Management and employee flexibility and co-operation within the company.* First, the ability to change work organisation and patterns rapidly is central to successful innovation in the 1980s. This ability is enhanced by flexible specialisation. Under Fordism, the changes in work practices required by innovation had to be worked out in great detail in advance by engineers, and imposed on the work-force in a time-consuming process. Flexible specialisation speeds up the innovation by enabling the work-force to carry through many of the changes themselves. This requires co-operation and teamwork by blue-collar workers. It also requires individual initiative, 'autonomous responsibility'.

Fordist factory organisation enabled productivity increases to come from exploitation of economies of scale typically in assembly-line production of standardised goods in large workplaces. It was associated with a largely semi-skilled work-force, hierarchical control by management, and a relatively conflictual pattern of industrial relations. Product innovation was a long-term process, machines were pre-programmed, adaptations on the shop-floor were difficult.

Fordist organisation in its pure form was an important phenomenon, but not universal. It did not apply outside a limited number of industries (notably automobiles and consumer durables), and was stronger in certain countries (France, Italy, USA) than others. On the other hand hierarchical management, with acquiescent workers, was and is much more widespread.

Where, by contrast, management and work-force are teamwork-oriented and skilled, the incorporation of microprocessors into most types of equipment, including machine tools and machining centres, has permitted programming on the shop-floor. Hence, so long as qualities and relations of management and work-force allow it, a high degree of adaptability has become possible on the shop-floor. Long standardised runs are no longer necessary to secure economies of scale: small batch production, with frequent variations of product, is competitive; and product innovation can be carried through more quickly. Large plants are no longer automatically more efficient than small or medium-sized ones. This is the essence of flexible specialisation.

Lane's comparative survey of British and West German studies links the adoption of flexible specialisation to technological innovation (Lane, 1988), in part based on the case studies of Kern and Schumann (Kern and Schumann, 1984). Piore and Sabel generalise from case studies to argue that it permits frequent adaptation to changing market demands, higher quality and product diversity (Piore and Sabel, 1984). In a study of 50 companies in the old manufacturing Montechusett region of Massachussetts, survival in increasingly open markets was associated with the ability to adopt flexible specialisation, for Piore-Sabel type reasons (Doeringer *et al.*, 1987). The relationship between product market needs and flexible specialisation in France is covered by Maurice *et al.* (see Maurice *et al.*, 1986 and Eyraud *et al.*, 1988).

Secondly, innovation is easier if management is not organised on rigid functional lines. The more interchange there is between different functions the more easily can managers appreciate the links between technology, the market, finance, personnel etc. involved in innovation. Also, it facilitates teamwork. Thus the company structures which favour innovation are those which permit managers from different parts of the company to work easily together, as opposed both to structures with decentralised profit centres and to those in which management is organised rigidly in functional divisions.

Thirdly, the more holistic the perspective of the company by the work-force and management, the more easily can change be managed. This in turn is a function of the depth and history of co-operation within a company.

(c)   Competence. This type of behaviour by both management and
work-force is only possible with the requisite degree of technical
and communicative competence. Because rapid change requires
the cooperation of all the work-force, and not just key groups,
the whole work-force requires to possess these competences.

**2.2   The Economic Environment and Ability to Survive and
Innovate**

It might be thought that a company with the above characteristics was
well suited to survive in most capitalist economic environments. Or
that strategic management in most AICs, having once understood the
need for such characteristics, could reproduce them. That is not the
case: particular environments favour survival (and growth). Ease of
survival depends on how the environment provides or inhibits key
inputs and modes of behaviour. We focus on five broad areas:
finance; skill formation; marketing, research, design and develop-
ment; management behaviour; and management-worker relations. In
each case it will be argued that the closer the environment approxi-
mates the textbook model of perfect competition, the less supportive
it is of the innovative company; that state intervention may help, but
that it is fully effective – and not always necessary – when companies,
external institutions and workers are able to participate in long-term
co-operative arrangements. In each case the problems arise for
standard market failure reasons: impacted information; opportunism
and the belief that others are opportunistic; public goods; and co-
ordination difficulties.

(a)   Finance. There is now some measure of agreement that highly
competitive financial markets encourage a short-term mana-
gerial perspective. In such markets share prices tend to discount
long-term profits more heavily than in 'industry-related' finan-
cial systems. Why should this be so? Competitive financial
markets (that is, with very many players) have difficulty in
valuing assets where information about future profitability is
uncertain. In practice, in such conditions, asset valuation be-
comes a coordination game; in general the only obvious cri-
terion for valuation on which the market can (as it were) agree
to focus is the level of current profitability. This 'focal point' –
the term comes from the literature on co-ordination games –
then makes it more profitable for financial institutions to devote

research resources to forecasting profits in the near future, rather than to the long-term prospects of the company; or to forecasting the likelihood of takeover bids. Decisions to buy and sell shares are taken on the basis of differences between private and market expectations of next year's profits; or on the basis of differences between private and market expectations of takeover bids. Shares are held in consequence on a short term basis, with no commitment to long-term holdings. Without such a commitment, companies are loath to release sensitive information about long-term developments; and shareholders the more likely to devalue or disregard the information which is released.

The bias in share price determination towards short-term profits does not in itself produce a short-run perspective in management decision-making. The short-run perspective is brought about when the bias is linked to the possibility of hostile takeovers.

Nor is it confined to quoted companies. Financial institutions without knowledge of the long-term prospects of companies will require security or additional premia if they are to lend on a long-term basis.

By contrast there is an alternative equilibrium in which a small number of financial institutions have major long-term holdings in companies; in which considerable research is conducted into the long-run prospects of companies; in which share prices are set to reflect long-term profits; and in which the likelihood of hostile takeovers is low. Given long-run holdings, it pays financial institutions to acquire detailed knowledge about the company for three reasons: first, the holding institution may still make portfolio switches, though rarely; secondly, and more important, it needs to be able to intervene from time to time in company decisions, since there are no other constraints on managerial decision-making: this may include situations involving restructuring, mergers, and the removal of bad managers; and thirdly, and most important, the wider experience of the financial institution, derived from depth knowledge of many companies, may enable it to give continuous advice to the company especially in the area of long-term planning. And in so far as experience of different companies is valuable, the knowledge of each additional company will benefit the advice the bank gives to other companies. In all these ways the long-term profits

of the financial institution are increased. The managers in the company benefit, since the risk of hostile takeovers is reduced; thus their own collective position is more secure, and they can if they wish invest in projects with no immediate pay-off.

But while this equilibrium is to the long-run benefit of both company managers and financial institutions, such relationships are less likely to exist in highly competitive financial markets. The long-run co-operative relation between both sides which is at the basis of the equilibrium is not necessarily to the interest of both sides at each moment in time. But the nature of the relation makes it difficult to fix in contractual form. In highly competitive markets participants believe other participants are opportunistic. Without a contract to hold shares for a long period, the financial institution would use information that the company was going to increase investment in training thus lowering profits and hence the share price, to sell shares and buy them back when the price had fallen; the company believing the financial institution would behave in this way, would either not give the institution the information or would adopt a short-term perspective and not undertake the investment: either way the relation would cease to work in a competitive financial market.

(b) Skill formation. Apologists for perfectly competitive markets have argued that they provide optimal levels of training: Training for firm-specific skills will be provided by the company. Individuals will finance the acquisition of marketable skills for themselves.

There are two standard difficulties with this argument. Financial institutions in competitive financial markets are not generally prepared to finance training by individuals without security: for the return to marketable skills is uncertain and the loans would be open to moral hazard. Nor will companies be willing to provide a socially optimal level of training for marketable skills because of public good type problems. This is exacerbated if the acquisition of firm-specific skills depends on previously acquired marketable skills; and further exacerbated if management has a short-term financial perspective.

Were these the only difficulties, state intervention would suffice to correct market distortions. This intervention usually takes the forms of loan guarantees or subsidies; positive or negative fiscal inducements to companies to invest in training;

and the development of a state vocational training system.

But there is a second set of problems whose solutions require co-operation among employers and between state and employers. These result from impacted information and the need for co-ordination.

(i) If the distinction between marketable skills and firm-specific skills were simple and clear-cut, and a blueprint (as it were) of each marketable skill was available, state intervention without employer cooperation would be straightforward. The 'technology' of training does not fit into this description, however. Think of marketable skills as a very complex range of products, being sold to many different companies with heterogeneous needs in different industries across the economy. Given that there are some economies of scale in the development and production of any one of these 'products', the optimal set of marketable skills will represent a balance between the needs of different companies; (the residual gap between the most appropriate marketable skills and a company's skill needs then defines that company's firm-specific skills). Choosing that balance requires knowledge of the needs of different companies. Moreover these needs are changing all the time. And they will themselves be in part determined by what the latest 'technology' of training can produce. Thus, just as product development and innovation of capital goods demands close co-operation between producer and user, so too does that of marketable skills.

(ii) The technology of training is such that it is generally advantageous for some proportion of the training to be carried out within companies. Without cooperation from companies, it is difficult to get good quality training even with financial inducements. How well training is carried out under such circumstances can be in part checked through external monitoring and exams. But given those constraints, non-cooperative profit-maximising companies will maximise training for firm-specific skills, or cut as many corners as possible in the provision of the training. Their incentive to do this will be greater the more likely they are to lose the workers they have trained. Where, by contrast, companies are prepared to cooperate over time – by not poaching and/or by adequate training – there is a cooperative solution to the prisoner's dilemma game.

(iii) Participation in training, especially by those without employment (school leavers, potential labour market re-entrants, the unemployed), depends in large part on whether they can see the training leading to relevant employment. In pure market or pure state-run systems the bridge to employment is less clear than in systems in which employers are fully and co-operatively involved.

(c) *Marketing and research, design and development.* The long-term relations needed for product innovation between companies and their customers seldom take contractual form because of the range of uncertainties which they involve. In competitive markets this raises the problem of opportunism. Company *A* sells machines to company *B*; *B* wants a particular development of these machines on which company *C* is known to be working; *B* would benefit from a machine which would exactly fit its needs and is prepared to collaborate with *A* to develop it. But *A* is unprepared to invest in this because no water-tight contract is available, and *A* believes *B* will opportunistically buy from *C* if *C*'s version is developed much earlier or if problems arise in its own work with *B*. So *A* is more likely to license the new technology from *C*. These type of problems also inhibit the development of long-term co-operation between a large company and small component suppliers: the greater the proportion of the supplier's sales and innovation resources to the large company, the more nervous will be the supplier of investing in joint innovation activities in an opportunistic environment.

For small and medium-sized companies, there is a further problem. There are economies of scale in marketing and in product innovation. Small companies, starting from scratch in a non-cooperative market environment, will find it difficult to engage in producing innovative products or high quality differentiated products. The long-term co-operative relationship with a large company is one answer. Another answer is long-term cooperative relations with some form of marketing/ product-development agency, which fulfils the marketing function, the information-gathering function and the links with purchasers, and also supplies the resources for innovation. Such an agency works well when it represents a group of small companies producing broadly similar goods. That in turn requires that the companies are prepared to co-operate with each

other on a long-term basis in an environment in which – if they were opportunistic – co-operation would quickly become impossible.

(d)   Management behaviour and company structures. Neither management behaviour nor company structures are directly imposed by the economic environment in which the company operates, but it exerts a powerful influence on both. We look first at management behaviour. In highly competitive markets the role of opportunism and the imposition on companies of short-term financial horizons have already been noted. These effects reinforce the effects of competitive managerial markets in ways adverse to innovation. What is the optimal career strategy for managers? Short term financial horizons make it difficult for most companies to offer credible life-time employment to managers; and the greater the belief in the opportunism of other agents in the economy, the less plausible will such offers appear. Redundancy or threats of it have in any case been the experience of most managers in relatively free market economies. Thus the manager's strategy is to be attractive to the external market. With competitive managerial labour markets, a premium is set on specialist marketable skills, in finance, engineering, production, personnel or whatever it may be. Managers will be less prepared to choose to work in companies where their professional identity is blurred, and prefer companies with clear occupational differentiations. They will also have less incentive to invest personal resources in teamwork, or in acquiring an holistic picture of the company, since these are company-specific skills. Moreover, the greater the extent to which the company is organised on occupational-functional lines, the greater the difficulty in engaging in cross-specialisation teamwork and *a fortiori* seeing the company holistically.

These factors, together with short-run profit maximisation, create an incentive for companies to adopt decentralised profit centre organisational structures. The larger the organisation and the more managers have occupational career strategies, the greater the problem for the organisation in monitoring and generating incentives for company-oriented behaviour by individual managers; there is no problem in monitoring their 'professional' behaviour, since their superiors are likely also to be professionals. The solution for a company with a short-term

horizon is decentralised profit centres with short-term profit targets, since then lower level managers are forced to accept company goals: for if a centre fails to meet targets it can be closed down.

This type of organisational solution makes product innovation less likely, directly and indirectly. Less is spent on investments with a long-term payoff, including innovation and training expenditures. In particular long term risk-taking will seldom appeal to managers running such centres; even less to their subordinates. Labour-saving investments which can pay for themselves via redundancies will make sense, if they can be bought 'off the peg'. There will be an incentive to produce new products developed elsewhere under licensing agreements. Collaboration across profit centres to develop new products will not be encouraged. More generally a premium will be put on cost-cutting financial management. And the system will reinforce the belief of managers in the possibility of redundancy.

Long-run industry-related financing combined with low opportunism make it easier for companies to offer credible lifetime employment to managers. These characteristics will not by themselves lead to innovative export-oriented companies; they can as easily lead to bureaucratised, rule-based organisations, perhaps with powerful baronies in different areas. If teamwork, flexibility, a holistic perspective, and risk-taking are valued by the company then managers will have an incentive to behave in those ways (at least if it is assumed that managers are not members of unions opposed to such behaviour). But what factors are likely to predispose a company to have those values and be innovative and export-oriented?

Two factors are of particular importance. The first is the extent to which the systems which provide finance and other services (marketing, R&D, training, etc.) – that is to say, primarily banks, employers organisations and other business organisations – are themselves concerned with the export orientation of industry. If they are, and if those systems are themselves appropriate for the innovative company, then they can exert sanctions and, more important, educate managers through the multiple channels which the process of long-term cooperation throws up.

The second factor is the extent to which the company sees itself as committed to the long-term employment of its work-

force. If a very high cost is attached to creating redundancies, then the company has an incentive to maintain a high pace of product innovation in order to minimise the possibility of redundancies, so long as the return from product innovation is greater than the return from investing no resources in product innovation and meeting the cost of redundancies (Dore, 1987; Sorge and Streeck, 1988; Hotz-Hart, 1988). This means that the incentive is positive where the costs of innovation are relatively low; that is, where there is long-run finance, good marketing and R&D systems, innovation-oriented management, a highly skilled work-force *and* a co-operative work-force. It is to the question of the co-operative work-force and management-worker relations that we now turn.

(e) *Management-work-force relations.* Is there a presumption that the work-force will behave co-operatively? There is no satisfactory analytical answer to this question, indeed rather little *analytical* work on it. I want in a tentative way to suggest a set of answers contingent on the external environment of the company. The analysis requires a game theoretic framework. The approach via co-operative game theory partially begs the question, since it allows only solutions which are Pareto optimal between the parties; more useful is a non-cooperative game framework. It goes without saying that the analysis is highly simplified and set out here in necessarily compressed form.

Management is assumed to have three alternative strategies (in the game theoretic sense): (i) hierarchic, under appropriate production conditions Fordist, and in general rule-based, with specific requirements worked out by management for individual employees with different skills, and enforced by sanctions of one sort or another on individual workers; (ii) co-operative, involving a degree of employee participation in decision-making on work organisation, and allowing workers autonomous responsibility to a greater or´ lesser extent; (iii) acquiescence in job control by the workforce (this may be the optimal strategy in the sense that management has no alternative, given the strategy of the work-force).

The work-force also has three strategies: (i) cooperative, in the sense that the workforce is prepared to accept autonomous responsibility, as well as management instructions on what they are to do, and to engage in teamwork with or without management

involvement; (ii) acquiescent, will follow management instructions to the extent that they will be sanctioned if they do not; (iii) non-cooperative; strike or other form of industrial action if management is either co-operative or hierarchic, and imposes job control if management is acquiescent in it.

We start by considering the case of a relatively unskilled work-force: management strategies are on the top of the bimatrix, and work-force strategies are down the side:

	Management: acquiescent (job control)	Management: co-operative	Management: Hierarchic
Work-force: Cooperative	0...0	10...10	0...25
Work-force: Acquiescent	0...0	5...5	5...20
Work-force: Non-coop.	20...0	x...−x	x...−x

The first number in each square of the matrix is the pay-off to the work-force, the second to management. No significance attaches to the size of the numbers, only to their ordering – independently for the two sides. Management has some preference for a co-operative to an acquiescent semi-skilled work-force. More important, the pay-off is much higher for hierarchic as compared to co-operative management: this is because we are assuming the labour force is relatively unskilled. The worst outcome for management is to have to acquiesce in job control. Workers prefer co-operative to hierarchic management; and if management is co-operative they prefer to co-operate themselves, though with hierarchic management they choose acquiescence. Job control is rated above each of these by the work-force: the strength of this preference is determined in part by low work-force belief in employment security. x is a measure of work-force power, so that if x is positive it can be interpreted as the work-force winning strikes.

If $x > 0$, management is forced to acquiesce in job control, while workers choose non-cooperation; this is the unique Nash equilibrium for $x > 0$. If $x < 0$, management will choose hierarchic organisation,

and workers will choose acquiescence; again a unique equilibrium. Thus, the co-op/co-op solution is not favoured by an external environment of unrestricted free markets, providing for low skills and low employment security.

What is more surprising is that the aspects of the external environment which we have seen to be supportive of the four factors discussed above do not by themselves guarantee the co-op/co-op solution. To see this, imagine a system which produces a highly skilled work-force, where there is long-run finance, a low degree of opportunism, and effective cooperative relations between companies and other institutions for marketing and product innovation. In the game set out above, the pay-offs are altered in one significant particular:

	Management: acquiescent (job control)	*Management: co-operative*	*Management: hierarchic*
Work-force: Cooperative	0...0	10...40	0...25
Work-force: Acquiescent	0...0	5...5	5...20
Work-force: Non-coop.	20...0	x...–x	x...–x

For with a skilled work-force, and with the other conditions favouring product innovation, the co-op/co-op solution becomes greatly more attractive to management. So long as workers continue to prefer the co-op/co-op solution to the acquiescence-co-op solution, the former is the Nash equilibrium for $x < 0$. (If that preference ordering is reversed, the Nash equilibrium in a one-off game with $x < 0$ is acquiescence-hierarchic. This is because management would choose hierarchic, because acquiescence would be the dominant work-force strategy; the latter is the case since with $x < 0$ the work-force knows management would not choose acquiescence. However, the game is not one-off but played over time. So long as the work-force prefers the co-op/co-op solution to the acquiescence-hierarchic, management can turn the co-op/co-op solution into a perfect equilibrium by credibly threatening a hierarchic strategy if the work-force ceases co-operation.) Thus irrespective of the work-force

preference ordering between co-operation and acquiescence when management is adopting a co-operative strategy, the co-op/co-op solution is likely to emerge when $x < 0$.

There is, however, no reason at all to believe that self or group-interested skilled workers would not prefer considerably more control over work conditions than implied by the co-op/co-op solution. So long as their skills are marketable, control over their pace and type of work is likely to be preferred to co-operation. For, as Lane (1988) notes in her magisterial survey of the West German literature on flexible specialisation:

> The work carried out by the new production worker is full of contrasts: the work is skilled and offers chances for autonomous regulation *but* it also entails a high level of stress; it is open to the exercise of worker initiative *but* it is also highly condensed (*verdichtet*). This clarification by Kern and Schumann of the type of work/workers created by the new production concepts is particularly important as it dispels some of the false romanticism about a return to the old craft idyll.

If $x > 0$, the Nash equilibrium will be job control, or at any rate – if that sounds too severe – a compromise which falls considerably short of full co-operation by the work-force.

This situation is made more serious by two other considerations. First, where x is initially negative, the co-op/co-op solution will over time increase the power of the workgroup as it acquires more and more company specific skills. Thus it can be expected that in many cases $x < 0$ will eventually turn into $x > 0$.

Secondly, and even more potentially serious, is the consequence of a high cost of redundancies. The beneficial effect of this on company incentives, pushing towards product innovation strategies was noted in the last subsection. But if the workgroup is self-interested, the high cost of redundancies increases the chance of the job control solution, since it greatly enhances the power of the workgroup. This effect is particularly dangerous when the high cost is imposed on the company from outside for example, by legislation.

This brings us to the critical role which unions need to play if the system as a whole is to work. In Northern European systems, where employment security is imposed from outside, national unions act as a guarantor of work-force co-operation. They also act as a guarantor that redundancies will be possible when they are unavoidable. The

national unions are able to act in this way in part because, in the last resort, they can exert sanctions on workgroups and union officials at company level. More important, they have a major educational role in explaining to workers the central importance of export success; we discuss in Section 5 how this educational role gets around the standard collective action problem.

In Japan the system is subtly different. There the national unions were not prepared to act in such a way in the post-war period. The company unions by contrast have themselves taken on such a role: the game theoretic analysis above suggests that should not be possible, but there are three points to be made:

(i) In the Japanese system employment security is imposed by the company not by state or external industrial relations system. Thus the company itself engages in a long-term bargain with its work-force, exchanging security for co-operation, (as was shown by dismissals during industrial unrest in the 1950s).

(ii) The relation between large companies in Japan considerably reduce the marketability of skills of uncooperative workers.

(iii) The export-oriented ideology of the company union, mirroring that of national unions in Northern Europe, is made possible by the management career structures of union officials.

In conclusion, there is a complex balancing act which produces work-force co-operation and co-operative management worker relations. In one form or another unions with an export-oriented ideology are necessary.

In Section 4 it is shown how these different functions, long-term finance, employment security, good educational and training institutions, and co-operative work-force behaviour can reinforce each in a virtuous circle.

3 CO-ORDINATED MARKET ECONOMIES IN THE 1980s: COMPARATIVE ADVANTAGE IN WAGE RESTRAINT

An improvement in price-cost competitiveness requires that real wage growth, *ex-post* and not just *ex-ante*, be less than labour productivity growth. (If the expected real wage growth is above the actual – the actual being determined by exchange rate depreciation and price behaviour – the rate of inflation will increase. Moreover a

fall in unemployment will worsen price-cost competitiveness if it induces a rise in the expected real wage above labour productivity growth unaccompanied by a depreciation; and an increase in the rate of inflation if the exchange rate depreciates to maintain price-cost competitiveness.) The need for wage restraint is, therefore, if anything greater as a result of the heightened intensity of world competition which has marked the last two decades.

3.1 Market Wage Restraint in Non-CMEs

A common argument is that the market can be relied on to produce the requisite restraint. Two market mechanisms are invoked in the argument, external competitive pressures and unemployment. Economies, on the external competitive pressures argument, are now so open that domestic producers cannot price out of line with world prices; hence domestic producers will restrain wage increases so as to safeguard their profitability; and price-cost competitiveness will be secured. But there are several problems with this argument. First, world pricing influences are directly limited to traded goods; unless there are institutional linkages, prices of non-traded goods get set on a cost-plus basis. Moreover, even for a company producing traded goods, bankruptcy is not the inevitable consequence of failure to control wage costs. One option in such circumstances is to gradually lose market share over time by pricing above competitors. Alternatively, if market shares are very sensitive to price differentials, oligopolists (in effect facing a kinked demand curve at the world price) may maximise long-term profits by charging the world price and accepting a reduction in marginal profitability, rather than incur the cost of strikes. The strong role of comparability can easily bring such a situation about if institutional wage restraint is lacking; for if some companies are particularly profitable they will be tempted to give larger wage increases than average to their employees. This will in turn impose pressures on less profitable companies to follow suit.

The unemployment mechanism for inducing wage restraint has also come under fire. Three 'hysteresis' arguments suggest that the increasing importance of skills over the last two decades has reduced the efficacy of unemployment. The first is the insider-outsider argument (Lindbeck and Snower, 1984). As firm-specific skills become important the bargaining power of workers within a company (insiders) becomes less affected by the extent of unemployment, since it is costly to sack those who are employed and replace them with

unemployed workers without the firm-specific skills. Secondly, in a free market system marketable skills of individual unemployed workers depreciate with the duration of unemployment. Empirically, as unemployment rises, the equilibrium proportion of the long-term unemployed rises, thus reducing the average marketable skill level of the unemployed. This lowers the downward pressure on wages exerted by the level of unemployment; econometric estimates for the UK suggest that short-term unemployment explains wage movements better than total unemployment (Layard and Nickell, 1987). Thirdly, the dampening effect on business expectations of market growth, associated with the deflationary policies needed to produce higher unemployment, leads businesses to reduce investment in the marketable skills of their employees, as employers scale down their anticipated requirements of workers with those skills (Soskice and Carlin, forthcoming). This means that the rise in unemployment does not lead to an excess supply of those with marketable skills; the greater the determining influence on wage negotiations of skilled workers, the less the bite of higher unemployment.

These effects are exacerbated in two ways in a free market setting. The first stems from the difficulty of companies to provide workers with long-term employment security, as was explained in the last section. This lack of security increases the tendency of skilled workers to 'make hay while the sun shines'; a good example of this is Jaguar. Secondly, the desire for comparability does not disappear either with unemployment or with free markets. Moreover it is asymmetric: one objects to comparator groups moving ahead not to their falling behind. For all these reasons, therefore, reliance on a free market approach to realise price-cost competitiveness has not become more sensible as economies have progressively opened and unemployment become more acceptable: for the lack of long-term co-operation within the company and the inability of free markets to provide an adequate level of training blunt the market mechanisms of wage determination. Thus non-cooperative market economies may find themselves driven to high levels of unemployment to enable such policies to have some effect.

3.2 Institutional Wage Restraint in CMEs

Many economists are sceptical about the existence and feasibility of institutional wage restraint in the 1980s. These doubts arise because the institutional wage restraint argument is closely identified with the

MCT position outlined in Section 1. It is a valid criticism of MCT, that if the main channel of institutional restraint was through the sanctioning ability of powerful unions it would not be effective in the 1980s. By contrast, the network of understandings and institutional arrangements which delivers effective restraint in CMEs is more complex and durable than that implied by MCT. Centralised unions usually have an important role in this network, though not always as the examples of Japan and to a lesser extent Switzerland show; sanctions are always present but usually in the background. There are three fundamental sets of requirements, which relate to the work-place, employers and education and training.

Workers in well organised workplaces are more likely to accept restraint the better their long-term position (in terms of employment security, working conditions, representation, not losing out against workers in other companies, and so on) and the more clearly they understand the relevance of short-term restraint to its preservation. The educational role of the union is thus to emphasise the baseline importance of international competitiveness, and to link this to an element of restraint as well as the need for co-operation, as was seen in the last section. This role is in principle easier for the national union to play. But that is not necessary: in Japan, the close links between management and company union enable the latter to play the same role. Since there may be groups who try to free ride, it is also necessary for unions and/or management to have sanctions. But these are generally implicit and informal.

Secondly, there has to be co-ordination among employers to en-sure that wage increases are broadly in line across companies and feelings of fairness unruffled. As implied in the free market dis-cussion above this may be a prisoner's dilemma situation for indi-vidual employers. Thus employers' organisations are needed to explain to employers the consequences of their individual actions. In addition employers organisations will need sanctions for employers who attempt to free ride.

The importance of powerful co-ordinated employers, typically with a major presence in exporting and with the understood goal of promoting international competitiveness, has been confined in the literature to direct wage restraint. There is another function that they assume. That is to play a major role in determining the prices of the bought-in components and services which they use. Thus they act as a partial mechanism for transmitting world price inflation through the economy. The contrast is with non-cooperative economies, in which

exporters find themselves squeezed between world price inflation on the one hand and domestic price inflation generated by cost-plus pricing in the sheltered sectors of the economy on the other. Individual companies in non-cooperative economies can seldom impose 'world price constraints' on their suppliers, for their suppliers would move elsewhere or be able credibly to threaten to do so.

Finally the role of education and training systems has been neglected in the institutional analysis of the control of inflation and the maintenance of price-cost competitiveness. In CMEs the hysteresis problems mentioned above are minimised by labour market institutions and company training infrastructures capable of retraining workers and thus reducing – at least in comparison with non-CMEs – the likelihood of bottlenecks and the power of insider groups.

3.3 The Increasing Comparative Advantage of CMEs in the 1980s

Whether or not CMEs are as successful today at institutional wage restraint (holding real wage growth below the growth rate of labour productivity) as they were in the 1960s is unclear because of other factors which affect real wage growth. But compared to non-CMEs their comparative advantage has increased. Real wage restraint in non-CMEs in the 1960s was fragile because it was not underpinned by the factors discussed in the subsection above (Flanagan *et al.*, 1983). In the 1980s institutional real wage restraint has become harder for two reasons: the increased individualisation of the work-force; and the much reduced growth of labour productivity. Thus non-CMEs have had to resort to market rather than institutional mechanisms to control wage growth.

4 HOW THE CO-ORDINATED MARKET ECONOMY IS HELD TOGETHER

Companies in CMEs are subject to centrifugal forces in the modern world economy: low rates of interest from world financial markets, tempting them away from their traditional bankers; cheaper foreign sources of labour, with low redundancy costs; licenses to produce new products or use new processes developed elsewhere; and so on. But there are also powerful centripetal forces which operate in a counteracting direction, and which reduce the extent to which

companies in CMEs become 'disorganised capitalists'. In this short section the five factors which appear most important in this respect are listed. They go some way to defining a coordinated market economy:

(i) *The virtuous circle of innovation, retraining and employment security.* There is a virtuous circle, or 'high skills equilibrium' (Finegold and Soskice, 1988) in CMEs which operates as follows: Employment security, an effective retraining infrastructure within companies, and skilled teamwork-oriented employees, provide two incentives to innovate: namely, the cost of innovation is relatively low, and the expansion of markets involved avoids the cost of redundancies, (Sorge and Streeck, 1988); successful innovation is positively related to past innovation, so the company becomes more successful at innovation, increases the skills of its work-force and reassures them of employment security, increasing their teamwork orientation; more generally an individual and company culture of training is reinforced, and companies will exert pressure via business organisations to ensure that external training and education is effective (Maurice, Sellier and Silvestre, 1986).

(ii) *Underlying agreement between the social partners on international competitiveness.* Both unions and business organisations, as well as government and financial institutions, agree on the central need for international competitiveness. In relation to small European countries, see Katzenstein (1985).

(iii) *Unions and business organisations as educators.* The modern AIC is plagued by problems of market failure, as was made clear in Sections 2 and 3. The institutions and understandings of CMEs resolve many of these problems. These involve both companies and individuals behaving in a long-run co-operative manner, in Dore's terminology 'relational contracting' (Dore, 1983). On the usual assumptions of rational choice theory, self-interested individual agents would not behave in this way, unless they faced a sanction for not doing so. In the real world, however, identity and hence interests are socially constructed; in CMEs the definition of identity in part in terms of group membership, and the internalisation of its obligations, is important; thus a key role of representative organisations is to educate members in the interests of the organisation. For most members of unions or most senior managers behaving in the

interests of their group – whether in terms of wage restraint or carrying out adequate training – does not require sanctions but a continuing process of education by unions and business organisations.

(iv) *Non-anonymity*. Some individual agents, companies and workers, will want to free ride. Sanctions are more effective in CMEs because one role of institutions, particularly if they can co-ordinate easily between themselves, is to remember the history of agents. Institutions can transform the enormously multi-player extensive game of economic life from one of imperfect information, in which individual players have little idea of past moves except perhaps their own (perfect recall), into a game of perfect information in which a full history of past moves is known (Schotter, 1981). Individual agents, that is to say, do not have the anonymity that they do in a free market economy. Sanctions are only needed for the occasional free-rider, but they are likely to be effective because the free-rider knows that free-rides will be recorded for future reference.

(v) *Institutional flexibility*. Non-market institutions are as prone to failure as markets, though for different reasons. Non-market institutions can easily become taken over by the interests of their staff, and thus cease to solve the problems of market failure for which they were originally set up, or fail to solve new market failure problems which have arisen in their area. In CMEs non-market institutions are, by contrast, staffed at least in part by experts from the social partners.

Underlying all of the above is some sort of compact with the individual worker in the CME society. This compact enables individual workers to think in terms of a reasonable degree of employment security, decent working conditions, and progress through skill acquisition. Such a compact does not apply to all members of the society, notably in Japan, and to some extent in countries like West Germany; it applies far less to women in Japan and the Germanic-speaking countries than to men: so it is not the purpose of this paper to argue that these societies are 'better' than other AICs. What this implicit compact does is to help explain the underpinning of the system of institutions, representation and education. The next section looks at the nature of the implicit understanding between unions and business, which enables this implicit compact for the individual worker to be sustained.

5   CHOOSING UNEMPLOYMENT: THE BROAD GAME
AND THE NARROW GAME

This section is devoted to an explanation of why unemployment rates
are different in different countries; and to why that explanation is
consistent with full employment in each of the countries in the 1960s.
To prevent misunderstanding about the nature of the explanation, I
repeat what was said in the introduction. What is presented is a
highly simplified model. It is not intended in any sense as a complete
explanation. It is deliberately couched in a more formal way than
may seem appropriate, in order that the argument comes across
clearly. My concern is to provide an insight into political decision-
making in advanced industrialised economies.

The argument of the last two sections has been that:

(a)   The basic constraint on the ability of governments to choose the
      rate of unemployment has been the need to maintain external
      equilibrium at a stable rate of inflation.
(b)   The slow growth of world trade combined with the type of
      technological change brought about by the microprocessor has
      given a comparative advantage to the more co-ordinated market
      economies in world markets; this is because of a superior ca-
      pacity both to innovate rapidly using modern technology, and to
      control cost inflation. Only co-ordinated market economies
      have had the option of choosing full employment while main-
      taining external equilibrium.

This section focuses on why some co-ordinated market economies
chose full employment, while others did not.

The starting point of the argument lies in the nature of the relation
between labour and capital in the co-ordinated market economies.
Corporatist theorists have generally and wrongly seen agreement on
full employment between employers/government and unions as part
of the accommodation of labour. West Germany in the 1980s is an
obvious counter-example. Many corporatist theorist moreover, par-
ticularly economists, have seen the agreement primarily in macro-
economic terms.

I want to suggest that there is a broad ongoing framework agree-
ment, implicit and fuzzy, in co-ordinated market economies between
capital and labour; that it covers micro more than macro questions;
and that it does not include unemployment. The basic form of this

agreement is that the unions underwrite the flexibility of the system and accept the basic goal of export orientation; and that in return they are given a position within the system which enables them to ensure that that flexibility is not abused. Such a bargain is usually implicit, but five elements can be distinguished in what is required of unions:

1. Acceptance of need for international competitiveness.
2. Underwriting worker co-operation and functional flexibility, especially within large and medium-sized companies.
3. Wage restraint.
4. Guaranteeing the validity of the vocational training system to workers, by ensuring that it has a suitably long-term, marketable-skill perspective; but also guaranteeing that skilled workers will not use the system to increase their bargaining power by restricting the supply of skills, for instance by limiting the number of apprenticeships.
5. Adopting a balanced position on redundancies and restructuring: on the one hand, guaranteeing to workers that they will only be made redundant if it is absolutely unavoidable; and on the other, not abusing their powers to delay or prevent redundancies via employment security legislation or whatever.

In return, government and employers' organisations give unions:

1. Institutional positions within the systems of vocational training, wage determination and the determination of redundancies, which at least enable them to carry out what is implied by (1) to (5) above.
2. Influence to a greater or lesser extent within large companies.
3. A system of within-company representation in which the unions have role.

The institutional form which this 'framework game' takes differs across countries, most notably between Japan and the corporatist economies; in Japan the unions concerned are the company unions of the major companies, as opposed to national unions or confederations elsewhere. But the basic form of the bargain is similar; making allowance for the different institutional context, each of the elements appear in both cases. (Although it takes a different form again, similar problems find analogous solutions in the industrial district).

The framework game is relatively stable over time. This is for the following reasons. If employers' organisations opted out of the arrangements, they would cease to have the importance they had, since they would no longer be required to deal with unions on the previous wide range of issues. If unions opted out, many of the functions which sustained their bureaucracies would end. Moreover if either side opted out, the other side would be similarly affected. If the functions and importance of both sides was reduced, their ability to move back to the fundamental bargain would be impaired. In other words, the game which is being played is that in which the status quo is preserved by the fear of each side that if they opt out it impairs the ability of the other side to opt for the status quo again.

The framework game only sets a framework, putting limits on the outcomes of a wide range of variables. These include:

- The rate of wage increases; both sides agree on the need for restraint, but the unions will typically want somewhat higher real wages than management will be prepared to concede.
- Investment in such areas as work design in relation to new technology; working conditions; health and safety provisions.
- Those subject to bargaining with the government: the powers of the unions within institutional structures, health and safety legislation, macroeconomic policy, public sector job creation, and so on.
- The pace of restructuring and redundancies, which business will wish to be faster and the unions slower; (particular attention will be paid to this in what follows).

The precise set of outcomes or bargains are struck in what will be referred to as the outcome game. The outcome game is being played all the time. The outcomes of the outcome game will depend on the relative strength of unions and employers in both the industrial and political arenas at the time in question. This in turn depends on many factors, such as the existing institutional position and expertise of the unions, the degree of union organisation and so on. If these structural factors are held constant at any moment in time, the main factor which determines the bargaining strength of the unions in the outcome game will be the level of unemployment (and a related set of macroeconomic factors).

The level of unemployment is under the control of the government so long as the external feasibility conditions are satisfied, and so long

as the unions cannot directly block (for example, by strike action) government attempts to raise unemployment. The outcome game therefore can be seen as a two stage game:

Outcome game: Stage 1 Government chooses unemployment level, assuming union does not have blocking power.

Outcome game: Stage 2 Unions and employers bargain over wages, conditions, redundancies, and so on (all the time within the limits set by the framework game).

The basic point to be made in this part of the paper is that the political complexion of the government, more generally the balance of power between capital and labour, matters in the choice of unemployment levels in co-ordinated market economies. But while left-wing governments (it will be argued) will always choose low unemployment, the choice of right-wing governments is more complicated even if they are acting in the interests of employers.

In discussing the outcome game, the argument will focus on redundancies and restructuring. This not only makes the discussion manageable, it is also the most significant variable for understanding the differences in behaviour between the 1970s/1980s and the 1950s/1960s. The second stage of the outcome game thus becomes a bargain between unions and employers over the pace of restructuring.

The government's choice of unemployment in the first stage of the game will be a key determinant of the outcome of this second stage bargain. Since the government's choice of unemployment will be made with this outcome in mind, we need to discuss the relation between unemployment and the outcome of the bargain. Thus the second stage of the outcome game is discussed first:

Stage 2. The bargain in the second stage between employers and unions takes place within the limits set by the fundamental game. As shown in Figure 7.1, there is a lower limit set to the pace of restructuring by the need not to put international competitiveness at risk: this follows from the acceptance by unions of the goal of competitiveness. And there is an upper limit set by the need, accepted by employers and/or their organisations, to maintain the importance attached to employment security. Too fast a pace of restructuring, implying an increased number of redundancies, is inconsistent with

Figure 7.1

the procedures required to ensure that redundancy is a last resort. This upper limit is shown as falling with the level of unemployment to indicate that at low levels of unemployment the system can preserve employment security with a faster pace of restructuring.

The actual pace of restructuring – the outcome of the bargain – will be at either, or between these limits, in the non-traded area. Where it is will depend on the relative strength of the employers and the unions. This is determined by underlying structural factors and by the level of unemployment. Three cases can be distinguished, as shown in Figures 7.2, 7.3 and 7.4.

In Figure 7.2, the unions are too weak to reduce the pace of restructuring below the upper limit, even at low unemployment. This, it is asserted, is the case in Japan and Switzerland. Here, an increase in unemployment has no effect on the chosen pace of restructuring. That is because if R were left to unfettered collective bargaining, the relation between R and U (unemployment) would be above the upper limit, except perhaps at low unemployment. This is shown by the upwards sloping line above the upper limit: unions would be weakened in their power to restrict restructuring and redundancies as unemployment rose, but that is not relevant to the actual pace of restructuring.

In Figure 7.3, the general case, the pace of restructuring rises with unemployment. Union bargaining power declines as unemployment rises: its elasticity is negative. The upper limit still remains and is
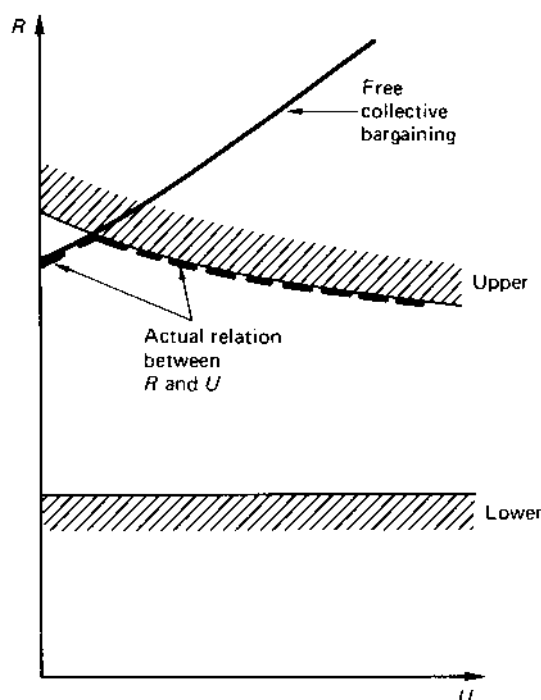
Figure 7.2

attained at some level of unemployment. This case seems likely to cover most N. European countries.

There is a third, at least hypothetical, case 2 shown in Figure 7.4, in which the union is so strong that it is able to keep the pace of restructuring at the lower level despite rising unemployment.

Now we can return to the first stage of the outcome game, and suggest how the government's choice of unemployment can be explained:

Stage 1. In modelling the behaviour of governments, it is assumed that they (a) accept the fundamental/framework bargain, and (b) are concerned in choosing unemployment with the promotion of the interests of the social partner closest to them (left-wing governments with unions and right-wing governments with employers) and with their own electoral success.

As far as left-wing governments of co-ordinated market economies
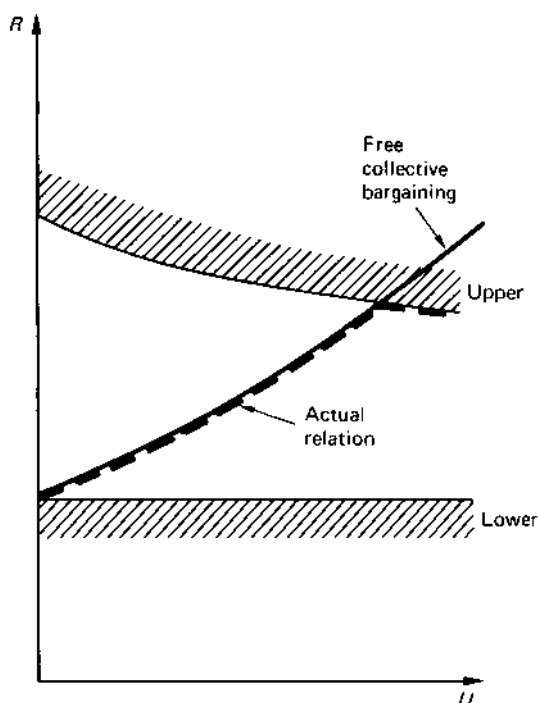
Figure 7.3

are concerned, the solution of this game is trivial. The promotion of union interests and concern with electoral success both point to keeping unemployment low. (It will be remembered that union commitment to real wage restraint is part of the framework agreement. And that governments of co-ordinated market economies are assumed not to be forced into high unemployment by balance of payments problems.)

The outcome game is more interesting in the case of right-wing governments. Right-wing governments maximise the difference between the value to them of the benefit, within the framework game, to employers of unemployment and their perception of its political cost. Writing this symbolically:

$$V_g = V_{gb}.V_b(R[U],U) + C_{pol}(U) \tag{1}$$

where V_g is the government's objective function; V_{gb} is the value to
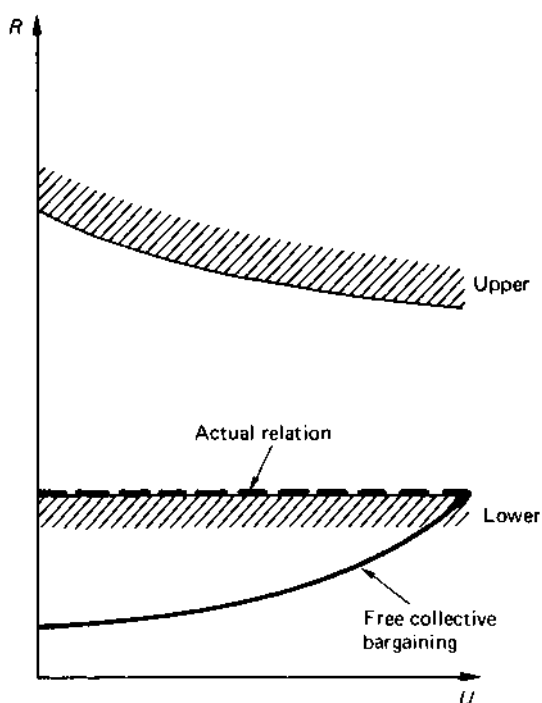
Figure 7.4

the (right-wing) government of a unit rise in V_b, the objective function of business; $R[U]$ is the relationship generated by stage 2 of the outcome game, showing how the pace of restructuring, R, depends upon the level of U, unemployment; $C_{pol}(U)$ is the political cost to the government, measured in terms of its objective function. A rise in unemployment affects the government's objective function in three ways:

1. By a change (usually non-negative) in the pace of redundancies, leading to a change of the same sign in the objective function of business.
2. By a fall in internal demand and hence a fall in the objective function of business; (the second argument in the objective function of business).
3. By an increase in the political cost to the government.

In what follows I will neglect (2). This is not because it is not important or would not be useful in the explanation – internal demand effects are far more damaging to Japanese than German manufacturing – , but because (1) and (3) by themselves suffice to explain (a), (b) and (c) above: (2) is therefore cut out by Occam's razor.

Also, I am not going to use (3), the political cost of unemployment, to differentiate between countries or the political complexion of governments or different decades. It may be that governments in countries with a history of, and a strong commitment to, full employment perceive a higher political cost in raising unemployment than those in other countries; but it is a flabby explanation. Equally some commentators explain rising unemployment between the 1960s and 1980s on the grounds of falling political cost; the explanation may have truth in it but it lacks any cutting edge. All I assume is that the marginal political cost of unemployment rises with level of unemployment.

The government's choice of the level of unemployment, if it wishes to maximise its objective function, is straightforward. It will increase unemployment until the extra benefit to business (in terms of its objective function) is just equal to the extra political cost. The first term is the marginal benefit of a rise in unemployment via increased pace of restructuring. This is equal to:

$$V_{gb}.V_{bR}.R_U \tag{2}$$

where V_{bR} is the value attached by business to a unit increase in the pace of restructuring and R_U is the change in the pace of restructuring as a result of a unit increase in unemployment. (2) must be equal to the marginal political cost of unemployment, C_U^{pol}. Thus:

$$V_{gb}.V_{bR}.R_U = C_U^{pol} \tag{3}$$

We are now in a position to offer 'stylised explanations' of the main unemployment problems:

1. *Among Co-ordinated Market Economies, some right-wing govern-ments (West Germany, the Netherlands) chose high unemploy-ment in the 1980s, while other right-wing governments (Japan, Switzerland) chose low unemployment. Why?* A government will choose low unemployment when the marginal benefit is low

relative to the marginal cost. This is because, when unions are very weak, as in Japan or Switzerland, an increase in unemployment will not lead to an increase in the pace of restructuring in the outcome game: the marginal benefit will therefore be low. The relation between restructuring and unemployment will be given, by the framework game, as the upper limit on R consistent with the maintenance of employment security. In fact if the upper limit R falls as U rises, R_U and the marginal benefit will be negative. This is shown in Figure 7.2 where the actual relation between R and U is the dashed line coincident with the upper limit; and in Figure 7.5 below, where the relation between marginal benefit and marginal cost is drawn. So U will be at U_J.

By contrast, in West Germany and the Netherlands, with stronger but not very strong unions, a rise in U leads to a rise in R. This is shown by the dashed line in Figure 7.3. In Figure 7.5, the marginal benefit to the government is positive, and the government chooses a higher level of unemployment where the marginal benefit line cuts the marginal political cost line, at $U_{G, 80}$.

2. *All co-ordinated market economies with left-wing, governments in the 1980s chose low unemployment (Sweden, Norway, Austria).*
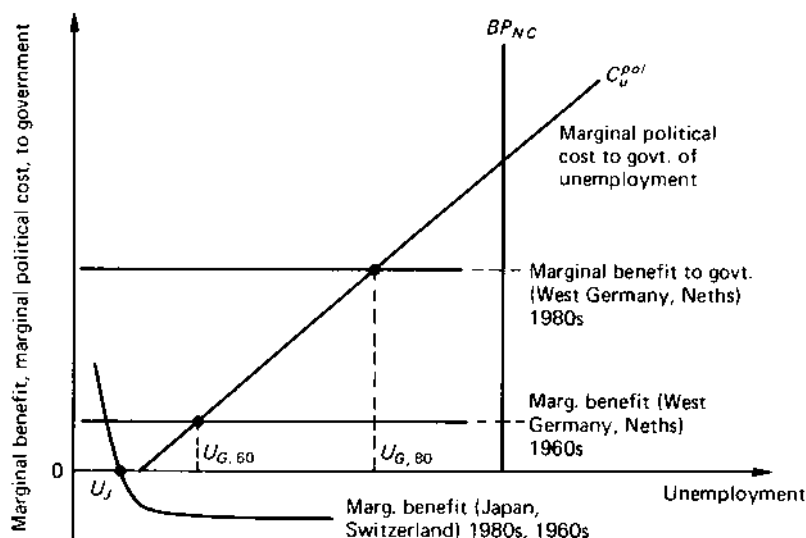
Figure 7.5

This case has already been discussed. Without an external constraint on low unemployment, with real wage restraint as part of the framework bargain, and with no marginal benefit from helping business (by more than what is implied by the framework bargain), there is no reason to choose a high level of unemployment. In terms of the marginal benefit formula, $V_B^C.V_R^B.R_U$, the first term is zero. So the marginal benefit schedule is coincident with the horizontal axis.

3. *No non-coordinated market economies chose low unemployment in the 1980s, whether they had right-wing or non-left governments (Italy, Ireland, UK) or left-wing governments (France, Spain, Greece).* As explained in Sections 2 and 3, non-coordinated market economies have found it far harder to be successful in world markets in the 1980s than have co-ordinated market economies. This is for the two basic reasons:

   (a) That the microprocessor technological revolution, which has really come into its own in the last two decades, has altered the nature of competition in international trade. The microprocessor has permitted greater emphasis on product innovation, rapid response to demand shifts, and high quality production and servicing. The most successful use of the new technology in these areas has been in co-ordinated market economies where to a greater extent than in non-co-ordinated market economies, companies have the necessary supporting institutions (vocational training, finance, marketing, R&D); the necessary intercompany co-operation; and the necessary teamwork-based, long-term co-operative relations between management and work-force to permit flexible specialisation in work organisation.

   (b) That real wage restraint has remained possible at low levels of unemployment for co-ordinated market economies despite low growth rates of labour productivity (and hence lower required growth rates of real wages). But the fragile systems of real wage restraint in non-coordinated market economies either collapsed or required high unemployment in the 1980s.

   Non-coordinated market economies were thus externally constrained from lowering unemployment in the 1980s. In terms of Figure 7.5 they were to the right of

some line BP_{NC}, indicating the balance of payments constraint on non-co-ordinated economies. This does not imply that they would not anyway have chosen high unemployment in order to aid the process of restructuring. Indeed several governments allowed unemployment above the level for external equilibrium for that reason (UK, Spain); and in other cases (for example, France) unemployment was necessary to help restructuring by weakening the possibility of resistance.

4. *In the 1960s nearly all governments chose low unemployment.* There are two main differences, within the framework of this paper, between the 1960s and the 1980s. First, no advanced economies were forced into high unemployment by balance of payments constraints. This was primarily because of buoyant world trade. In addition the comparative advantage which co-ordinated market economies enjoyed in world markets in the 1980s (see (3)) was much less apparent in the 1960s. West Germany, Japan and Sweden were highly successful exporters in the 1960s, but so too were France and Italy; work organisation was not the discriminator then, when optimal organisation in many leading export sectors was Fordist, that it has become in the 1980s.

Secondly, and equally as important; restructuring of industry was not seen as the central problem in the 1960s that it came to be in the next two decades. Thus right-wing governments, representing in part the interests of business, did not have the reason for choosing or allowing high unemployment that they have today. In terms of the formal discussion above, the marginal gain to business of an increase in the pace of restructuring, V_R^B, was lower in the 1960s than today. Thus in Figure 7.4 the marginal benefit line in the 1960s, $V_B^G.V_R^B.R_U$, is drawn lower, to intersect the marginal political cost at a lower level of unemployment.

Note

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Part II
Unions and Incomes Policies

8 Incomes Policies in a North American Setting

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1 INTRODUCTION

This paper is concerned with policies that might improve macro-economic performance in the context of a North American system of decentralised wage bargaining and multi-year overlapping contracts. I begin by stating the argument in four major points and then devote the rest of the paper to substantiating and fleshing out these points:

1. The major disadvantage of North American-style wage inertia is that the output and employment costs of reducing the rate of inflation are very high. It seems generally agreed that if the problem is one of supply shocks, then inertia is a positive, or at least non-negative, feature of a wage bargaining system. Inertia may also be a good thing in the context of positive shocks to aggregate demand. On the other hand, if, for whatever reason, the inflation rate is too high, then wage inertia raises very considerably the costs of disinflation. This point is consistent with the fact that unemployment arising from disinflation has consti-tuted a major part of the overall unemployment problem in North America. By contrast, much of European unemployment appears to be more structural or permanent in nature.

    For these reasons, the paper focuses on policies that may reduce the costs of disinflation associated with long overlapping wage contracts. Clearly such policies are not needed when in-flation rates are low, but they may be useful if inflation begins to rise again.

2. While many economists have analysed this issue, from the stand-point of this paper the most relevant discussions are those of Phelps (1979) and Taylor (1983). They showed that despite the wage inertia resulting from an overhang of previously negotiated

contracts, a painless disinflation could occur if the deceleration of the growth rate of nominal GNP was very gradual during the early stages of the programme. The problem, of course, is that 'wage negotiators have to be convinced that the deceleration will come later even though it is not occurring today' (Taylor, 1983, p. 992). This raises the difficult problems of credibility and time inconsistency. Taylor did not indicate how these problems could be resolved, whereas Phelps recommended voluntary wage guideposts (although the record does not inspire great confidence on the effectiveness of such guideposts).

3. The third and major point of the paper is that Canadian experience provides a concrete example of the successful implementation of a modified Phelps-Taylor plan. The one key modification is that instead of relying on voluntary wage guideposts, the Canadian policy involved a compulsory stepping down of wage settlements over a three year period. The policy, which was announced in the fall of 1975, permitted maximum wage increases of respectively 10, 8, and 6 per cent in the first, second, and third years of the programme. At about the same time, the Bank of Canada announced a policy of gradually stepping down the rate of growth of the money supply ($M1$). Both of these policies were carried out pretty well as announced.[1]

As will be documented later in the Chapter, the effects of this programme have been studied exhaustively by Canadian economists, and the result has been a degree of unanimity that is rare in our discipline. Apparently without exception, these studies have found that the programme had a very substantial moderating effect on wage settlements and that there was no significant post-controls bubble effect. The implication is that Canadian unemployment and/or inflation would have had to be considerably higher in the absence of wage controls.

Moreover, although this point is more controversial, there is also evidence that the policy of controls-plus-monetary-restraint helped to keep real wages and the real exchange rate closer to their equilibrium levels than would have been the case under monetary restraint without controls. Simulations to be presented later in the chapter suggest that monetary restraint without controls would have given rise to a period of substantial real exchange rate overvaluation, uncompetitiveness, and external imbalance. The wage controls, then, can be seen as reducing or eliminating the Dornbusch (1976) overshooting effect, thereby

helping to prevent real wages from rising to a level that was too high. To the extent that Europe suffered from classical unemployment after 1975, wage controls may be seen as helping to avoid this European problem in Canada.

Canada's experience with direct controls stands in sharp contrast with the US programme of the early 1970s with the latter described as a 'self-inflicted wound' (Gordon, 1981) or, in a similar metaphor, a 'remarkable act of national self-flagellation' (Blinder, 1979). As a result of this contrast, mainstream economists in Canada have typically shown much more sympathy for wage and price controls than their US counterparts. For example, Richard Lipsey, who in 1977 wrote an article entitled 'Wage-Price Controls: How to Do a Lot of Harm by Trying to Do a Little Good', provided guarded support for the possible reimposition of controls in his Presidential Address to the Canadian Economics Association in 1981.

Since the Canadian experience with incomes policy is little known outside Canada and since economists' opinions on the subject have been influenced mainly by the failed US policies, it seems useful to make the point that such incomes policies can be effective – *providing they are structured to take full account of the multi-year overlapping wage contracts which are an institutional fact of life in North America.*

If this Canadian experience were repeatable and transferable, then we would have a recipe for disinflation that would be a valuable addition to the set of instruments at the disposal of North American policy-makers. Based on the Canadian experience, the policy rule under a system of long overlapping wage contracts would be as follows: in general, let the system operate on its own, but if, for whatever reason, inflation becomes too high, invoke Phelps-Taylor-Canadian style compulsory wage guidelines, in combination with a consistent policy of monetary deceleration, in order to step down the rate of inflation over a three year period.

4. Unfortunately, and this is the last major point of the chapter, the conclusion that the Canadian experience is both repeatable and transferable seems unwarranted. I say this because the historical record provides prima-facie evidence that Canada's wage controls of 1976–8 were not repeatable in Canada. For reasons unrelated to the 1976–8 wage controls, by 1981 Canadian inflation had returned to double digits, and the conditions facing

the economy were not unlike those of 1975. As in the earlier period, the Bank of Canada responded with a tighter monetary policy, but in contrast with 1975 there was no recourse to incomes policy. Why, if the 1976–8 experience was so successful, was the policy not repeated in the early 1980s?

There is probably more than one answer to this question. To some degree, the non-interventionist philosophy of Ronald Reagan and Margaret Thatcher had found its way into Canada. Constitutional considerations also played a role. However, the point I would like to emphasise in the present context is that Canadian unions had displayed a passionate opposition to the 1976–8 wage controls – so much so that for the first time in Canadian history, the labour movement managed to organise a nationwide strike in protest (albeit for only one day). The reaction of labour to the reimposition of wage controls in 1981 would have been hostile in the extreme, and this consideration may well have played an important role in the government's policy decision.

Ultimately, then, it can be argued that Canada's successful experiment with wage controls was unrepeatable because democratic governments cannot repeatedly impose policies that incur the intense wrath of major groups in society. A different argument, but one that goes in the same direction, is that the policy might have become less effective as it came to be anticipated. Unfortunately, then, we seem forced to consider the larger issues of consensus and co-operation that are likely to be the focus of much attention at this conference. We cannot treat compulsory wage guidelines as a purely technical policy instrument on the same footing as, say, open market operations.

I use the word 'unfortunately' because, as one who has devoted considerable time to a study of the connection between social consensus and economic performance, I am all too aware of the possibility of dead ends as far as practical policy options are concerned. Even if we could all agree that 'social consensus' makes a primary and exogenous contribution to economic performance, it is far from clear how governments could go about creating consensus (certainly not by imposing wage controls!).

In the present context, the challenge is to examine the sources of labour's opposition to incomes policy and to ask whether a revised version of the Canadian programme might be both effective and acceptable. At least in a Canadian context, there seems little reason for optimism on this issue. If opposition to compul-

sory wage guidelines were based solely on the charge that they were unfair to labour, then it might be possible to devise an acceptable package. On the other hand, if, as certainly seems the case in Canada, the opposition is also based on the argument that compulsory guidelines are incompatible with free collective bargaining, then there would seem to be no room for compromise. The essence of free collective bargaining is to negotiate wages, and the essence of the policy is to set maximum allowable wage increases.

In summary, Canada's experience suggests that a modified Phelps-Taylor plan based on compulsory wage guidelines is technically feasible but politically very difficult to repeat in Canada. On the other hand, political conditions are quite different in the United States, where unions are generally thought to be weaker and more moderate than in Canada and constitutional considerations are not the same. This suggests that the lessons to be learned from Canada's wage controls of 1976–8 might, in the future, be more applicable in the United States than in Canada.

The remainder of the chapter backs up and amplifies the arguments that have just been presented. Following a short description of the structure of the programme, I present a simple theoretical framework for considering the impact of wage controls. This framework is then used to analyse the impact of the programme on inflation, unemployment, competitiveness, and real wages.

2 THE CONTROLS PROGRAMME

On 13 October 1975, Prime Minister Pierre Trudeau announced a three year programme of wage and price controls. The programme was part of a three-pronged attack on inflation which also included a policy of fiscal restraint and the Bank of Canada's policy of stepping down the growth rate of the money supply. These policy measures were a response to the fact that Canadian wage settlements were then running at twice the level of those in the United States, while the country's competitive position (measured by relative unit labour costs) had deteriorated by some 20 per cent relative to 1970. As a result of both expansionary monetary and fiscal policies and a booming resource sector Canada had largely avoided the US recession of 1974–5 – but at the cost of a substantially higher inflation rate.

As already noted, the main feature of the controls programme involved a stepping down of the permissible level of wage settlements over a three-year period. The programme covered employees in the public sector, private sector firms with over 500 employees, and construction firms with over 20 employees. In general, increases in total compensation were not to exceed 10 per cent in the first year of the programme, 8 per cent in the second year, and 6 per cent in the third year. However, these amounts varied slightly according to the level of wage increases obtained in the pre-controls period, and there was also a provision for increases above the guideline if an historical relationship existed. The programme did not interfere with deferred wage increases negotiated prior to the imposition of controls. In addition, there was a maximum permitted absolute dollar income increase (which also applied to self-employed professionals) and a minimum salary level below which the programme did not apply.

The programme did not control prices directly but sought to limit profit margins. In cases where profits exceeded the allowable amount, firms were required to return the 'excess revenue' to the market. The programme had little or no effect on prices in a number of key areas, including food, energy, and imports. The reader who is interested in a more complete description of the details of the programme is referred to a useful survey by Reid (1982).

3   SIMPLE ANALYTICS OF WAGE CONTROLS

I now present simple wage and price equations that illustrate the possible effects of the controls programme. For purposes of this illustration, I ignore such factors as productivity growth, wage-wage effects, and the possibility of structural breaks in the equations.

To a first approximation the rate of inflation (Δp_t) in an open economy can be represented as a weighted average of wage inflation (Δw_t) and world inflation adjusted for the exchange rate $\Delta p_t^w + \Delta e_t$, where p_t^w is the log of world prices and e_t is the log of the exchange rate):

$$\Delta p_t = (1-m)\Delta w_t + m(\Delta p_t^w + \Delta e_t) \tag{1}$$

It is convenient to re-write (1) as:

$$\Delta p_t = \Delta w_t + m' \Delta q_t \tag{2}$$

where $m' = m/(1-m)$ and $q_t = p_t^w + e_t - p_t$ is the log of the real exchange rate.

Assuming that there is some source of wage inertia, the simplest way to write the wage equation or Phillips curve is as follows:

$$\Delta w_t = \Delta p_{t-1} - \alpha\, UGAP_t + x_t \tag{3}$$

where $UGAP_t$ is the actual-minus-natural unemployment rate and x_t is a wage shock term.

Now, substituting (3) into (2) and transferring all variables except x_t to the left-hand side, we have:

$$\Delta p_t + \alpha\, UGAP_t - m' \Delta q_t = x_t \tag{4}$$

Finally, if we take the sum of equation (4) over the period $t = 1, 2, 3, \ldots T$, the result is given by:

$$(\Delta p_T - \Delta p_0) + \alpha \sum_{j=1}^{T} UGAP_j - m'\,(q_T - q_0) = \sum_{j=1}^{T} x_j \tag{5}$$

An effective wage controls programme implies $\Sigma x_j < 0$: the programme has a direct negative effect on wage inflation, and this effect is not subsequently reversed by a post-controls bubble. As will be documented shortly, there is no doubt that this condition was satisfied for Canada.

Now, given that $\Sigma x_j < 0$, we can use the left side of (5) to analyse the possible consequences of wage controls. Ignoring the real exchange rate term for a moment, the equation states that in the absence of controls, inflation would have been permanently higher by an amount equal to $-\Sigma x_j$, or the economy would have had to undergo $-\Sigma x_j/\alpha$ additional point-years of unemployment to achieve the same inflation rate, or some combination of the two.[2] The degree to which monetary policy would have been accommodated the extra inflation resulting from the absence of controls determines the breakdown between these two effects.

This much is pretty conventional. In an open economy, however, the real exchange rate or competitiveness term $m'(q_T - q_0)$ is also likely to play an important role, at least in the short run. Indeed, equations (4) and (5) indicate that positive wage shocks need not have any effect on either inflation or unemployment if there is a sufficiently large real exchange rate appreciation. Furthermore, as confirmed by empirical results to be presented shortly, in the absence

of Canada's wage controls, there would almost certainly have been some real exchange rate appreciation or decline in competitiveness in the short run.

However, and this is a key point, if the long-run level of competitiveness is fixed by an external balance constraint or purchasing power parity, then this exchange rate channel can operate only in the short run. As in Buiter and Miller (1982), the anti-inflation effects of a short-run real appreciation must be cancelled out by a subsequent real depreciation (or more than cancelled out if one takes account of the need to service the larger external debt resulting from a period of overvalued exchange rate). In terms of equation (5), q_T is independent of wage controls in the long run, and the long-run impact of wage controls is divided between Δp_T and $\Sigma UGAP_j$ as for a closed economy.

This framework will now be used to consider the empirical evidence bearing on Canadian wage controls. Two issues are considered in turn: the direct effect on wage settlements (Σ_{xj} of equation (5) and the effects of wage controls on inflation, unemployment, competitiveness, and the real wage.

4   DIRECT EFFECTS OF WAGE CONTROLS

More than ten studies have tested for direct effects of wage controls as represented by x_t either in a wage equation such as (3) or in a quasi-reduced form price Phillips curve.[3] No study to my knowledge has found evidence of a post-controls bubble, while every study has found significant negative effects during the period of controls. Estimated negative effects are generally about two percentage points a year, with studies based on earnings data (as opposed to new wage settlements) typically finding negative effects only in the second and third years of the programme. Hence estimates of the cumulative negative impact (Σx_j in terms of equation (5)) are between 4 and 6 percentage points.

I will present just one of these estimates, taken from McCallum (1988). In that paper I present wage equations estimated over the period 1956–87 with dummy variables for the second and third years of wage controls, but here I follow the more stringent procedure of first estimating the regression over the period 1956–76 and then presenting dynamic simulations of wage inflation over the period

1977–87. The estimated equation for 1956–76 (with t-statistics in brackets) is given by:

$$\Delta w_t = 4.40 + 0.54 \ (\Delta p_t^e + \Delta \bar{y}_t) + 0.46 \ \Delta w_{t-1} - 2.76 \ \log(UM_t)$$
$$\quad \ (4.0) \quad (5.0) \hspace{6.5cm} (3.4)$$

$$\quad \quad + \ 0.17 \ \Delta RPX_{t-1}$$
$$\quad \quad \quad \ (2.3)$$

$$\bar{R}^2 = 0.66 \quad SE = 0.85 \quad Q(6) = 4.11$$

where Δw_t is the per cent change in hourly compensation, Δp_t^e is an estimate of the expected inflation rate measured by consumer prices, $\Delta \bar{y}_t$ is trend productivity growth, UM_t is the adult male unemployment rate, and RPX_t is the relative price of Canadian exports (which is highly correlated with relative world prices of resource products). More precise definitions and explanations are provided in the original paper, which also presents a series of tests indicating structural stability of the Canadian Phillips curve.

Figure 8.1 reports actual and predicted values of Δw_t, with the post-1976 predictions calculated as dynamic simulations. Predicted wage inflation is 4.7 percentage points too high in 1978, the last year of the controls programme. If there had been a post-controls bubble, then this gap between actual and predicted values would have disappeared following the termination of controls. It can be seen, however, that the gap remains fairly stable over the whole period 1978–87, ranging between 3.2 and 5.0 percentage points with no apparent trend. This implies that there was no post-controls wage bubble despite the substantial increase in wage inflation in the three years following the end of controls.

This re-acceleration of inflation was due mainly to a combination of food and energy price shocks, exchange rate depreciation, and a booming resource sector. It should also be noted that monetary policy over this period was more expansionary than the authorities intended: although target and actual growth rates of the supply of $M1$ were coming down as planned, the demand for $M1$ was also falling as a result of innovations in financial markets (a full account of this is provided by Freedman, 1983).

In brief, these results, as well as those of the other studies cited above, indicate that the cumulative direct negative effect of wage controls was about five percentage points.
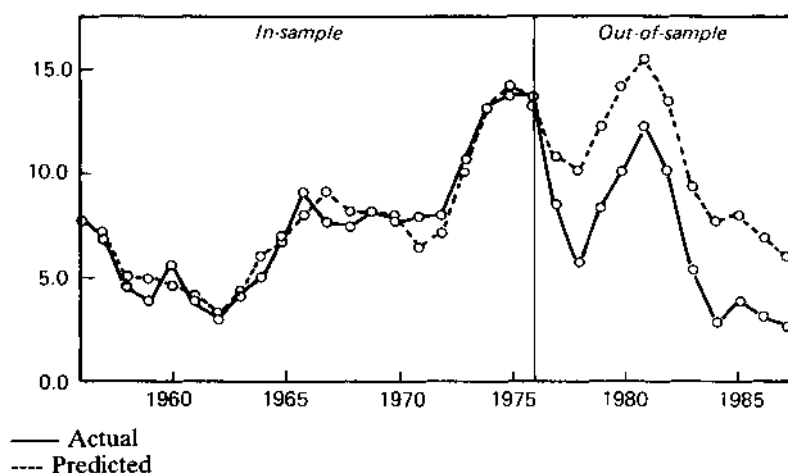
—— Actual
---- Predicted

Figure 8.1 Percent change in hourly compensation in Canada, 1956–1987

Note: Predictions for 1977–87 are calculated from the 1956–76 parameters
reported in the text, plus 1976 value of wage inflation and 1977–87 values
of the other explanatory variables.

Source: Based on McCallum (1988) and regression equation reported above.

5 EFFECTS ON INFLATION, UNEMPLOYMENT, COMPETITIVENESS, AND REAL WAGES

This section summarises the results of Helliwell (1983) who analysed
the effects of the controls programme in the context of his econo-
metric model of the Canadian economy (the MACE, or Macro and
Energy model). He assumes that in the absence of controls, central
bank policy would have been to 'lean against the wind', while
permitting some increase in the money supply over historical levels to
dampen the rise in real interest rates. Hence the assumption is one of
partial monetary accommodation.

The simulations, which run from 1977 to 1990, indicate that with-
out controls both wage and price inflation would have been perma-
nently higher by about four percentage points, while unemployment
would have been higher by about one percentage point. Up to 1982,
however, the effect on wages is greater than the effect on prices. As a
result, in the absence of controls, by 1982 the level of the real wage
would have been a very substantial 13 per cent higher than it actually
was.

The reason for this result is indicated in Figure 8.2. As a result of
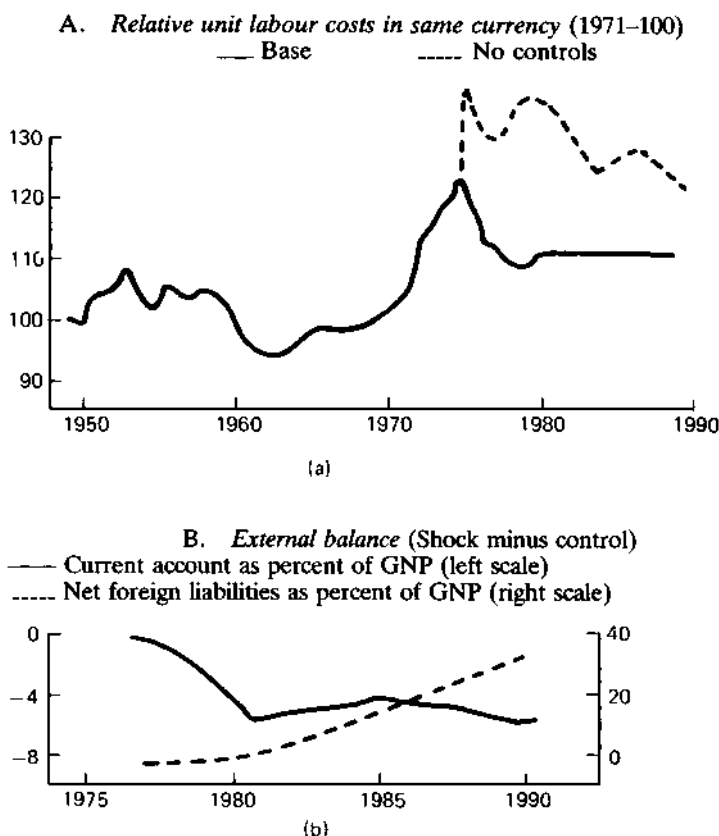much higher real and nominal interest rates (not shown), there is a

A. *Relative unit labour costs in same currency* (1971–100)
_____ Base   _ _ _ _ No controls

(a)

B. *External balance* (Shock minus control)
——— Current account as percent of GNP (left scale)
_ _ _ _ Net foreign liabilities as percent of GNP (right scale)

(b)

Figure 8.2   Simulated effects of no wage controls, MACE model

Source: Helliwell (1983) and accompanying print-out.

large and longlasting real exchange rate appreciation. This is the only significant source of the higher real wage: money wages rise in relation to the prices of imports and other goods with prices determined by the exchange rate (including energy). Clearly, however, the implied deterioration in competitiveness (Panel A) would have been unwarranted and unsustainable (Panel B). The overvalued exchange rate would have given rise to chronic and rising current account deficits, and the ratio of net foreign debt to GNP would have risen rapidly and apparently without limit. By the end of the simulation period in 1990, the current account deficit would have deteriorated

by 6 per cent of that year's GNP, while the foreign debt ratio would have increased by about 30 per cent of 1990 GNP.

At some point, probably much sooner than suggested by the simulations, the real exchange rate would have had to depreciate to restore current account balance, and at that point the economy would have had to suffer additional inflation and/or unemployment as implied by equation (5) above. For present purposes it does not matter whether the magnitude of the current account imbalance displayed by MACE is judged to be realistic. Rather, the point is that the direction of these effects is what one would expect, and the conclusion is that controls should be regarded as preventing the real wage from exceeding its equilibrium level rather than as depressing the real wage below its equilibrium level. That is, controls-plus-monetary-restraint were approximately neutral with respect to real variables as compared with a policy of pure monetary restraint without controls.[4]

6   CONCLUSION

To paraphrase James Tobin (1977), the results of this paper suggest that Canadian wage controls resulted in *both* a smaller 'Okun gap' *and* a smaller 'Harberger triangle' in terms of the costs of prolonged deviations of the real wage from its equilibrium level. Moreover, should inflation rise to high levels again, there does not seem to be any compelling *technical* reason why this Canadian experience could not be either transferred to the United States or repeated in Canada. Instead, the downside of Canadian-style wage controls involves political and constitutional considerations, notably concern for the preservation of collective bargaining and a general distaste for such large-scale government intervention in private decisions. However, if the basic argument of this paper is accepted, the unemployment cost of ruling out wage controls on these grounds is likely to be very high.

Notes

1.   However, the controls programme was terminated after two and a half years instead of the announced period of three years. Also, as will be discussed below, while the Bank of Canada kept to its policy of reducing the growth rate of $M1$ over the period 1975–81, the policy was then

abandoned because of important and unpredictable shifts in the relation between $M1$ and nominal GNP.

2. In a more general formulation involving longer lags in the wage equation, the coefficient on $(\Delta p_T - \Delta p_0)$ in (5) becomes equal to the average lag, while the coefficient on $\Sigma UGAP_j$ is unaffected.

3. These studies include Auld *et al.* (1979), Christofides and Wilton (1979), Reid (1979), Fortin and Newton (1980), Riddell and Smith (1982), Helliwell (1983), Wilton (1984), Lacroix and Robert (1985), Fortin (1988), and McCallum (1988).

4. It is possible, however, that controls affected real wages not only via the real exchange rate but also via a direct effect on profit margins. However, regressions for both profit shares and real wage growth that are reported in McCallum (1986) suggest that there is little evidence to support this view.

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9 Industrial Employment in Italy: The Consequences of Shifts in Union Power in the 1970s and 1980s*

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1 INTRODUCTION

In the second half of the 1970s Italy was alone among the major EEC economies in showing a positive rate of growth of employment in industry. In the same period the rate of growth of Italian industrial production was the highest and the rate of growth of output per person employed the lowest. This fact is surprising, especially in view of previous and subsequent records of productivity growth. Before and after the mid-1970s output and employment in Italy followed a pattern of growth which was close to the other large EEC countries.

This paper analyses the main macroeconomic time-series in Italy since 1970 in order to establish the salient features of the dynamics of industrial employment in relation to the dynamics of other economic indicators.

Two different research approaches will be utilised. The first one is a traditional (that is, non-cliometric) historical approach. The unique experience of the Italian political economy of the last 15 years will be described as an historian might describe it, stressing variables and the relations between them that she/he finds more relevant, regardless of the fact that the explanations involved 'belong' to different disciplinary

fields: economics, sociology, political science, industrial relations or any other. The second approach is statistical data analysis. Obviously our story has some implications for the behaviour of quite a few economic time series: are such implications borne out by a careful statistical analysis?

The statistical analysis supports the interpretation given in the first part with two results. First, the shocks of the 1973–5 years, while larger in size than those of 1979–80, did not produce any effect on the growth rate of any of the series examined. They can be characterised as temporary changes in the drift of the processes that generated these series. Secondly, the 1979–80 shocks had different effects on the macroeconomic time-series examined: only for employment did those shocks affect the long-run path and this change is not justified by the behaviour of variables usually strictly related to it such as industrial production, hours worked and wages.

Any 'story' consistent with the data should therefore explain a change in the growth path of employment and not just a change in its cyclical behaviour. Also, such an explanation should take account of the fact that there was an observed permanent change in employment trend, but not in the trend of hours worked. This is the story that we will be telling.

2   THE BACKGROUND: AN HISTORICAL INTERPRETATION

Let us start from the most compact summary we can give of that 'story' of industrial relations in the 1970s and 1980s on which a wide consensus exists among political scientists, industrial sociologists and industrial relations students in general (Lange et al., 1982; Salvati, 1985): basically it is the story of the rising and falling strength of the 'Labour Movement'.

In the European political tradition, two agents of the Labour Movement have to be distinguished: the political agent (party or parties), and the 'economic' or 'mass' agent (unions and other mass organisations). In our account they play a rather different role, the political agent directly influencing macroeconomic policy, and the mass agent the behaviour of workers on the shop-floor: this would not make sense (and would not fit in with any sensible economic interpretation) if either agent and either field of policy influence were left aside.
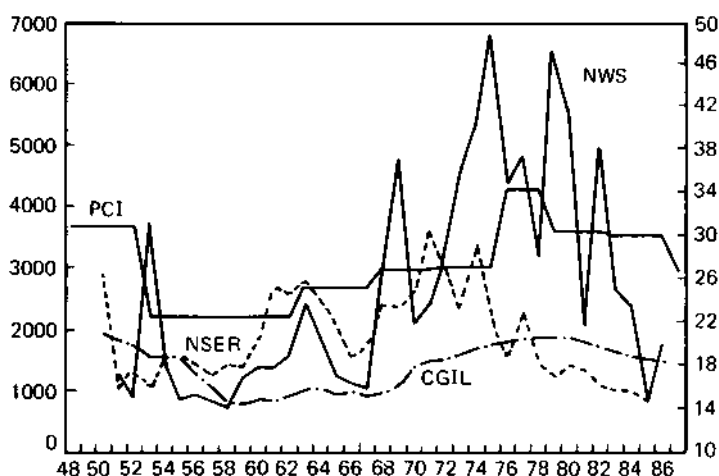
Figure 9.1 Industrial relations and Labour Movement strength

Source: ISTAT and Bordogna L. and Romagnoli G. (personal data bank).

Figure 9.1 portrays the indicators of a few relevant variables. The number of 'industrial conflicts for economic reasons' (NSER) – all data are for industry alone, if not otherwise specified – is the best indicator available both for the state of collective mobilisation *and* for the willingness of unions to exploit it at the local/shop-floor level. The number of workers involved in economic conflicts (NWS) again captures mobilisation, but also the choice of unions of using it for national (as opposed to local) bargaining or 'symbolic' purposes. Membership in the CGIL (Confederazione Generale Italiana del Lavoro) can be used as an indicator of the organisational strength of unions (Cella and Regini, 1985) and the percentage of votes obtained by the PCI (the Italian Communist Party) in national elections can be used as a rough indicator of the political strength of the Labour Movement.

2.1 1969–75 – Collective Mobilisation and a New Industrial Relations Regime

This is a phase of mass mobilisation, industrial unrest and rising unionisation. The most convincing explanation has been given by sociologists and students of industrial relations (see, for example,

Pizzorno, 1978): the outburst of worker unrest was an aspect of a process leading to the formation of a new collective identity – mass-production, semi-skilled workers – asking for recognition and representation. Unions were ready, in fact eager, to seize such an opportunity, and rapidly adopted bargaining objectives which were in line with the typical demands of their new members: 'flat-rate' increases in pay, working time reductions (this is particularly significant in view of later developments), union control of the work process. For the first time in their history, Italian unions were building an organisation within the factories, and, in order to do so, they were adding to industry-wide bargaining widespread bargaining on wages and working conditions at the shop-floor level: the data on the number of strikes show just that. And the data on membership show how successful this strategy was from the organisational point of view. The 'political' indicator chosen (PCI votes) lags behind the real shift in political power. Evidence of an earlier shift is given by the fact that, right from the beginning of the period, the government did not dare to take a really hard stand against industrial unrest and wage increases. The restrictive monetary and fiscal measures it enacted in 1970 did not reach the scale, and did not last for the time, that would have been necessary to reverse expectations and to interrupt the process of change in industrial relations (Banca d'Italia, Annual Reports for 1970, 1971; Salvati, 1985).

2.2 1976–9 – Stabilisation Phase I: Political Exchange

This period is the peak of the organisational strength of unions and of the political strength of the Labour Movement and can be characterised as the phase in which the Italian Labour Movement pursued a strategy of co-operation (neo-corporatism) although, as we shall see, the later consequence of this strategy eroded its support and internal cohesion. While unionisation stopped increasing, the political influence of unions and parties of the Left was at its zenith: for the first time after the immediate post-war period, the Communist Party became a part of the government's majority, though without its own members in the cabinet ('national solidarity' government, 1976–9), and its influence in shaping the design of macroeconomic policy is indisputable (Salvati, 1985; Lange and Regini, 1988). How did unions and parties of the Labour Movement use their power, both in the political field and in industrial relations?

Two alternative macroeconomic strategies could have been fol-

lowed in the second half of the 1970s pegging the lira to a depreciating US dollar through an accommodating monetary policy; or following the hard currencies of the EEC in their appreciation *vis-à-vis* the American currency. The second strategy was not even seriously considered by the policy-makers of the time: it would have meant anticipating in the mid-1970s the reduction in the aggregate demand of the 1980s, in much less 'favourable' internal circumstances and in the absence of a really strong pressure from abroad. Externally, the 'American' inflationary route was available in the late 1970s, whereas it was not in the 1980s; and a deflationary choice was not imposed by a recently signed, fixed exchange agreement, the EMS (European Monetary System), as it was in 1980. Internally, a restrictive monetary policy and an appreciation of the lira *vis-à-vis* the dollar would have required – given the wide inflationary differential of the mid-1970s – a sharp reversal in industrial relations. Facing lower export prices, higher real interest rates, lower internal and foreign demand, firms would have been forced to lay off workers in order to maintain an 'acceptable' profit level. As will be seen, this is what happened in the 1980s. It was not politically feasible in the mid-1970s, in a country where social and industrial unrest was still widespread, where political terrorism would have been greatly helped by an attempt at reversing the industrial relations regime; where the political strength of the Labour Movement was at its apogee; and where the main goal of left-wing parties and unions was full employment. The depreciation/monetary accommodation strategy, with its inflationary consequences was therefore followed. Why then do we define this period as a phase of stabilisation, and a quite successful one at that?

It was probably the maximum of stabilisation that could be squeezed out of the social and political circumstances of the time. Many union leaders were perfectly conscious of following an unpopular strategy of stabilisation: in exchange for political legitimisation and for neocorporatist policy-making, and within the context of an expansionary policy, unions and parties of the Left made a serious attempt at moderating wage demands and at controlling local industrial conflicts. The effect of the wage indexation mechanism that had been recently (1975) introduced was almost immediately dampened through a national tripartite agreement (1977). Local bargaining and disputes met with an attitude of caution, if not outright hostility, from national union officials: the fall in the number of local strikes is more evidence of the lack of organisational input from the unions than of

the lack of demand for it, that is, the lack of propensity and willingness to strike from the workers. As can be seen, when called from the parties and unions for nationwide strikes or political demonstrations, the workers still flocked by hundreds of thousands. So, despite the obstacles that big firms were still meeting in hiring and firing and in the tight union control of day-to-day industrial relations, the slowdown of conflict and wage push at the local level, the depreciation of the real exchange rate, the maintenance of very low (and sometimes negative) real interest rates, the sharp reduction of social security contributions paid by firms, the growth of internal and foreign markets, are the main reasons which explain the (moderate) rise in the share of profit in industry, after the big fall of the previous period.

As a last sign of goodwill, the PCI hesitatingly agreed to Italian participation in the EMS, a turn of the screw in the anti-inflationary strategy which it hoped to pursue in the consensual, quasi-neo-corporatist atmosphere of the national solidarity government. However, the atmosphere was changing. In the political elections of mid-1979 the share of the PCI vote fell significantly from its 1976 peak, and the presence of this party in the government majority was no longer felt to be necessary: after all, social and industrial turbulence had been subdued, the first successes against political terrorism had been obtained, unions seemed divided and without perspectives. The 'national solidarity' period had sharpened the political divisions among the three national unions; their officials at the local level and the work councillors had mostly been hostile to the neo-corporatist, centralising strategy of the previous years; and the workers were also disappointed. While the co-operative strategy had succeeded in keeping industrial employment high, its distributional outcomes had not been favourable to labour. Partly because of the direct effect of wage moderation, partly because of the indirect effect of inflation on net pay (fiscal drag), the share of labour in value added decreased. As a matter of fact, the very modest increase in real wages was almost exclusively due to the wage-indexation mechanism, and not to visible and ongoing union activity; one of the consequences of that was a continuous flattening of wage differentials, which aroused resentment. These factors together explain the gradual erosion of workers' support for 'national solidarity'.

2.3   1980–87 Stabilisation Phase II: The Collapse of the New Industrial Relations Regime

In 1979, the dykes that had defended industrial employment in the 1970s – an accommodating macroeconomic policy and unions' control of working conditions in the big factories – were ready to be breached. The last regime, from 1980 onward, is a phase which witnesses the collapse of the industrial relations system of the 1970s. This is a phase of declining union membership and militancy as measured by both number of conflicts and number of workers involved in work-related industrial disputes. Together with change in unions' behaviour we witness a standstill in real wages and a continuous fall in industrial employment. Change in the industrial relations regime and in the orientation of macroeconomic policy came almost contemporaneously, and one was the condition for the other.

On the industrial relations side the signal for the change was the failure of a strike at FIAT in autumn 1980, against the layoff of 20,000 workers and the anti-union demonstration of 40,000 white-collar workers in Turin in the same year, protesting against the flattening of wage differentials. On the macroeconomic side the tightening of policy also dates from 1980, only after uncertainties concerning the political and industrial situations were gone. Without the parliamentary support of the communists, the new government was 'credible', and the unions' reactions at the national level were weak and divided. Despite a much stronger inflation, Italy had now to defend the parity of her currency with the deutschmark, since a depreciation/inflation policy would have meant not only withdrawing from the EMS, but also 'going it alone' among the major industrialised countries: this time the USA were leading the tight-money consensus. Firms were thus forced into a difficult situation. Slack in home and foreign demand, high real interest rates and, above all, a strong currency policy coupled with higher inflation at home, meant that, if they wanted to survive, they had to cut costs sharply. And this meant, in turn, that they had to attack the industrial relations regime of the 1970s.

After 1980, dismissals grew very rapidly, normally disguised for subsidisation purposes as layoffs. Just as the unions lost their *de facto* power to obstruct layoffs and dismissals, they also lost the control of the work process inside the factory: tasks, workplaces, work intensity, working conditions and hours were increasingly determined by

unilateral managerial decision. Despite all the talks on shorter hours – both in the unions and in the government – hours worked started increasing from the bottom of the recession (1983) onwards: there was no change in legal or economic conditions which can explain this choice of employers between average hours and number of employees, just as there was no such explanation of the fall in average hours in the early 1970s. As observed previously, the unions had as a specific objective a reduction in working time and were able to enforce it.

The fall of both the macroeconomic and the industrial relations 'dykes' thus explains the fall of employment and the increase of production per person employed: at last, the delay of the late 1970s *vis-à-vis* the trend of employment in comparable European countries had been made up.

The conclusion of this section is clear. A complicated interaction and feedback between economic policy, industrial relations and the evolution of the economy led to a change in relative bargaining positions. The cumulative effect of this was an abrupt change in employment from 1980 on. It should be noted that our choice of two different 'macroeconomic regimes' does not imply that the change from one to the other was necessarily abrupt. The relationship between macroeconomic variables, economic policy and labour's bargaining power have changed over the whole period and each of the periods that we have chosen corresponds to a particular phase in the nature of these relationships.

3   A LOOK AT THE DATA

In this section we examine the pattern of the data and evaluate how it fits in with the salient points of our account.

The feature which distinguishes our reconstruction of economic events from more traditional formulations of models of employment behaviour in industry, is that we claim that the decline in employment since the early 1980s is persistent and does not have the nature of a cyclical downturn. Moreover, it cannot be related to the behaviour of other macroeconomic variables in a simple way. Our basic problem in the data analysis is then to identify the properties of macroeconomic indicators to see whether employment does indeed behave differently. Having seen if this is the case, we then wish to evaluate to what extent the timing and nature of these changes in the

employment series coincide with the period identified in our initial account. Furthermore we wish to establish whether, as our account would suggest, earlier shocks had no permanent effect. To check this we have to test the possibility that the employment series changed structurally at points other than 1980.

We concentrate on the behaviour of the trend component of 12 macroeconomic time-series in order to detect the characteristics of economic growth and fluctuations.

The strategy is as follows: first we examine the degree of persistence in the data, that is, the extent to which today's events depend on yesterday's; in addition, we examine whether dependence on the past has changed over time or whether the statistical model representing the processes is stable; secondly, we suggest a method for identifying those shocks which have had a permanent effect on the trend in the mean growth path of the series.

3.1 Degree of Persistence of the Individual Macroeconomic Time Series

A simple look at the main macroeconomic indicators since 1970 reveals two features: first, they are highly non-stationary; secondly, they show two clusters of shocks in the 1973–4 and 1979–80 periods. We want to utilise analytical methods that will enable us to identify sources of non-stationarity as well as the nature of large shocks.

Non-stationarity can be produced by different features of the data: trends in the mean of the series, trends in variance or changing volatility of a different type. It is also important to distinguish between stochastic non-stationarity, which is produced by the cumulation of persistent shocks, and deterministic non-stationarity, in which case the trend can be modelled as some deterministic function of time. Different patterns of non-stationarity imply differences in the process of economic growth: it is therefore of some interest to identify its nature.

The alternative data generating processes we first consider are the following:

$$y_t = y_{t-1} + u_t \tag{A}$$

$$y_t = \alpha + y_{t-1} + u_t \tag{B}$$

$$y_t = \alpha + \beta t + u_t \tag{C}$$

In all cases we assume u_t to have a bounded but time varying variance.[1]

Processes (A) and (B) contain a unit root. In this case shocks, which hit the processes at each point in time, have a persistent effect and each time they set the economy on a new path. In other words, after they are hit by a shock, there is no tendency for such processes to return towards their mean. In addition, both (A) and (B) are characterised by a trend in variance and (B) has also a trend in mean. The difference between (A) and (B) is that while in the former case the 'general direction' of the series is arbitrary, in the latter the 'general direction' of fluctuations is given by the presence of a drift. In the case of process (C), shocks have a transitory effect, there is no trend in variance, but there is trend in mean. Moreover, we should note that, while we assume the errors to be trend-free in mean and variance, in all cases we have not restricted them to be stationary; we allow them to have changing variability (heteroskedasticity) and/or to contain outliers. This makes it possible to analyse cycles whose characteristics change over time.

A testing strategy should encompass all different possibilities for each of the series. This will enable us to see into which type each series falls and whether any particular series is isolated from the others. We proceed in three steps:

STEP 1: we estimate the following regression:

$$y_t = \hat{\alpha} + \hat{\beta}(t - T/2) + \hat{\rho}y_{t-1} + \hat{u}_t \qquad (1)$$

and we test the hypothesis HO: $\hat{\rho} = 1$ and HO: $(\hat{\beta}, \hat{\rho}) = (0, 1)$ (test statistics $Z(\rho)$, $Z(t_\rho)$ and $Z(\Theta_3)$ as in Perron, 1988). If HO cannot be rejected we go to step 2, otherwise we conclude that the process is as in (C) and non-stationarity can be characterised by a deterministic trend in mean.

STEP 2: on the basis of regression equation (1), we test the hypothesis HO: $(\hat{\alpha}, \hat{\beta}, \hat{\rho}) = (0, 0, 1)$. If the hypothesis is rejected we conclude that the process is as in (B); if it is accepted we test for a unit root in the regression:

$$y_t = \hat{\alpha} + \hat{\rho}y_{t-1} + \hat{u}_t \qquad (2)$$

if the hypothesis is accepted, we conclude that the process is as in (A) and has no drift.

STEP 3: We test for presence of heteroskedasticity and autocorrelation on the basis of errors estimated from the preferred model chosen in the first two steps of the analysis.

Table 9.1 summarises results from the analysis of 12 quarterly macroeconomic time series since 1970.

This stage of the analysis leads us to conclude that all economic time series examined are characterised by a unit root and have a drift. Moreover, most series have errors which are either autocorrelated or have a time-variant variance. The presence of the drift indicates that, while shocks tend to put the series on a different path at each point in time, there is a trend in the mean of the process which makes series move in the particular direction determined by the drift.

This first step might lead us to conclude that all series examined are similar in nature. Note, though, that this analysis of the economic process is agnostic with respect to the relative importance of shocks. In particular, the interpretation of events given in the first part of the analysis implies that the cumulated effect of various economic changes resulted in a shock that had a special impact on the dynamics of employment. Also, we claimed that this 'important' shock did not affect other series. The story implies that the drifts of some series themselves have been temporarily affected by shocks at particular dates, but that the trend in mean of these processes has not changed and cannot be used to explain the change in the employment series.

To see whether, in fact, there has been any permanent change in the series, the processes we want to consider, in addition to those analysed above are:

$$y_t = \alpha + \mu d_t^1 + y_{t-1} + u_t \tag{D}$$

$$y_t = \alpha + \beta t + \gamma d_i^1 t + u_t \tag{E}$$

where:

$$d_t^1 = 0 \qquad t = 1, 2, \ldots, i-1$$

$$d_t^1 = 1$$

$$t = i, i + 1, \ldots, T \qquad i = \text{chosen dates}$$

The characteristics of such processes is such that, at some date, the trend in mean changes in the upward or downward direction in a permanent way. This will be the case if some events, such as a change

Table 9.1   Characteristics of non-stationarity (results from step 1 – step 3)

Model	Model characteristics	Series	Het.[a]	Autoc.[b]
Model (A)	Trend in variance trend-free in mean	none		
Model (B)	Trend in variance trend in mean	LH	no	no
		U	no	yes
		LWH	no	no
		LP	yes	yes
		LE	no	no
		LVA	no	no
		LM	no	yes
		IL	no	yes
		LPP	yes	yes
		LINV	yes	yes
		EXR	yes	yes
		LCSP	no	no
Model (C)	Trend-free in var. trend-in mean	none		

Notes:
a. Engle (1982) test for fourth order autoregressive heteroskedasticity.
b. Lagrange multiplier statistic for fourth order autocorrelation.
Variables are the following:
LE: Log of industrial employment.
LH: Log of hours worked in industry corrected to take into account workers covered by the funds for temporary layoffs (CIG).
LWH: Log of hourly wages in industry.
LVA: Log of value added in industry at 1970 prices.
LPP: Log of industrial output price index.
LP: Log of consumption price index.
U: Unemployment rate corrected to take into account workers covered by the Funds for temporary lay offs (CIG).
LINV: Log of net investments in industry.
EXR: Exchange rate relative to the US dollar.
LCSP: Log of Common Stock Prices.
IL: Long-term interest rate.
LM: Log of money supply (M1).
Source: Available from the authors.

in policy regime or in the institutional and economic structure have a permanent impact on the rate of growth of the series.

The statistical difficulties of discriminating between processes such as (B) and (E) have been discussed in the literature. Rappoport and Reichlin (1987, 1988) and Perron (1987), have argued that tests on

the unit root hypothesis are not robust against the hypothesis of segmented trend (process (E)) with the implication that processes characterised by infrequent permanent shocks are easily confused with processes characterised by persistent shocks at each date. Moreover, Reichlin (1988) has shown that there is a systematic bias of existing tests which favours the acceptance of the unit root hypothesis against any misspecified alternative.

In our context the problem is twofold. First, we want to verify the robustness of the results summarised in Table 9.1. Is our acceptance of model (B) robust against alternative hypotheses such as model (E)? If yes, we want to proceed to a second step of analysis and establish whether we can identify shocks which affect the drift of the process permanently. In other words, we want to test a model such as (D).

The first question can be answered by performing stability analysis of the coefficient of the lagged dependent variable. If the process corresponds to model (E) and not to (B), this coefficient should change over time, and the series are characterised by a deterministic trend which is stable over sub-samples and is hit infrequently by permanent shocks. Our results indicate that, if we do not consider the first few recursive estimates which are obviously unstable, the estimated coefficient, for most series, oscillates around one. Exceptions are unemployment (from 0.75 to 0.92), hours (from 0.5 to 0.78), employment (from 0.70 to 1.01) and common stock prices (from 0.45 to 0.90). For these series we have estimated the following regression for different values of $T1$:

$$y_t = \hat{\alpha} + \hat{\beta}t + \hat{\gamma}d1(t-T1) + \hat{\rho}y_{t-1} + \Sigma_{i-1}^{k}\hat{c}_i\,\Delta y_{t-1} + \hat{u}_t \qquad (3)$$

where:

$$di = 0 \qquad t \leqq T1$$

$$di = 1 \qquad t > T1$$

and $T1$ has been chosen alternatively to be 1974:1, 1976:1, 1980:1 and 1983:1. It should be stressed that the procedure used is not meant to give us a precise indication as to the timing of turning points; test statistics are carried out each time as if we knew the relevant date to be the appropriate one. Thus this cannot be considered as a searching procedure, but more as a way of assessing what are the consequences

Table 9.2   Tests on unit root with segmented trend alternative

	k^a	Date (T1)	$t_{p=1}$
LE	1	1974:1	2.30
	2	1976:1	3.00
	2	1980:1	1.00
	2	1983:1	5.71*
LH	0	1974:1	2.43
	1	1976:1	3.14
	1	1980:1	3.33
	1	1983:1	3.10
U	1	1974:1	3.20
	1	1976:1	3.40
	1	1980:1	3.33
	1	1983:1	2.00
LCSP	0	1974:1	2.14
	0	1976:1	2.22
	0	1980:1	2.87
	0	1983:1	2.67

Notes:
*   indicates that we reject the hypothesis of unit root at the 5% level. Critical
    values are 3.75 (T1 at 3% of sample size); 4.24 (T1 at 5% of sample size);
    4.18 (T1 at 7% of sample size); 4.18 (T1 at 8% of sample size) respectively.
a   k indicates the order of the autoregressive term in equation (2).

for traditional test statistics of not considering the possibility of a
'shock' which has a permanent effect on the trend in mean. What we
want to know is whether the instability of the coefficient of the lagged
dependent variable, which indicates the degree of persistence of the
data, can be explained by the presence of at least one turning point in
the trend in mean and whether that break corresponds to the date
indicated by our account of the consequences of institutional and
policy changes. If this were the case for one or more of the series, we
should conclude that results on the presence of a unit root are not
robust and that the appropriate model should be (E). However, in
the statistical analysis we are considering one turning point only; we
do not rule out, but we do not consider explicitly, the possibility that
series can be characterised by a model with more than one turning
point. The statistical problem here is that as we increase the number
of turning points, model (E) becomes progressively more similar to

model (B) (see Reichlin, 1988) and it becomes difficult to discriminate between them.

Table 9.2 reports results from test of the hypothesis HO: $\rho = 1$. Critical values for the t statistic have been computed by Perron (1987) for break points at different sample proportions.

For all series, except employment, the presence of a unit root is confirmed. For employment, we reject the hypothesis when we take in consideration the 1980 shock; we then conclude that this series is the only one that corresponds to model (E). Thus our underlying hypothesis that employment did experience a break in 1980 and that this cannot be explained simply by other macroeconomic time-series is confirmed.

3.2 Characteristics of the shocks in the time series

Having established that all processes except for employment are likely to be characterised by model (B), we want now to verify whether we can identify permanent shocks on the drift of such processes. In other words, we want to establish whether series correspond in fact to model (D) where the path of growth changes infrequently and not to (B) where the drift is constant. It should be stressed that the difference between (D) and model (E) which was analysed in the last section is that according to the latter model, series move along a stable path which changes once in a while, while according to the former, the path is not stable in any interval.

In order to analyse possible changes in the drift of the series, we study first difference processes. Models (B) and (D) in first differences can be written as:

$$\Delta y_t = \alpha + u_t \tag{B'}$$

$$\Delta y_t = \alpha + \mu d_t^1 + u_t \tag{D'}$$

with $d_t^1 = 0, t = 1, 2, \ldots, i - 1$

$$= 1\ t = i, i + 1, \ldots, T, i = \text{chosen dates}$$

It is clear that the hypothesis of a permanent change in the trend in mean of the series corresponds to the hypothesis of permanent changes in the constant of the first differences of the same process.

A simple visual examination of the first differences of all series

indicate that large outliers occurred around the year of the first oil shock, in the early 1970s. However, since size of shocks is not necessarily related to their degree of persistence, the question is whether they had any permanent effect on the growth path of the series. The point of our analysis is in fact that the first oil shock did not cause a permanent change in the characteristics of economic growth. In order to get a rough idea of whether permanent changes in the mean of processes occurred for some series and at some point of the sample, we have estimated the following regression:

$$\Delta y_t = \hat{\gamma}_{ti}\, d_t^1 + \hat{u}_t \tag{4}$$

with $d_t^1 = 0, t = 1, 2, \ldots, i - 1$

$\qquad = 1, t = i, i + 1, \ldots, T$

$i = 1974{:}1, 1976{:}1, 1980{:}1, 1983{:}1$

We have plotted the estimates of the γ_t^i with the relative standard errors (Figures 9.2 to 9.13). Although the plotting may be misleading because dates of possible change of the mean of the series have been chosen ad hoc, we note that employment is the only series for which we have a radical permanent shift in mean and that this occurs around 1980. For interest rates and wages we have a shift in 1983, but not for the 1980s as a whole.

This is hard to interpret as a permanent change because we do not have more recent comparable data. Consumption prices had a permanent shift around 1974, but, for this series, first differences are nearly integrated[2] and this explains the fluctuations in the estimated mean. All other series show no clear permanent change in the mean of first differences. We should conclude that none of the series examined clearly conform to model (D'), although further analysis on the characteristics of first differences is needed.

Results of Section 3.1 are however confirmed: employment is the only series in our sample which has been subject to a permanent shift in its growth path around 1980. This change is not matched by a shift in series related to it, most noticeably hours worked and real value added. This shift, which, as it should be clear from the analysis, is not just a cyclical downturn, is the most important 'fact' that any account of the events of the last fifteen years should try to explain. This could
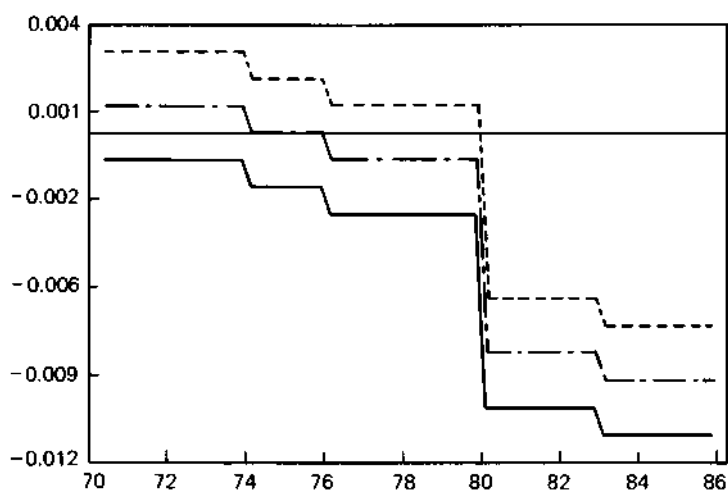
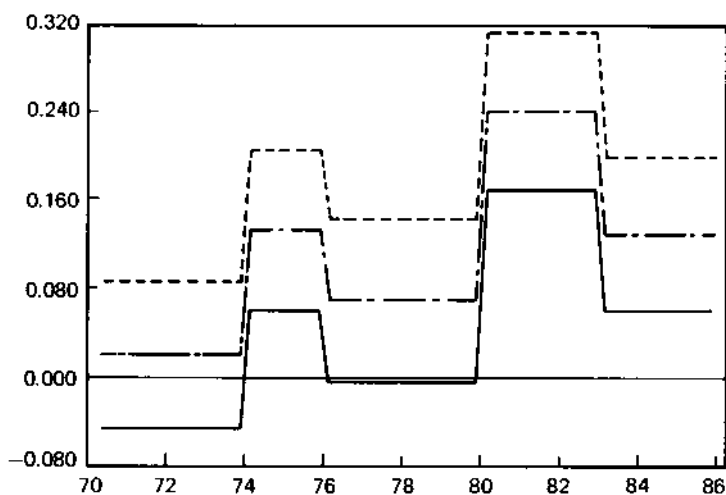*Figure 9.2* Estimate of the mean of first differences (employment)

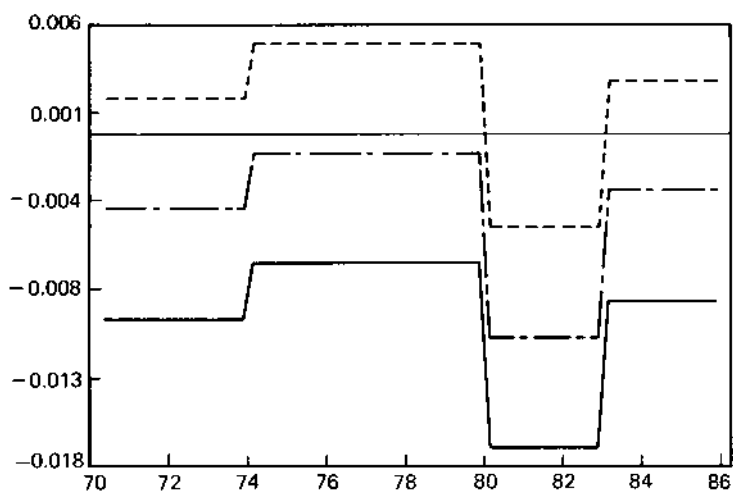*Figure 9.3* Estimate of the mean of first differences (unemployment rate)

Figure 9.4 Estimate of the mean of first differences (hours)

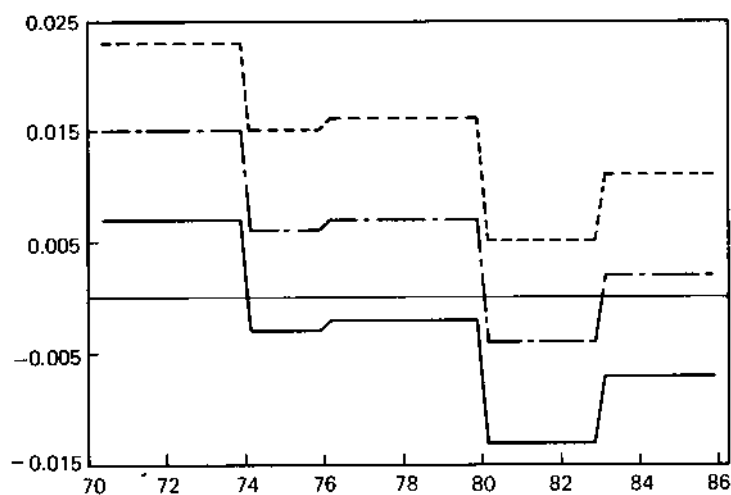*Figure 9.5* Estimate of the mean of first differences (value added)
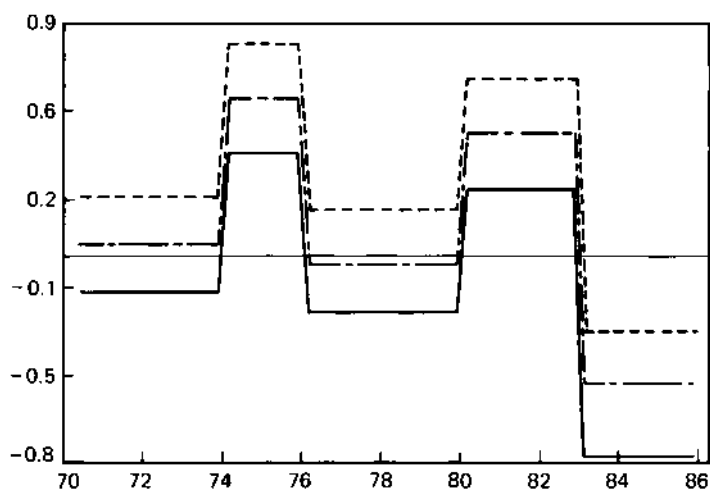
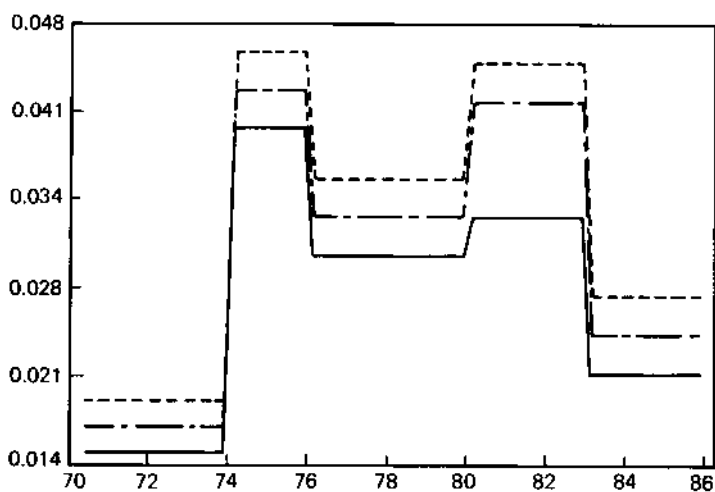*Figure 9.6* Estimate of the mean of first differences (long-term interest rate)

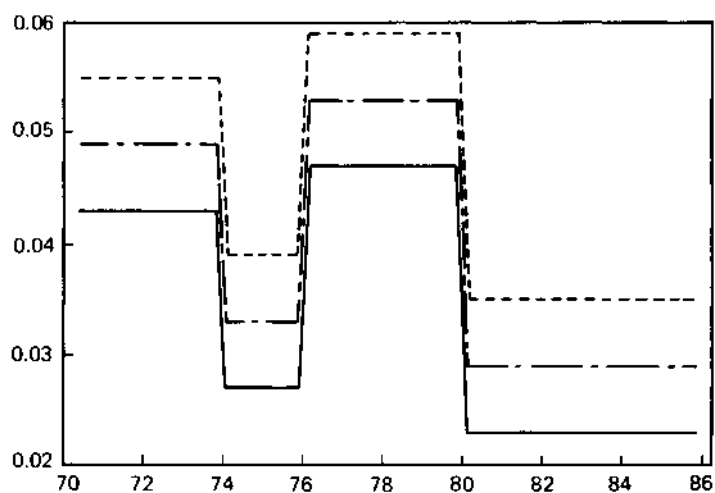*Figure 9.7* Estimate of the mean of first differences (cpi)

Figure 9.8 Estimate of the mean of first differences (money supply – M1)
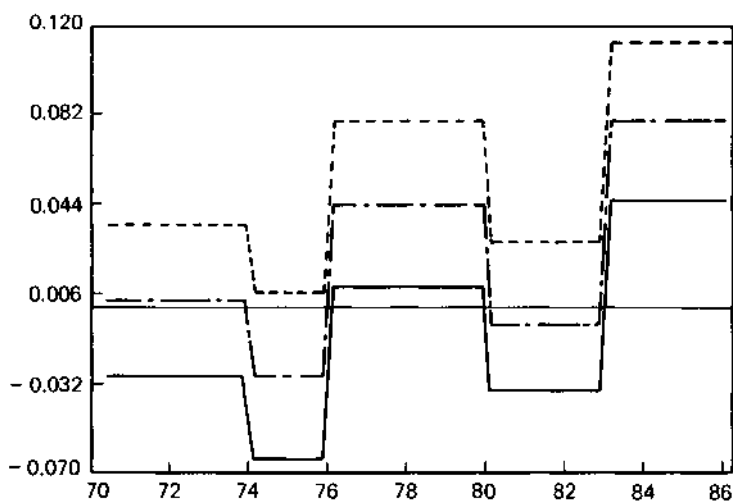
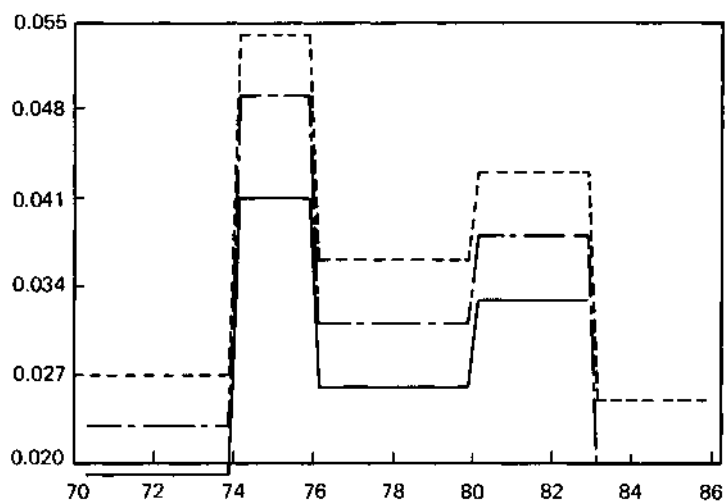*Figure 9.9* Estimate of the mean of first differences (common stock prices)

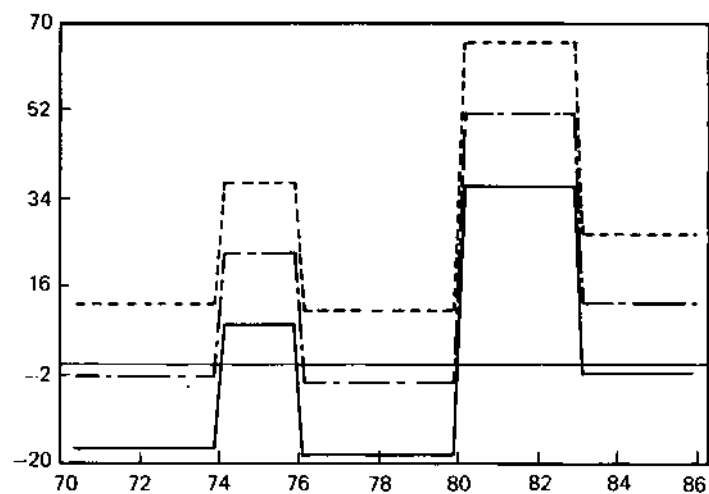*Figure 9.10*   Estimate of the mean of first differences (ppi)

Figure 9.11   Estimate of the mean of first differences (exchange rate)
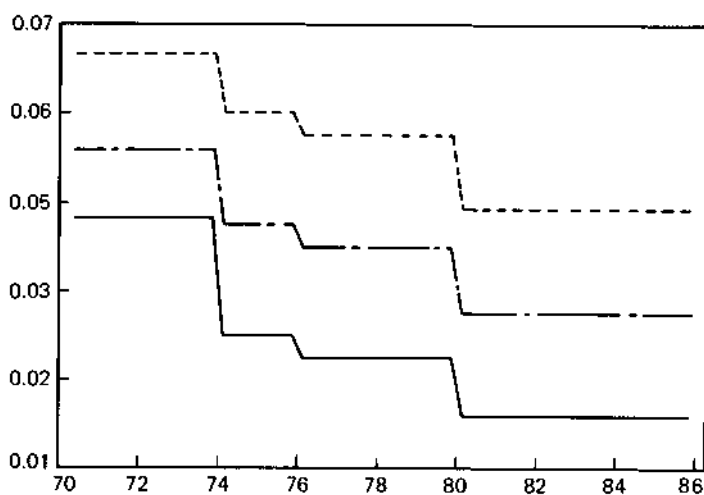
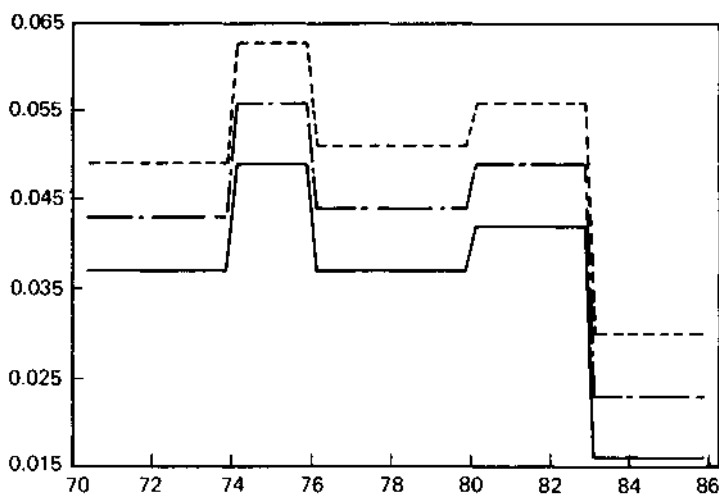*Figure 9.12*   Estimate of the mean of first differences (investment)

Figure 9.13   Estimate of the mean of first differences (hourly wages)

also be interpreted as the presence of more than one equilibrium path in the period considered.

3.3 Implications for estimating a labour demand equation

Given the results from univariate analysis, we may now ask how to go about building a multivariate model of labour demand with industrial employment as a dependent variable. The problem here is that employment is neither stationary, nor stationary after differencing (integrated). If it were integrated we would have looked for that linear combination between employment and some other macroeconomic series which was stationary. In other words, we would have been looking for a relation of cointegration which, in turn, could have been interpreted as the equilibrium path (Engle and Granger, 1987). If it were stationary, we might have hoped to find a combination of some of the other macroeconomic variables which was stationary and explained employment. Since employment can be considered as having a trend which changes over time, we would have to find a stationary combination of the other variables for the first period and a different model for the second. Whilst this is possible, it merely emphasises our assertion that the 'model' which explains the behaviour of employment is one that changes over time and no invariant combination of the economic time series considered in our sample can provide an explanation of its dynamic.[3]

4 CONCLUSION AND EVALUATION OF DIFFERENT INTERPRETATIONS

We can now put the pieces of our analysis together and consider the evidence in relation to the alternative explanations that have been given in the literature.

It should be stressed that any model consistent with the data should explain a change in the growth path of employment and not just a change in its cyclical behaviour. Also, such a model should explain the observed permanent change in employment but not in hours.

If we consider this statistical fact we then have to be cautious about explanations exclusively based on the change of the monetary policy regime and its credibility (Tabellini, 1987). This factor alone does not explain why there was a permanent effect on employment but not on hours. The same is true for interpretations which have stressed

technological innovation as a cause of labour dishoarding in the 1980s. An accurate analysis of this factor cannot be done on the basis of available aggregate data on capital stock; however, the different behaviour of hours and employment should confirm the general impression that the increase in labour productivity of recent years has nothing to do with technological improvement (on this point, see Barca and Magnani (1988) and Silva *et al.* (1984)). In addition, an explanation based on factor costs does not tell us why restructuring through layoffs took place only in 1980 when the ratio between real wages and interest rates would have suggested a more labour-intensive strategy than in the mid-1970s.

We are left with two other explanations which are the most recent as well as the most popular.

The first is the insiders-outsiders explanation mentioned above. Recently, this type of model has been quoted to explain the Italian situation of the 1980s (Barca and Magnani, 1988). In this view, the unions, in order to protect the labour income of the insiders have accepted making a limited number of workers work longer hours instead of opting for a work-sharing strategy. This should explain both the decline in employment and the increase in hours worked per man from 1982. The problem with this theory is that it is not clear why unions, after a decade of work-sharing strategy, suddenly opted for a defence of the insiders at the expense of total employment. In fact, what has to be explained is why strong unions are associated with high employment levels and labour hoarding and not vice versa. Moreover, the period in which unions were strong, from 1970 to 1979, is associated with a stationary employment series and does not, as predicted by the insiders-outsiders models, show the property of hysteresis.

A second hypothesis most recently put forward by Bentolila and Bertola (1988) tries to explain the asymmetry of cyclical employment on the basis of firing and hiring costs. In this view, the presence of such frictions produces asymmetric behaviour with labour hoarding during upturns, but with less dishoarding during downturns. While this is an interesting observation, it is still not appropriate for the Italian case, for two reasons. First, the decline in employment is not just a cyclical phenomenon. Secondly, the dynamics of employment during the downturn of the 1980s were different from the dynamics in the 1975 downturn even if there have not been major changes in legal regulations which would have affected the fixed costs of labour.

Thus our account of the economic evolution over the period

considered and our statistical analysis show that there is no simple model for explaining employment as a function of other macro-economic variables. Rather, these variables cause and are caused by changes in relative bargaining positions and in economic policy. The result of this complicated interaction was a clear and radical change in the behaviour of employment from 1980 on.

Notes

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1.   The sequence $(u_t)_1^\infty$ of allowable innovations in (A) – (C) satisfies the same assumptions as in Phillips (1987). These allow for both temporal dependence and heteroskedasticity in the sequence $(u_t)_1^\infty$.

2.   By nearly integrated we mean that the estimated coefficient β in an equation of the form $\Delta x_t = \alpha + \beta \Delta x_{t-1} + \theta(L)\varepsilon_t$ (where $\theta(L)$ is a polynomial in L satisfying the usual stationarity and invertibility conditions) is nearly one and that therefore the shocks of first differenced processes are very persistent. In this case it is very difficult to detect the behaviour of the mean by this simple methodology.

3.   It should be emphasised that if we had just relied on results from standard tests for unit roots we would have wrongly concluded that employment was integrated of order one. However, tests for co-integration between employment and the other variables in the sample would have rejected the hypothesis of presence of co-integration. Results from tests at the bivariate level are available from the authors.

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10 Incomes Policies as Co-operative Strategies: Lessons from the Italian Experience of the 1980s*

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1 INTRODUCTION

Incomes policy, as a part of Keynesian policy-making, was introduced in the early 1960s. However, its relevance as a stabilisation tool was particularly emphasised in the following decade, when large inflationary phenomena and social tensions in the labour market became the main concern of governments and economists.[1]

The theoretical basis for incomes policies is provided by non-competitive models in which agents affect prices and income distribution. Markets are generally oligopolistic; inefficiencies and conflicts occur, pushing prices upwards; the government is asked to intervene to regulate income distribution and to stabilise cyclical fluctuations. In this context, incomes policy is often considered the appropriate policy tool.[2]

In several countries, incomes policy has either taken the form of regulatory interventions on wages and prices, in order to reduce their rates of growth and to maintain an equilibrium income distribution, or the form of fiscal incentives and subsidies (tax-based incomes policy) (Wallich and Weintraub, 1971; Blackwell and Santomero,

1978; Slitor, 1979; Layard, 1982; Ashenfelter and Layard, 1983). Fiscal manoeuvres were meant both to compensate economic agents whose income was redistributed, and to serve as a threat designed to deter price and wage increases. Tax based incomes policies are a good instrument if markets are oligopolistic and information is not asymmetric (otherwise, see Baron and Myerson, 1982; Baron, 1988 for some hints). In any case, the tax structure must be non-linear (Guesnerie and Laffont, 1978) and this makes the actual implementation of this type of policy fairly complicated.

There is a third model of incomes policy that has sometimes been observed in industrialised countries. In this model, incomes policy is just a part of the overall economic policy set up by the government. Its main task is to harmonise conflicting interests of different social groups. For this reason, incomes policy is characterised by the introduction of institutions designed to co-ordinate agents' strategies and to control incomes dynamics. In other words, social groups are asked to trade their own economic advantage for a role in the process of economic planning. This 'political trade' is such to benefit all agents.

In this paper we focus our attention on this latter model of incomes policy, mainly because Italy is probably one of the countries in which the implementation of this model can best be observed. Crucial features of the Italian case are indeed: (i) centralised bargaining among social groups (synchronised contracts, national bargaining between unions and entrepreneurs, homogeneous agreements in different industries, indexation); (ii) strong labour unions, designed to represent all workers; (iii) the pervasive presence of the state in industrial activities and a high degree of regulation. As Tarantelli (1986, ch. 2) points out, these elements are likely to increase the possibility of achieving the co-ordination of social and economic interests that constitutes the basis of incomes policy. These elements also explain why incomes policy has been more useful and successful as a policy tool in countries like West Germany or Sweden, than in countries like England, France or the United States (see Brunetta and Pozzana, 1984; Tarantelli, 1986).

This paper aims to provide a deeper analysis of the features and the role of incomes policy. Our basic assumption is that *incomes policy is a way of achieving co-operation among conflicting social groups*. This implies recognition that economic agents interact, and that a group of agents' action can negatively affect other agents' welfare or profit.

The presence of *externalities* thus leads the government to intervene in order to distribute welfare gains that can be achieved through harmonisation of agents' behaviours.

This approach is not totally new. Tarantelli (1986, chs 2 and 3) proposes a similar approach to incomes policy, by viewing wage and price stabilisation as a public good. His analysis, however, makes use of a simple static model, that prevents the understanding of the role and problems of incomes policy. In particular, he seems not to realise that incomes policy is never adopted by social parties (not even in a completely centralised setting) if the intertemporal dimension of the decision process is not taken into account.

In contrast, we propose to view *incomes policy as a long term agreement that can be sustained as an equilibrium by appropriately designed institutions* (rules). In the short run, the agreement can be modified in order to react to transitory shocks affecting the economy. In this context, agents' behaviour is represented as an *intertemporal non-cooperative game*, in which conflict and co-operation are possible outcomes that depend on the agents' strategies. All agents have different objectives. Decisions are decentralised and sequential (as an example, consider a situation in which workers choose a union; then, at a second stage, unions, firms and the government sign a three-party agreement that specifies how wages, prices and taxes have to be set; finally, the parliament is asked to ratify the agreement at a third stage of the game).

Moreover, Tarantelli's model does not account for the interactions between workers and unions that can be a relevant explanation of the *free-rider problem* that undermines the possibility of implementing incomes policy. In contrast, we explicitly consider the game that takes place between workers and unions, and we show the implications of these interactions. We also emphasise the role of institutions designing for guaranteeing the achievement of all policy targets, and the stability of the co-operative agreement.

A further novel element of our model is the concept of rationality. In the second part of the paper, we do not assume that players are fully rational, so that they can immediately realise the advantage of co-operation (when it exists).[3] On the contrary, we assume that conflict and co-operation are possible strategies among others, and we look for the strategy that emerges as the optimal one after a process of trial and error. In this process, co-operation (incomes policy) can emerge as the best policy only in the long run, after agents

have learned and compared different strategies. We thus make use of the concept of *evolutionary strategy* (see Maynard-Smith, 1982), and the related equilibrium concept.

The plan of the paper is the following: in the next section we present the model, we specify the rules of the game and we describe its main features. The incentive to adopt incomes policies will be analysed in Section 3; the sustainability of co-operative agreements will be shown to depend on factors such as the planning horizon, the discount rate, the inequality preserving features of the agreement. The general model being too complicated to be solved, we focus our attention on some details of the overall picture.

In Section 4, we thus analyse different blocks of the model, by emphasising particularly how workers' goals affect unions' policy, their own survival, and the emergence of co-operation. We show that incomes policy can be implemented only as a long-run policy, and that it is likely to be based on inequality-preserving norms. Our model also explains the simultaneous existence of co-operative and conflicting unions even when co-operation benefits all agents. We relate our findings to the recent Italian experience.[4]

Section 5 tries to derive some normative implications from the analysis presented in the previous sections. We try to design some rules that can favour the successful implementation of incomes policy. In this respect, we propose to view *profit sharing as a mechanism to sustain incomes policy agreements*. Finally, Section 6 outlines possible developments of the analysis.

2   A GAME-THEORETIC MODEL OF INCOMES POLICY

As previously stated, incomes policy can be viewed as an agreement among social parties with the aim of achieving multiple policy targets (for example, inflation, growth, income distribution, and so on). In more general terms, incomes policy is an agreement in which opti- misation and distributional targets are traded off among social par- ties. This means, for example, that agents (such as unions) who are more concerned with distributional issues are ready to leave aside their main target in order to make easier the achievement of stabilis- ation targets (more output and less inflation) that are pursued by other agents (for example, firms or government). Incomes policy thus achieves the harmonisation of conflicting interests through a bar- gaining process that leads to co-operation among social parties.

Hence, if we want to design an appropriate theoretical framework to analyse incomes policy, we must introduce into the model the following elements:

(i) economic decisions are interdependent; markets are oligopolistic; externalities can occur;
(ii) the industrial relations system is centralised. Policy decisions can be taken by representatives of a few social groups;
(iii) economic agents and their representatives set their decision variables in order to maximise their intertemporal welfare (pay-off, profit, or utility), taking into account all interactions with other decision-makers.[5]

It is not difficult to fit these elements into a game-theoretic framework. Suppose that the model tries to describe the economic implication of interactions among the following agents: workers, unions, firms, government, and the parliament. Agents' preferences can be represented as a function of diverse and conflicting targets. Agents' actions are furthermore interdependent: if one agent sets his decision variables in order to achieve his own targets, he affects the other players' welfare.

The game between these agents is sequential: workers decide first, by choosing the union they want to support. Then firms, unions, and the government simultaneously set their own decision variables. We can simplify the model by assuming that unions set wages, that firms set prices and employment, and that the government sets monetary and fiscal policy instruments. Finally, in the third stage of the game, the parliament can intervene either by imposing institutional constraints, or by modifying (or ratifying) decisions taken in the previous stage. The structure of the game is shown in Figure 10.1.

Let W_{it} (Y_{it}, θ_i) denote the players' payoff function at time t, where $i = 1 \ldots n$ can represent workers, unions, firms, the government and the parliament. The vector θ_i denotes the parameters of the function (for example, the ranking of different targets, or the desired values). Moreover, Y_{it} is a vector containing player i's targets at time t. Suppose that these targets can be influenced by all players' decision variables, that is $Y_{it} = h_i (x_{1t} \ldots x_{nt})$, where x_{jt}, $j = 1 \ldots n$ are vectors containing players' decision variables (actions) at time t. The functions $h_i (x_{1t} \ldots x_{nt})$ describe the reduced form of the model. We can then write the players' payoff function as $P_{it} (x_{1t} \ldots x_{nt}, \theta_i)$.

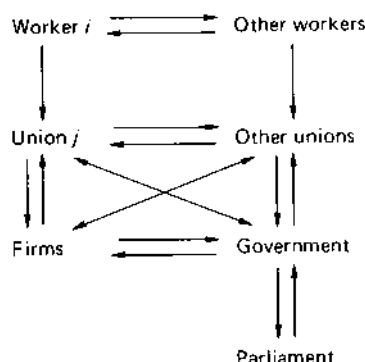Each player is assumed to minimise the discounted sum of his

Figure 10.1　The structure of the model

Note:　Arrows indicate interactions and their directions.

payoff over the planning horizon, that is $V_i = \sum_{t=1}^{T} \alpha_i t - 1 P_{it}$, where T can be either finite or infinite.

We assume complete information,[6] and that players' strategies are closed loop, that is, that each player chooses a strategy $\sigma_i = (v_{i1} \ldots v_{iT})$, where v_{it} are decision functions that map the history of the game up to the moment in which player i takes his decisions into player i's actions at time t. Furthermore, we assume σ_i to belong to a compact set S_i, $i=1 \ldots n$. The complete information assumption will be slightly relaxed in Section 4.

We denote $\sigma^* = (\sigma_1^* \ldots \sigma_n^*)$ an equilibrium of the game if no player i finds it profitable to deviate from the strategy σ_i^*, given that the other players adopt the strategy σ_j^*, $j = 1 \ldots i-1, i+1 \ldots n$. The game being sequential, we consider only subgame perfect equilibria. Hence, the equilibrium must be computed backwards, starting from the last period of the game.

The next section analyses possible equilibria of this game. We consider the overall game without any co-ordination mechanism, and we analyse the possible emergence of co-ordinating institutions. Section 4 introduces some asymmetries in players' behaviour. It becomes thus necessary to analyse blocks of the model instead of the overall game. We also outline the equilibria of the game assuming a weaker concept of rationality (evolutionary strategies).

3 CO-OPERATION, INSTITUTIONS AND THE OPTIMALITY OF INCOME POLICY

Suppose the game described above is played once ($T = 1$). The subgame perfect equilibrium of the non-cooperative game is such that players' decisions are mutually consistent, and there is no incentive to adopt a different strategy. However, given our assumptions on the existence of oligopolistic markets, externalities and distortionary taxes, this non-cooperative equilibrium is sub-optimal, that is, there exists a set of decisions that could bring all players closer to their targets. Following our definition, incomes policy belongs to this set; indeed incomes policy defines agents' behaviour in such a way that all players find it profitable to join the agreement. However, co-operative outcomes are not an equilibrium of the single-play game, that is, each agent finds it profitable not to co-operate if the others do co-operate. Hence, no player co-operates and incomes policy cannot be implemented.

This result can be reversed if the game is repeated over time ($T > 1$). Some crucial conditions must be satisfied for incomes policy to belong to the equilibrium outcome of the repeated non-cooperative game. The aim of this section is to emphasise some of these conditions. Its basic conclusion is that the implementation of incomes policy is possible only if the society develops a set of norms or institutions that force all agents to cooperate.

The crucial questions are therefore the following: is there any institutional or market mechanism to induce players to be committed to the co-operative agreement? How can agents agree about a specific set of co-operative rules (for example, incomes policy) if there exists in general a large number of rules that improve upon the non-cooperative, conflict, situation? What is the agents' strategy that leads them to sign the incomes policy agreement?

To answer these questions we need to define the word 'institution'. We adopt Schotter's (1981) definition and we say that a *social institution* is a regularity (set of rules) in social behaviour that is agreed to by all members of society, specifies behaviour in specific recurrent situations, and is either self-policed or policed by some external authority.

The crucial words of this definition are (i) *regularity* and (ii) *policed*:

(i) The fact that a social institution is a regularity means that it

cannot be studied using the single-play game previously described. In contrast, we must assume that the game is iterated over and over again. Consequently, games, or the social institutions they describe, are not viewed as static phenomena, but as evolutionary situations with constantly changing players. Time becomes a crucial variable in the analysis, and a basic ingredient of incomes policy.

We will see (particularly in the next section) that the result of this approach is that, as the games we analyse are repeatedly played, players develop certain socially agreed norms, conventions, and institutions which are passed on to succeeding generations of players. Notice that these norms are also likely to affect and change future generations' behaviour.

(ii) The fact that a social institution is either self-policed or policed by some external authority means that it can emerge only if economic agents realise that they always have an incentive to deviate from norms or conventions, if the other agents do stick to those rules or conventions (this problem is called free-riding in Tarantelli, 1986). Hence, agents must design social institutions in such a way that players are punished any time they deviate from the social agreement. The punishment must be carried out either by all players themselves, or by an external authority.

The above remarks clarify the institutional dimension of incomes policy that was indeed defined as a long-term agreement among social parties that is policed by appropriate punitive strategies. For instance, the idea of incomes policy as a co-operative agreement is complementary to the idea of tax-based incomes policy. Taxes can indeed be used as a threat to sustain the co-operative agreement over time. Other deterrence technologies can be devised. For example, the incomes policy agreement signed by Italian social parties in February 1984 included rules giving the government the power to reduce subsidies to firms and workers and to increase taxes if some parties deviate from the agreement. Punishments were also specifically designed with respect to a given agent's deviation.

A crucial requirement to implement rules or institutions designed to prevent agents from not co-operating is the observability of all agents' actions (the complete information assumption). If the deviating agent cannot be detected, or if another bargaining game takes

Agent i

		Conflict	Co-operation
	Conflict	P^c_{ji}, P^c_{it}	$\phi_j(x^*_i), P^\pi_{it}$
Agent j			
	Co-operation	$P^\pi_{jt}, \phi_i(x^*_t)$	P^*_{jt}, P^*_{it}

Figure 10.2 The basic game

place about the evaluation of the deviation from the agreement, it becomes impossible or extremely difficult to implement incomes policy.[7]

We now try to formalise these ideas. Let P^c_{it} be the players' single-play pay-off when they do not co-operate and adopt their one-stage optimal strategy, and let P^*_{it} be the single-play pay-off when they do co-operate, $i = 1 \ldots n$. As previously stated, $P^*_{it} \geqslant p^c_{it}$, $i = 1 \ldots n$.

In the simplest setting, player i can thus take two actions: either he co-operates $(x_{it} = x^*_{it})$ or he does not co-operate $(x_{it} = x^c_{it})$. The single-play game is summarised in Figure 10.2 where $\phi_i(x^*_t)$ is player i's pay-off when he deviates from co-operation whereas the others do co-operate, and $P^\#_{jt}, j = 1 \ldots n, j \neq i$, is the other player's pay-off in such a situation; x^*_t is the vector $(x^*_{1t} \ldots x^*_{nt})$. Because $P^c_{it} \geqslant P^\#_{it}$ and $\phi_i(x^*_t) \geqslant P^*_{it}$, if the game is not iterated, all players always choose the non-cooperative, conflictual strategy. Their pay-off is therefore P^c_{it}, which is lower than the co-operative pay-off P^*_{it}, $i = 1 \ldots n$. However, when the game is iterated over time, players may develop a set of rules (social norms) that can force all players to adopt the co-operative strategy. For example, a social norm or convention can emerge that says that a player that deviates from the co-operative agreement will be punished. The punishment is carried out by the other players. Each one is forced to carry out the punishment by the threat to be punished by the remaining players if he does not do it. And so on. This type of strategy is explained in detail in Fudenberg and Maskin (1986) and Abreu (1988), and can be shown to constitute a subgame perfect equilibrium of the iterated game. No player has thus any incentive to deviate from co-operation, if his deviation can be detected by the other players.

The incomes policy agreement must therefore specify two types of

norms: those that directly concern economic variables like prices of private goods and public services, wages, output, taxes, public investments, and those defining the deterrence technology that should prevent agents from deviating from the agreement.

The simplest rule that can sustain a co-operative outcome is the tit-for-tat strategy proposed by the biologist Anatol Rapoport. Each player plays co-operatively until he observes some player that deviates from co-operation. If a deviation occurs, he plays non-cooperatively until the end of the game. When the game is not time-varying (that is, players' pay-off does not depend on time), Friedman (1971) shows that this threat can force all players to co-operate at all stages of the *infinitely* repeated game, if the discount factor satisfies the following condition:

$$\alpha_i \geq [\phi_i\,(x^*) - P_i^*]/[\phi_i\,(x^*) - P_i^c] \quad i = 1 \ldots n$$

where the subscript t is now superfluous.

This simple condition points out that all players must sufficiently value their future pay-offs (the discount rate must be low) for incomes policy (co-operation) to be the equilibrium outcome of the infinitely repeated game. Otherwise, non-cooperative strategies prevail. More general results, that also hold for finitely repeated games and/or time-varying games, can be found in Fudenberg and Maskin (1986) and Friedman (1986). However, the role of *time* (co-operation is an intertemporal phenomenon), and of *discounting* (agents must not be myopic) is always crucial for incomes policy to be implemented.

A further possibility is to give an external institution the power to carry out the punishment any time some agent does not act according the incomes policy agreement. This possibility is explored in Carraro (1985, 1987a, 1987b), where a public authority (the government or the central bank) is designed as the institution that sustains the co-operative agreement by appropriately threatening the other players. It could be interesting to analyse how external institutions should be specifically designed to guarantee the stability of incomes policy agreements (similar ideas, but in a different context, are in Dewatripoint, 1987).

The previous discussion stresses the role of time and of players' discount rate in the mechanism designed to implement incomes policy. There is, however, another problem to be solved. There generally exists an infinite number of co-operative agreements that

Agent *i*

		Agreement 1	Agreement 2
	Agreement 1	P^{**}_j, P^{**}_i	P^c_j, P^c_i
Agent *j*			
	Agreement 2	P^c_j, P^c_i	P^*_j, P^*_i

Figure 10.3 The coordination game

Note: $P^{**}_j > P^*_j > P^c_j$, and $P^*_i > P^{**}_i > P^i_i$.

give players a larger intertemporal pay-off than non-cooperation. How can economic agents co-ordinate their action in order to achieve a given co-operative outcome? How do players with different preferences over the set of possible implementations of income policies agree on a given policy plan?

There are several solutions to this problem. One can argue that, if the economic situation is particularly negative (the Italian emergency in the 1970s), parties are less reluctant to harmonise their conflicting interests. An incomes policy agreement can therefore be achieved. A condition for incomes policy to succeed could thus be the existence of a serious danger or of an emergency. However, this does not completely solve the problem raised above.

Another piece of the solution can be found by assigning each player with a bargaining power and by explaining the agreement achieved by all players as a function of their bargaining power (see Binmore *et al.*, 1985, for a survey).

This explanation is not completely satisfactory, in particular when co-operation is policed by some external authority. As an example, suppose there are only two players and only two co-operative agreements that give players a larger pay-off than the non-cooperative outcome. The first player prefers the first agreement, whereas the other player prefers the second. Figure 10.3 describes the game over the co-operative outcomes.

Suppose one of the two agreements (for example, the first) specifies that some features of the economic system must not change, whereas the second is more innovative and, for example, asks for income re-distributions or it modifies industrial relations. Following Ullman Margalit (1978), we can argue that the emergence of 'norms of partiality' is likely, that is, norms that preserve a *status quo* position of inequality among economic agents. In other words, if agreement one is closer to the *status quo*, it is more likely to prevail as

the co-operative outcome, particularly if the co-operative outcome is sustained by some external authority.

The question is therefore whether the historically predetermined convention prescribing an unequal distribution of utility will be adhered to or whether the unfavoured party will try to deviate from it. In situations in which social groups do not agree about the actual implementation of incomes policy, the equilibrium of the game is likely to be the *status quo*.[8] Moreover, institutions are likely to arise to preserve it.

These remarks lead us to the following conclusion. Incomes policy is only partially the outcome of a multilateral bargaining process that selects a given agreement among those that can be sustained by agents' strategies. Incomes policy is also likely to be an inequality-preserving set of rules that is agreed upon by all players, because any deviation from this set of rules would imply a welfare loss for the deviating player.

Summing up, we have shown that many elements are probably necessary to implement an incomes policy: centralised bargaining, long-term rules, deterrence technology, non-myopic forward-looking agents, observability of agents' deviations from the agreement, emergency, inequality preserving norms. Other elements will be emphasised in the next section (for example, homogeneity of social groups).

4   AN EVOLUTIONARY THEORY OF THE INSTABILITY OF CO-OPERATION

In the previous section we showed that co-operation between unions, firms and the government can be attained only if the game is iterated over time, and if each player appropriately threatens the other ones in order to sustain the co-operative agreement. The threat strategies previously described have been shown to constitute a subgame perfect equilibrium of the repeated game; no player has thus an incentive to deviate from his co-operative strategy.

This result seems to be in contrast with some empirical evidence; for example, in Italy, unions, after the agreement settled in 1984, decided not to support any longer the co-operative strategy that enabled the government to implement its incomes policy.

In this section, we explore more deeply the game presented in

Section 2, by emphasising the interactions between unions and workers. In the previous section, we assumed that all players knew the whole structure of the game, could evaluate the profitability of co-operation, and observe possible deviations. Moreover, all players were supposed to decide whether to co-operate or not. We now assume, in contrast, that the bargaining game to attain the incomes policy agreement takes place only at the second stage of the game. Unions, firms, and the government therefore decide whether to adopt an incomes policy. Workers decide first, by choosing to join the union that maximises their pay-off. Parliament decides last, by ratifying or refusing the incomes policy agreement.

We focus our attention on the game between workers and unions.

We wish to show that accounting for this type of interaction may destabilise co-operation in the long run. More precisely, even if the co-operative strategy that lies behind incomes policy benefits all players, it pays unions to move to a different strategy in order to guarantee their own survival.

The idea is fairly simple. Each union aims at achieving its targets in terms of macro-variables (inflation, employment, and so on) and income distribution. These targets must reflect workers' preferences; the strategy adopted to achieve them must obtain workers' consensus. This means that a worker may decide to leave his union, if he disagrees about either the proposed targets or the union's strategy. On the other side, a union can survive only if it gets workers' support. We show that co-operation, even if it provides workers with a greater pay-off, is not the strategy that best guarantees union's survival. Hence, some unions can deviate from co-operation whenever they realise they are loosing workers' support.

We proceed as follows: in the first subsection, we outline the game between unions and workers, and the assumption on agents' (bounded) rationality. We show that the equilibrium of the game is such that all unions co-operate, but lose workers' support at the same time. Then we slightly change the assumptions: we first add the hypothesis that workers realise that, by withdrawing their support, they weaken the union, thus reducing or losing the gains from co-operation. This leads all workers to join a union and to support the co-operative strategy in the long run.

In the second case, the very existence of the union is introduced among union's targets, so that unions may choose the non-cooperative strategy in order not to lose workers' support. We then show

that the long-run equilibrium is characterised by a stable polymorphism in which some unions co-operate and the other ones adopt a conflictual strategy.

The assumption that is behind these results is that workers are not homogeneous, that is, they may have different targets. For example, workers in the private and public sector, in large and small firms, with blue and white collars, have different targets and therefore different appreciations of the strategies proposed by different unions.

This leads us to introduce the main novel element of this section, that is, the type of rationality we assume for workers and unions. Workers cannot solve the whole intertemporal game: their rationality is bounded. They simply observe a multiplicity of unions, each one with a different strategy. Then a worker decides to support the union that adopts the strategy that increases his pay-off. Workers consider single-play pay-offs, so that they do not know what strategy is the best one in the long run. However, we assume that if, at a given stage of the game, a union adopts a strategy that provides workers supporting it with a pay-off larger than the average, then this union increases the share of workers who support it. By analogy, unions only consider single-play pay-offs. However, if a union adopts a strategy that gives a pay-off larger than the average, more unions will adopt that strategy in the following period.

We analyse whether the above learning process is convergent, that is if, in the long run, all workers support one union, or if a multiplicity of different unions is likely to coexist. At the same time, we want to see whether the existing unions actually co-operate.

4.1 The Game Between Unions and Workers

For simplicity's sake, let us suppose again that each player that plays at the second stage of the game (the bargaining stage) has two strategies: co-operation and conflict. Hence, let us denote by P_j^c and P_j^*, union j's pay-off, respectively when a conflictual, non-cooperative strategy is chosen, and when the co-operative strategy is appropriately sustained. The game is time-invariant. We showed that $P_j^c < P_j^*$.

The union's pay-off is unequally divided among the workers that support the union. This reflects the fact that the agreement actually implemented may provide different benefits to different players. We assume that worker i receives $\bar{\beta}_i P_j$ if he is a member of union j.

Worker i can decide whether to support or not to support union j's strategy. In the latter case, the union's pay-off is reduced by K_j^c if the

Worker *i*

		Unionised	Independent
	Conflict	$P_i^c, \beta_i P_i^c - C_i^c$	$P_i^c - K_i^c, \beta_i (P_i^c - K_i^c)$
Union *j*			
	Co-operation	$P_j^*, \beta_i P_j^* - C_i^*$	$P_j^* - K_i^*, \beta_i (P_j^* - K_i^*)$

Figure 10.4   The game between unions and workers

union adopts the non-cooperative strategy and by K_i^* if the union co-operates. We assume $K_i^c > K_i^*$ because workers' support is particularly crucial during periods of conflict. There is also a cost that each worker must pay to support the union (membership fee, salary lost during strikes, time, and so on). This cost is equal to C_i^c in periods of conflict, and is C_i^* in periods of co-operation.

Union *j* must decide whether to sign a cooperative agreement with firms and the government, or to start a bargaining conflict in order to achieve a better outcome.

The part of the game that takes place between workers and unions is shown in Figure 10.4.

We assume $\beta_i K_j^c > C_j^c$, so that, if the union's strategy is conflictual, the workers prefer to join the union. This reflects the previous assumption that workers' support is crucial in periods of conflict (the loss K_j^c is large). Symmetrically, $\beta_i K_j^* < C_j^*$, that is if a worker withdraws from a union when it cooperates, the loss is low. Furthermore, notice that $P_j^* - K_i^* > P_j^c$, because when workers withdraw their support, the union's bargaining power is lower, but the co-operative outcome $P_j^* - K_i^*$ is still greater than the non-cooperative outcome P_j^c.

Being $P_j^* > P_j^c$ and $P_j^* - K_i^* > P_j^c - K_i^c$, co-operation is the union's dominant strategy. Knowing that, a worker decides not to support the union, because $\beta_i (P_j^* - K_i^*) > \beta_i P_j^* - C_j^*$. The only equilibrium of the single-play game is thus an equilibrium in which the union decides to sign the co-operative agreement, but loses workers' support.

How is this situation going to evolve? If the game is infinitely repeated, will the union keep co-operating even if this undermines its own existence? Will other unions enter the game claiming better to represent workers' interests by carrying out conflictual strategies?

To answer these questions, we need a new methodological tool, that we borrow from evolutionary game theory as developed in biology. Maynard-Smith and Price (1973) define evolutionary stable

strategy (ESS) as a strategy that, if all players adopt it, then it does not pay some to change to a different strategy since their expected payoff will be worse than the payoff of the rest of the players. In other words, we can describe an ESS strategy as the strategy that all players adopt in the long run because they realise that it provides them with a payoff above the average payoff provided by different strategies.

In our case, at any stage t of the game, union j can take two actions: conflict (x_j^c) and co-operation (x_j^*). Worker i also has two possible actions: becoming a member of a union (x_i^s) or being independent (x_i^0). The subscript t is omitted because we assume the game to be time invariant.

Let $\bar{\pi}_u$ be the frequency of unions using x_j^* and $\bar{\pi}_w$ be the frequency of workers using x_i^s. In the aggregate, $\bar{\pi}_w$ is also the union's probability to have workers' support, and $\bar{\pi}_u$ is the probability that a union cooperates. The union's expected pay-offs are therefore:

Union j:
$$P_j(x_i^*) = \bar{\pi}_w P_j^* + (1 - \bar{\pi}_w)(P_j^* - K^*) \tag{1.1}$$

$$P_j(x_j^c) = \bar{\pi}_w P_j^c + (1 - \bar{\pi}_w)(P_j^c - K^c) \tag{1.2}$$

where K^* and K^c are the aggregate losses when a percentage $(1 - \bar{\pi}_w)$ of workers do not support union j. For simplicity's sake, suppose that all unions that co-operate get an identical pay-off P^*, whereas all unions that do not co-operate get P^c. Moreover, suppose that the costs of becoming a member of the union are fixed and equal to C^* and C^c. Then, worker i's expected pay-offs are:

Worker i:
$$P_i(x_i^s) = \bar{\pi}_u(\hat{\beta}_i P^* - C^*) + (1 - \bar{\pi}_u)(\hat{\beta}_i P^c - C^c) \tag{2.1}$$

$$P_i(x_i^0) = \bar{\pi}_u \hat{\beta}_i(P^* - K^*) + (1 - \bar{\pi}_u)\hat{\beta}_i(P^c - K^c) \tag{2.2}$$

Define by $P(x^*)$ the average pay-off of a union that adopts the co-operative strategy, that is $P(x^*) = \sum_{i=1}^{Nu} P_i(x_i^*)$, where Nu is the number of unions that decide to sign the incomes policy agreement, and $x^* = (x_1^* \ldots x_{Nu}^*)$. Analogously, let $P(x^c)$ be the average pay-off of a union that adopts a conflicting strategy. The union's mean pay-off is thus:

$$P_u = \bar{\pi}_u P(x^*) + (1 - \bar{\pi}_u)P(x^c) \tag{3.1}$$

Let $P(x^s)$ be the average expected pay-off of a worker who becomes a member of a union, and let $P(x^0)$ be the average expected pay-off of a worker who is not unionised. For example, $P(x^s) = (1/Ns) \sum_{i=1}^{Ns} P_i(x_i^s)$, where $x^s = (x_1^s \ldots x_{Ns}^s)$ and Ns is the number of workers who join a union. The worker's mean pay-off is:

$$P_w = \bar{\pi}_w P(x^s) + (1-\bar{\pi}_w)P(x^0) \tag{3.2}$$

Finally, we assume that the frequency of unions that are going to co-operate in the next period is a positive function of the relative pay-off in this period, that is:

$$\delta\bar{\pi}_u/\delta t = \bar{\pi}_u[(P(x^*)-P_u)/P_u] \tag{4.1}$$

By analogy, the evolution of the frequency of workers that are going to join a union is described by:

$$\delta\bar{\pi}_w/\delta t = \bar{\pi}_w[(P(x^s)-P_w)/P_w] \tag{4.2}$$

In other words, the number of workers who join a union increases, if the average pay-off from supporting a union is larger than workers' mean pay-off.

It is possible to show that an evolutionary stable pure strategy is such that all players eventually use that strategy as time goes to infinity (see Maynard-Smith, 1982, Appendix D and J; van Damme, 1987, ch. 9). Furthermore, using results described in Thomas (1982, ch. 8), it is possible to show that the only evolutionary stable strategy pair of the game described in Figure 10.4 is (x^*, x^0), that is, unions co-operate with firms and the government, but workers do not support them. This implies that $\bar{\pi}_u$ converges to one, whereas $\bar{\pi}_w$ converges to zero, that is, the degree of co-operation increases until all unions co-operate, but, at the same time, unions are losing all support from workers.

This result first shows that there is no incentive for the creation of unions that carry out conflict strategies, and secondly, that co-operation leaves unions without any link with workers. However, these extreme conclusions are hardly plausible. Real events show that the interaction between workers and unions is more complex. In the next subsections, we therefore take into account that workers' support can be one of the union's targets and that the worker's decision not to support the union can affect its pay-off. Furthermore,

we shall assume that workers also know that unions' bargaining power is much lower without their support; they are thus going to lose all (or part of) gains from co-operation if all workers decide not to support the union.

4.2   The Game between Unions and Workers and the Game among Workers

We first consider the latter case, by assuming that workers realise that if they all decide not to join a union whenever it co-operates, their individual pay-off is reduced by H^*, which is much larger than the reduction K_i^* that takes place when only one worker decides not to support the union.

This implies that the pay-off pair induced by the combination (x^*, x^o) becomes $(P^*-H^*, \, \beta_i(P^*-H^*))$ for worker i, where H^* may satisfy the condition

$$\beta_i H^* > C^* \text{ for all } i \tag{5}$$

if the number of workers who do not join a union is large. Hence, each worker's decision depends on the other workers' decisions. Figure 10.5 describes the game among workers under the assumption that unions adopt the co-operative strategy as shown.

If this game is played once, each worker decides not to support the union and adopts x^o. However, workers realise that their free-riding behaviour is counterproductive if all workers behave in the same way. Hence, as Axelrod (1984) has shown, their evolutionary stable strategy, that is, the strategy that is going to emerge as the one adopted by all workers, is such that all workers eventually join a union (they adopt a tit-for-tat strategy).

Let us derive the solution of the game between unions and workers under the new assumptions and their implications. Unions still have a dominant strategy, that is, they still keep cooperating. This is also their ESS strategy (see Thomas, 1982). On the other side, workers face the game described by Figure 10.5. As previously stated, the strategy that they are going to adopt is the one that sustains the optimal outcome, that is, all workers support the union in the long run.

Hence, the only evolutionary stable strategy pair of the game between unions and workers, if we take into account the game taking place among workers, is (x^*, x^s). Therefore, if we start from a

Worker *i*

	Unionised	Independent
Unionised	$\beta_i P^* - C^*, \beta_i P^* - C^*$	$\beta_i P^* - C^*, \beta_i P^*$
Some workers $j \neq i$		
Independent	$\beta_i (P^* - H^*), \beta_i (P^* - H^*) - C^+$	$\beta_i (P^* - H^*), \beta_i (P^* - H^*)$

Figure 10.5 The game among workers

Note: We assume that the action of worker *i* alone cannot directly affect K^* (worker *i* is atomistic), and that (4) holds.

situation in which some unions co-operate, whereas others do not co-operate and in which some workers support the unions whereas others do not, a situation will evolve in which all unions co-operate and all workers support the co-operative strategy.

This evolution, however, can be cyclical; that is, we may have periods in which the frequency of co-operative unions decreases and then increases again and periods in which unions get low support from workers. However, these oscillations belong to a dynamic path that converges on a stable outcome in which all unions and workers realise the profitability of co-operation and support – directly and indirectly – the co-operative strategy.

4.3 The Game between Unions and Workers and the Game among Unions

A second way to depart from the result obtained in the subsection 4.1 is to show that a union prefers to adopt the conflict strategy whenever workers start leaving the union. This can be explained by taking into account the game that takes place among unions. Each union knows that, by adopting a conflict strategy, it is likely to gain some workers' support. Then there is an incentive for each union to defect from co-operation, because, if the other unions co-operate, the defecting unions can share the benefits of co-operation and can increase, at the same time, the number of its members.

The game among unions, under the assumption that workers are more likely to join the union if it does not co-operate, whereas they withdraw their support if the union co-operates, can be shown in Figure 10.6.

It is thus clear that each union always has the incentive to deviate

Union i

	Conflict	Co-operation
Conflict	P^c, P^c	$P^c, P^c - C_i^s$
Some unions $j \neq i$		
Co-operation	$P^* - K^* - C_j^s, P^*$	$P^* - K^*, P^* - K^*$

Figure 10.6 The game among unions

Note: C_j^s denotes the additional cost that union j suffers when it co-operates, and it also realises that it is losing workers' support because some other unions adopt a conflictual strategy.

from the co-operative agreement, that is, the conflict strategy is dominant. This implies that unions prefer to co-operate whenever workers support them, but they prefer not to co-operate if workers withdraw their support. This situation is captured in Figure 10.7 which describes the game between unions and workers under the new assumptions and their implications (indicated pay-offs are average pay-offs).

Notice that:

$$P^c - K^c > P^* - K^* - C^o \tag{6}$$

is the condition that leads unions to adopt the conflictual strategy if workers decide not to support them in case of co-operation. We also have

$$C^* > K^*_w \tag{7}$$

that reproduces the assumption of Section 4.1. Notice that, in this case, players' preferences are cyclical (if workers are unionised, unions co-operate; if unions co-operate, workers do not join a union; if workers do not join a union, unions adopt a conflictual strategy; if unions adopt a conflictual strategy, workers decide to join a union).

It is possible to show, using for example the results presented in Thomas (1982, ch. 8), that the game described in Figure 10.7 has no evolutionary stable strategy pair. However, using Hofbauer's (1985) analysis, we can show that the dynamic system (4), derived from the pay-offs of Figure 10.7 and describing the evolution of the fre-

Workers

		Unionised	Independent
	Conflict	$P^c, P_w^c - C^c$	$P^c - K^c, P_w^c - K_w^c$
Unions			
	Co-operation	$P^*, P_w^* - C^*$	$P^* - K^* - C^0, P_w^* - K_w^*$

Figure 10.7 The game between unions and workers

Note: C^0 is the unions' average loss arising when unions include in their pay-off function the number of unionised workers (a weighted average of C_j^c, for all j). Moreover, $P_w^c - C^c$ is the average pay-off received by a worker who joins a union adopting a conflict strategy. The worker gets $P_w^* - C^*$, if his union co-operates. If only a share π_w of workers is unionised, the average pay-off of workers who do not join a union is either $P_w^c - K_w^c$ or $P_w^* - K_w^*$.

quencies $\bar{\pi}_u$, $\bar{\pi}_w$, is asymptotically stable and that it converges to a stationary point, provided that all entries in the pay-off matrix are positive. Hence the outcome of the evolutionary game is a stable polymorphism, that is, a society in which some of the unions co-operate and some do not, whereas, at the same time, only part of the workers support the unions.

If we accept the assumption described by (6) and (7), we can derive the following conclusion: a certain degree of conflict is endemic, that is, there is no way to rule out the presence of unions that adopt conflict strategies (in order to gain workers' support), even when cooperation among unions, firms and the government provides all players with a larger pay-off than any conflict.

Notice that both modifications of the game we have proposed (in subsections 4.2 and 4.3) can explain why we observe periods of conflict and periods of co-operation. However, the first modification ultimately leads to a society in which all unions achieve the gains from co-operating and all workers realise the crucial role of unions in guaranteeing a successful bargaining process. In contrast, the second modification rationalises a society in which conflict is endemic, and different types of unions coexist. In particular, in this subsection we have shown that, under plausible assumptions, unions' behaviour may be cyclical, that is, a union can shift from co-operation to conflict and vice versa. There is no possibility of completely eliminating conflict behaviour. Incomes policies can be only partially successful, and there is little hope of achieving the consensus of all unions.

This is another lesson that the recent Italian experience shows us; the 1984 incomes policy agreement was indeed signed by only two of the three major unions. At the same time, other unions, who were too small to participate in the centralised bargaining process, increased their members, pushing the co-operative unions to deviate from co-operation.

5   THE DESIGN OF INSTITUTIONS

The message of this paper is twofold: first, incomes policy must be reinterpreted within the game-theoretic framework previously proposed, in order really to appreciate its effectiveness as a policy tool, and the complexity of its actual implementation. Secondly, incomes policy is not likely to be implemented in a decentralised, myopic, economic world, characterised by lack of institutions designed to sustain incomes policy agreements. The aim of this section is therefore to explore more deeply the problem of institution design.

We have shown that institutions accomplish two tasks: first, they set the partition of gains from co-operation among social parties. Secondly, institutions prevent players from deviating from the co-operative agreement by reducing the incentive to deviate, or by forcing all players to be committed to the agreement.

We have already indicated that taxes, incentives, and subsidies can all be used by the government to penalise players who deviate from co-operation, to induce agents to sign the incomes policy agreement, and to redistribute the relative gains.

These policy instruments, if appropriately set, could sustain an incomes policy agreement in a world with complete and perfect foresight, with no tax evasion. They could still be inefficient if incentives and subsidies induce a misallocation of resources. Moreover, taxes (lump-sum taxes are generally not available) are distortionary, thus creating a time-consistency problem (see Carraro and Giavazzi, 1988).

We therefore think that the design of incomes policy institutions should take into account these problems, by devising rules that are less subject to the above problems, and that could work even in the presence of uncertainty.

Let us consider the following example that captures the main features of Tarantelli's (1986) model. Suppose unions sign an incomes policy agreement that sets nominal wages over the planning

horizon. For instance, nominal wages have to be lowered. Given wages, then, firms set prices, employment and investments. The levels of these variables have been agreed upon in the bargaining process that led to the incomes policy agreement. Firms are thus forced not to deviate from incomes policy by the threat that unions could revert to conflict in the following periods. However, investment plans take a long time to come to fruition. Firms have thus many periods in which they can exploit low wages, before their deviation from the agreement can be detected.[9] Moreover, the distribution of gains from co-operation can hardly be settled in advance. Firms are thus likely to make large profits during periods of low nominal wages. Profits should then be redistributed by taxes. However, as Tarantelli (1986) pointed out, unions may not have enough confidence in the government's future behaviour, and may not be willing to take the risk of reducing nominal wages. This precludes the adoption of incomes policy.

However, institutions can be designed to solve this problem. An important suggestion is to include in the incomes policy agreement a profit-sharing system, as a mechanism to redistribute gains (profits) obtained from the adoption of incomes policy. Notice that profit-sharing was proposed by Weitzman (1984, 1985) as a mechanism directly to increase employment. Doubts have been raised about Weitzman's proposal, that is shown to work only under special conditions (see Estrin, *et al.*, 1987; Wadhwani, 1988). In contrast, our proposal is more general. Profit-sharing (and other forms of participatory schemes) is viewed as an institution that reduces unions' uncertainty about future income distribution, thus leading unions to accept the incomes policy agreement.

It is in this context that we can probably interpret the successful example of Japanese corporations, and the flurry of activity by western firms to involve their employees in the enterprise via one or another type of participatory scheme. No general plan, managed by the government and related to incomes policy has, however, yet been proposed (the UK is the only country to subsidise profit-sharing with tax incentives to firms that introduce profit-related pay).

The idea of profit-sharing as a mechanism to sustain co-operation finds theoretical support in the work by Johnson (1986). He proposes a model in which firms and unions bargain over wages, whereas employment is set by firms. Johnson shows that the introduction of profit-sharing enables unions and firms to achieve the 'efficient bargain' solution. To the extent that the 'efficient bargain' level of

employment is higher than the one which comes out of the 'right-to-manage' models (see McDonald and Solow, 1981), profit-sharing is seen to increase employment, and leads to a Pareto-improving change. Johnson's model is much simpler than the theoretical framework proposed in this paper. However, it shows that profit-sharing could be the institution that enables social parties to achieve the co-operative (Pareto-optimal) outcome.

We have to point out a possible objection to this idea. Weitzman (1984) argues that, because profit-sharing is in no individual firm's and union's interest, but benefits the economy as a whole, a subsidy is needed to encourage its introduction. However, Wadhwani (1988) shows that tax subsidies are peculiarly subject to evasion. Unions and firms could agree to sponsor a 'cosmetic' profit-sharing scheme to reap the tax subsidy, while retaining the initial wage system. This would raise their welfare and might prove virtually impossible for the authorities to detect. This type of objection does not hold in our model. If profit-sharing belongs to the incomes policy agreement, and is designed to sustain it, there is still the incentive to adopt 'cosmetic' changes, but this incentive is compensated by the threat of losing gains from cooperation with the government. More important is the fact that in our framework no tax subsidy is needed to induce unions and firms to adopt profit-sharing. The incentive to profit-sharing schemes comes out from the incentive to achieve gains from the adoption of incomes policy. As previously stated, these gains derive from the behaviour of several macro and micro variables, and concern several periods of time.

We can therefore conclude that incomes policy is not a simple discretionary policy action. It requires the involvement of all social parties, and the consensus of their members. It also asks for long-term policy plans and political stability. It requires a modified institutional setting in which rules and norms are such as to guarantee to all agents the correct implementation of incomes policy. Profit-sharing could be one of these rules.

6 CONCLUSIONS AND EXTENSIONS

The analysis of the previous sections constitutes a partial analysis of the complex interactions that take place in the economic world, and of the conflicts that originate from those interactions. Incomes policy

is a set of norms designed to harmonise those conflicts. Its success depends on a large number of economic, social and political factors; some of which have been emphasised in this paper; others have still to be analysed.

For example, in the previous analysis we did not consider the game that takes place among firms. Firms are indeed non-homogeneous: small and large firms, public and private firms, firms selling on international markets and those selling on national markets, may have different targets or different rankings of the same targets. This is likely to make the actual implementation of incomes policy more difficult.

Moreover, we considered the government as a unique player, without analysing the game that takes place between the monetary and the fiscal authority. Lack of co-ordination between these two agents can reduce the effectiveness of incomes policy, and can even make it counterproductive.

Also the interactions between parliament and the other agents were not explicitly modeled. Their analysis requires the use of voting theory (see Alesina, 1987) in order to account for the role of elections. Notice that elections break the planning horizon, and introduce the need for intertemporal coordination among governments for incomes policy to be sustainable in the long run.

Other agents were left out of the game. International organisations and sovereign institutions like the European Economic Community or the International Monetary Fund are likely to influence (and in Italy actually influenced) the process that leads to a policy plan and to the implementation of incomes policy.

Even more important is the fact that we considered only workers and firms as the private agents that intervene in the planning process. In contrast, given that incomes policy is a long-term intertemporal phenomenon, it would be more realistic to consider that in their life economic agents play different roles. An overlapping generation model could have been the appropriate tool to account for the fact that agents are first unemployed then employed, and then they retire. The interactions and solidarity among these groups are likely to increase, instead of reducing, the probability of implementing incomes policy. This is because in his life each agent plays the three roles described above; he thus has a strong incentive to reduce conflicts among social groups in order to increase his intertemporal welfare.

All the above remarks could lead to an extension of the analysis, and to a better understanding of the role and importance of incomes policy.

Notes

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1. Useful surveys of the debate on incomes policy can be found in Lipsey and Parkin (1970), Fallick and Elliot (1981), and Mayhew (1983).

2. Brunetta and Pozzana (1984) explore different approaches to incomes policy and their applications to twelve industrialised countries. A comparative analysis is also provided in Tarantelli (1986).

3. The importance of this fact was also realised by Tarantelli (1986, ch. 3). However, he emphasised the role of uncertainty, by assuming that workers could not precisely evaluate the gains from co-operation because the outcome of the co-operative process was largely uncertain. We assume instead that workers' rationality is partly bounded (they use plausible rules of thumb). The role of uncertainty will be briefly discussed in the last section of the paper.

4. A detailed discussion of the recent Italian economic history and the problems related to the implementation of incomes policy can be found in Brunetta and Pozzana (1984) and Brunetta and Dal Co (1987).

5. The same elements were also described in Tarantelli (1986, ch. 2), but then his analysis does not account for the intertemporal dimension of incomes policy. Moreover, he did not use a game-theoretic framework, thus loosing the possibility of discussing the role of strategic interaction, and the emergence of institutions.

6. This assumption is fairly strong because it prevents us from analysing the role of uncertainty in the players' decision process. As Tarantelli (1986, ch. 3) pointed out, uncertainty can explain why incomes policy can hardly be successfully implemented. However, as stated in the introduction, we focus our analysis on three problems that Tarantelli also emphasised, but that he could not appropriately model: the free-rider problem, the design of institutions for co-operation, and the problem of bounded rationality.

7. See Tarantelli (1986) for a discussion of the role of uncertainty in the actual implementation of incomes policy.

8. The importance of initial conditions was also emphasised by Tarantelli (1986).

9. For example, labour-saving investments can be made without unions immediately realising that firms are not acting according to the incomes policy agreement. This is one of the possible explanations of the failure of incomes policy in Italy in the 1980s.

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11 Trade Unions and Economic Performance: The British Evidence

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1 INTRODUCTION AND SUMMARY

Half of all British employees are union members, yet until recently little was known about the impact of unions on pay, productivity, profits and jobs. Fortunately we no longer have to rely on intuition or prejudice. In the last few years there has been a spate of good solid empirical work on the effects of unions. It is now possible to spell out with confidence the influence that unions have on the performance of companies, the economy and on individual welfare.

Flanders (1970) suggested that the question 'What are unions for?' could best be answered by analysing 'What unions do'. He concluded that unions have both a vested interest effect and a sword of justice effect. Flanders was spot on. It is now possible to tell an entirely consistent story – based on hard facts – about what unions do.

The vested interest effect is readily apparent. Union presence in a workplace or company is associated with lower labour productivity (Section 2) and higher relative pay (Section 3). Consequently financial performance and profitability is lower where unions are recognised for collective bargaining (Section 4). Further, in the last decade, unionised workplaces have been less likely than non-union workplaces to experience job gains and more likely to suffer job losses (Section 5).

Egalitarian sentiments are less apparent these days. But the sword of justice has endured. As a consequence of unions there is less wage dispersion among individuals and pay differentials by race, sex and occupation are narrower than they otherwise would be (Section 6).

The industrial relations climate in the 1980s is very different from that of the 1970s. While this change has not (yet, anyway) completely

overturned either the vested interest or the sword of justice effects of unions, it has certainly transformed labour productivity growth in manufacturing. In the last seven years labour productivity in manufacturing has been rising at nearly 6 per cent a year, more than double the rate of the previous 20 years. This transformation rests on fear, competition and decentralisation of collective bargaining (Section 7).

We are fortunate in Britain that the government has recently sponsored two major surveys of workplace industrial relations (Daniel and Millward, 1983; Millward and Stevens, 1986). Much of the evidence presented below is based on these surveys. The first relates to 1980 (henceforth described as WIRS 1) and the second to changes between 1980 and 1984 (WIRS 2).

It is important to bear in mind that the 'union effect' on productivity, pay, profit and jobs possibly conceals as much as it reveals. Unions are not homogeneous and, for example, craft unions may have different effects from general unions. Likewise, union recognition for collective bargaining does not come out of thin air – the impact of unions is not independent of managerial behaviour. Thus statistical analyses must be complemented by case studies at workplace level. These would incorporate things like the history of the parties, their traditions and customs, leaders' personalities and negotiating tactics.

Strong unions, indicated by the closed shop or very high density, certainly have a keener bearing on costs and performance than does weak unionisation, where unions are recognised for collective bargaining but density is lower. The evidence is summarised in Table 11.1. Using non-union workplaces as the benchmark, the closed shop has a worse effect on labour productivity than just recognition without a closed shop. Similarly, the amount of extra pay that union members get over comparable non-union members is twice as high for those covered by a closed shop (9 per cent to 14 per cent) than it is for those where there is recognition only (4 per cent to 7 per cent).

Not surprisingly, the consequence is that workplaces which are non-union perform better than those where unions are present. And among the latter, closed shop workplaces achieve less than those where unions are recognised but there is no closed shop. Only a quarter of managers in workplaces with a closed shop reported that their establishment had financial performance superior to the average for their industry. By contrast, three-fifths of non-union workplaces had better than average financial performance. Non-union work-

Table 11.1 Impact of unions on productivity, pay, profit and jobs

	Closed shop	Union recognition (no closed shop)	Non-union
Number of employees (million)			
1978	5.2	7.9	9.1
1987	3.0	7.3	10.8
Labour productivity			
Engineering firms 1984–5	substantial	modest	–
cf. non-union firms	negative	negative	
Relative wages			
Premium over non-union			
1980 (%)	9–14	4–7	–
Profitability			
Establishments reporting above average financial performance			
1984 (%)	25	44	60
Employment change 1980–84			
% of establishments reporting:			
Loss of 20%+	37	27	15
Gain of 20%+	9	18	33

Note: Union recognition means the recognition of at least one trade union by management for the purposes of collective bargaining over pay and conditions. Closed shop means the existence of some form of compulsory union membership arrangement. The terms are similarly defined throughout this paper.

Sources: Tables 11.2, 11.3, 11.4, 11.5.

places were also more likely to boost employment and far less likely to axe jobs than union workplaces. A third of non-union workplaces increased employment by more than 20 per cent between 1980 and 1984, while in the same period over a third of workplaces with a closed shop suffered a corresponding loss of jobs.

These results on profitability and jobs do not simply reflect the life cycle or industrial composition of plants such that mature workplaces in traditional industries have both strong unions and poor productivity, pay and profit prospects. The impact of the closed shop, and of weaker unionisation compared with the absence of unions, is maintained even when controls are made for these life cycle and industry composition effects.

The institution of the closed shop has been fragile throughout the 1980s and it is now decaying rapidly. The Department of Employment (1987) state that in 1987 three million people were covered by

the closed shop, down from the peak figure of 5.2 million a decade ago. The interaction of industrial change, management policy and legislation explains this decline. First, employment has declined in older manufacturing industries where closed shops have traditionally been concentrated. Secondly, many major companies – for example, British Telecom in the private sector and British Rail in the public sector – have withdrawn from their previous closed-shop agreements. Thirdly, this trend to end union membership agreements has been reinforced by legislation. Before 1980 is was legal to dismiss an employee who refused to join a union in an establishment where a closed shop was operating. Then, for much of the 1980s such a dismissal was only legal if the closed shop had been approved by a very large majority in a workplace ballot. From 1988 it is simply illegal to dismiss an employee for non-union membership. Further, immunity has been removed from any industrial action designed to create or maintain a closed shop.

As the closed shop withers away the union effect on pay, productivity, profits and jobs may diminish. But such emasculation does not follow automatically. The closed shop may simply be of symbolic importance – 'the last piece in the jigsaw' (Dunn, 1985) – and high density may, in fact, be the key to the union impact outlined in Table 11.1. Where density remains high – despite the absence of the institution of the closed shop – the union effects on performance may survive.

2   UNIONS AND LABOUR PRODUCTIVITY

Union presence is generally associated with lower labour productivity in a workplace. This influence of unions on labour productivity is the net effect of conflicting forces which make for both higher and lower labour productivity where unions are recognised for collective bargaining. These forces are extensively discussed in Metcalf (1988a).

Labour productivity will be lowered by unions if (i) unions are permitted restrictive work practices; (ii) industrial action has an adverse effect; (iii) union firms invest less than non-union firms; (iv) unions are linked with an adversarial style of industrial relations and consequently there is low trust and lack of co-operation between the parties. This last point is often neglected but is rather important. Freeman and Medoff (1984) who made all the running in suggesting

that, net, unions might boost labour productivity, are adamant that such an effect will only happen under very strict circumstances:

> if industrial relations are good with management and unions working together to produce a bigger 'pie' as well as fighting over the size of the slices, productivity is likely to be higher under unionism. If industrial relations are poor, with management and labour ignoring common goals to battle one another, productivity is likely to be lower under unionism.

Labour productivity may be higher in the presence of unions where (i) firms respond to the union relative wage effect by substituting capital for labour; (ii) unions play a monitoring role on behalf of the employer, thereby reducing X-inefficiency; (iii) collective voice has favourable consequences; (iv) managers become less lethargic; (v) exploitation of workers is stopped. The first route to higher labour productivity is generally held to be socially harmful while other routes are socially beneficial.

The net effect of the two opposing sets of forces has been calculated using information from both firms and industries. The results from company studies are given to Table 11.2. There are two types of company-based study: first those where firms or plants within a reasonably well defined industry – engineering or coal, for example – are the focus; secondly those where the data are drawn from a wide range of plants or firms across different industries. These studies point in the same direction: unionisation is associated with lower labour productivity or, at best, has no effect.

Machin (1987) examines the impact of unionisation in the engineering industry. This is an important study because it takes a novel approach to measuring union presence and it is one of the few studies to measure productivity properly. The key finding is that union presence reduces labour productivity substantially in large firms. This effect is specially strong if there is a closed shop. Wilson (1987) uses the same data set. He shows that a firm with half its workforce unionised has substantially lower labour productivity (around 20 per cent less) than a similar firm with a low level of unionisation. This bad effect of unionisation is partially offset in the density range 50 per cent to 80 per cent. But any density increases above 80 per cent result in significant fallbacks in labour productivity.

Evidence on the impact of unionisation on productivity in firms

Table 11.2 Unions and productivity: company studies

Author	Sample	Measure of productivity	Union indicator	Control variables	Union effect
Machin (1987)	52 engineering firms 1978–82	Deflated value added per employee	(i) closed shop (ii) union presence index	K:L ratio Firm size Worker participation: quality circles Works Council Profit sharing ESOP Production technology: Job/flow/batch % skilled	(i) closed shop present associated with following effect on labour productivity: (a) Large firm (>1000 workers) −47% (sig.) (b) Small firm (<1000 workers) −2.6% (ns) (ii) 10% increase in Union Presence Index associated with following effect on labour productivity: (a) Large firm −6.1% (sig.) (b) Small firm −0.6% (ns)
Pencavel (1977)	Pits in 4 groups of coalfields 1900–13	Coal output per manshift	% unionised	K:L ratio Technical change (over time); Thickness of seam (across pits)	Increase in unionisation from 66% (1900) to 80% (1913) associated with a reduction in coal output per person of
Warwick Survey Edwards (1987) (Table 6.3, eq. 2)	650 manufacturing plants with 50+ employees 1977–8	Turnover per head (company level)	% unionised (plant level)	K:L ratio (co); Average pay (co); CR5 (ind); Ratio of value added to turnover (ind); Industry dummies; % skilled (plant); % non-manual (plant); Discretion enjoyed by plants	10% increase in density associated with lower productivity of 1.3% – very slightly offset in highly unionised plants (>80% density) which have productivity 0.1% higher than those with lower density

Study	Sample	Dependent variable	Union measure	Control variables	Results
Edwards (1987)	190 large manufacturing plants with 250+	Turnover per head (company level)	% unionised (plant level)	K:L ratio (co); Growth of sales (co); Competitive environment; CR5 (ind); Average pay (ind); capacity utilisation (plant); % female (plant); Share ownership (plant); Discretion enjoyed by plant; Industry dummies	No effect: all union variables small and non-significant
Wilson (1987) (Table 3, eq. 1–4)	52 engineering firms 1978–82	Value added per employee	(i) closed shop (ii) density measured by (a) % (b) dummies (c) splines	K:L ratio Labour input: % male % skilled % blue collar Training expenditure Apprentices: shop floor industry dummies Advertising: sales ratio % industry sales imported North/South Union-management committee Profit sharing scheme % Piece rate Job/flow/batch Intermediate technology	eq. 4 (the most favourable to unions). Impact on labour productivity as compared with non-union firm

Density	Impact on productivity
50%	– 20%
80%	– 6%
100%	– 16%

Source: Metcalf (1988a).
Notes: ESOP = Employee share ownership programme.
   CR5 = Five firm concentration ratio.

across the whole spectrum of manufacturing industries has been examined by Edwards (1987). In a large sample covering 650 plants with over 50 employees labour productivity falls as union density rises. But the association is not strong and is attenuated at very high levels of density. This statistical evidence is in line with managers' perceptions. Edwards states that even after controlling for the level of demand for the plant's products and the extent of competition 'non-union plants were reported by their managers to have higher levels of production per worker'.

Results of studies using information on 3-digit manufacturing industries are reported by Metcalf (1988a). Some were done by Department of Employment researchers (Wragg and Robertson, 1978; Ball and Skeoch, 1981) and some use the United States as a benchmark (Caves, 1980; Davies and Caves, 1987). They deal with the effect of unions on both productivity levels and changes. The weight of the evidence from these industry-level studies also suggests either that union presence is associated with lower labour productivity or has no effect on labour productivity.

Although we can be pretty sure of the direction of the effect that unions have on labour productivity, the studies suffer a series of drawbacks which mean that they do not *explain* that impact (Leadbetter, 1988). Most studies treat unions as if they are alike. However, unions with similar strengths can have very different approaches to productivity bargaining, in part depending on different union cultures and negotiating tactics. Further different union structures can affect productivity in different ways even though membership levels may be similar. Craft unions are more likely than general unions to block technical change. Multi-unionism may restrain productivity growth, while single unionism may promote flexibility.

The impact of unions is not independent of managerial behaviour, and other company characteristics. Thus in engineering, unions seem to have little impact on productivity in small companies but a considerable impact in those employing more than 1000 people. It is this interaction between unionisation – particularly in the form of a closed shop – and company size that is the key.

Finally, none of the studies really grapples with the simple point that unions may be overrepresented in mature firms and industries which have lower productivity.

3 UNIONS AND RELATIVE PAY

Union members earn more, on average, than comparable non-union members. Blanchflower and Oswald (1988b) surveyed all the recent studies and conclude that the average wage premium is '10 per cent or just under'. Their survey is reproduced in Table 11.3.

The closed shop is the key to extra pay for union members. Stewart (1987) used WIRS 1 information to calculate the *ceteris paribus* wage differential that union members receive, over the wage of comparable members, according to the various types of bargaining structures. For semi-skilled manual workers the results are:

	Per cent
Pre-entry closed shop	14
Post-entry closed shop	9
Mean for all union members	8
Union recognition, no closed shop	6

The mean differential that union members received was 7.5 per cent, but those in a pre-entry closed shop received almost double that amount. And in 3 per cent of establishments with a closed shop the union premium was over 25 per cent. Successive tranches of 1980s legislation have undermined the closed shop (see Section 1). So it is plausible that the average union differential will decline as the closed shop withers away.

Union membership also confers bigger fringe benefits. Blanchflower and Oswald (1988b) report that, as compared with non-unionists, union members are more likely to get sick pay, occupational pensions and meal vouchers and their holiday entitlement is longer.

4 UNIONS AND PROFITS

Given that unions raise pay and lower labour productivity we should not be surprised to find that union presence is associated with lower profitability.

The 1984 Workplace Industrial Relations survey asked managers the following question:

Table 11.3 How much do British unions raise pay?

Year of study	Estimated union wage premium (%)	Type of collective bargaining	Worker category	Data sample	Author(s) and date(s)
1968	10 approx.	Union	Manual	1038 workers	Shah (1984)
1975	8 approx.	Union	Manual	5352 manufacturing employees	Stewart (1983)
1980	7–14	Pre-entry closed shop	Skilled and semi-skilled manual	1400 approx. establishments	Blanchflower (1984), Stewart (1987) Blanchflower and Oswald (1987a)
1980	0–9	Post-entry closed shop	Skilled and semi-skilled manual	1400 approx. establishments	ditto
1984	6–7	Pre-entry closed shop	Unskilled-skilled manual	1300 approx. establishments	Blanchflower, Oswald and Garrett (1988)
1984	0–8	Post-entry closed shop	Unskilled-skilled manual	1300 approx. establishments	ditto

Notes:
(i) A very small number of closed shops have much larger premiums (3% of establishments have union wage premiums above 25% (Stewart, 1987)).
(ii) When the 1980 and 1984 data are used in a consistant way, the estimated closed shop premium is approximately the same in both years.

Source: Blanchflower and Oswald (1988b).

Table 11.4 Union presence and financial performance

	Probability of above average performance (%) Establishment size				
	25–49	*50–99*	*100–199*	*200–499*	*500+*
Non-union	50	59	58	66	67
Union recognition	34	43	42	50	51
Closed shop	18	24	24	30	31

Note: The sample is all private sector establishments in WIRS 2 sample (*n*=948). The estimates are obtained from a probit equation, all the other variables are set to their means. The control variables are: state of product market, labour cost in total cost, presence of various forms of profit related pay.
Source: Blanchflower and Oswald (1987a).

How would you assess the financial performance of this establishment compared to other establishments in the same industry?

Blanchflower and Oswald (1987b) used this information to calculate the impact of unions on financial performance. Their results are reported in Table 11.4. In each size group non-union establishments were more likely to report superior financial performance than workplaces where unions were recognised for collective bargaining. And among the latter, where there was a closed shop the financial performance was worse than where unions were recognised but there was no closed shop.

Machin and Stewart (1988) supplement these results by bringing in product markets. They find that these negative union effects on financial performance are more marked where establishments have high market shares and/or are operating in highly concentrated industries. Thus the ability of the union to capture excess profits is greater where the establishment itself is powerful in its product market.

This negative effect of unions on profits is confirmed in the only other thorough British study. Machin (1988) analysed the influences on the profits to sales ratio across 145 manufacturing firms in 1984 and 1985 (that is, 290 observations). He controlled for capital, market share, concentration and export share. The mean profit to sales ratio was 9 per cent. But in firms where unions were recognised profitability was one third lower at 6 per cent.

There are a number of routes by which union presence may be

associated with lower profitability. The association is causal if unions bring about higher labour costs via their effects on relative pay and labour productivity. The evidence above (Sections 2 and 3) is consistent with such a route. Alternative routes would not point the finger at unions. For example, unionised firms may have lower product prices because they compete in international markets. Or, as managerial theories of the firm emphasise (Leibenstein, 1988), profits can be consumed inside the firm and perhaps unionised firms are specially prone to this. Finally, the association may simply be a life cycle effect: high unionisation and low profitability both being present in older firms and industries. Machin controlled for the age of the firm so this last route is unlikely to be an important explanation for the association.

Union presence is certainly associated with lower profitability. Whether this matters much is altogether a different question. It matters if, as a consequence, unionised firms invest less in physical and human capital and in research and development. Such an adverse union impact on capital accumulation would lower the underlying rate of growth of our economy. Unfortunately there is very little evidence on this important issue. Metcalf (1988b) surveyed the few available fragments and concluded, tentatively, that such union activity had contributed to our poor performance in the 1970s but that the effect had probably tapered in the 1980s.

5 UNIONS AND JOBS

The association between unionisation and job gains and losses appears to provide the most stunning bit of evidence concerning the impact of unions on workplace and economy-wide performance. There are two types of evidence. First, WIRS 1 and 2 indicate the characteristics of workplaces which gain or lose jobs. Secondly, more aggregate data get at the effect of changes in membership or militancy over time. As the evidence indicates that union activity hinders employment it is worth remarking that none of the authors quoted here has any axe to grind in the sense of being 'anti'-union.

Between 1980 and 1984 non-union establishments were twice as likely to boost employment by a fifth or more as they were to reduce employment by a corresponding amount (Table 11.5). By contrast, unionised workplaces were twice as likely to cut a fifth or more of their jobs as they were to increase jobs by this figure. And closed

Table 11.5 Unions and jobs

| | Change in employment (%) | | |
	Decrease of 20%+	*−19% to +19%*	*Increase of 20%+*
1975–80			
Non-union	14	47	39
Recognition, no closed shop	23	49	28
Closed shop	21	62	17
1980–84			
Non-union	15	62	33
Recognition, no closed shop	27	55	18
Closed shop	37	55	9

Note: Data refer to private sector establishments with more than 24 employees. The data are interpreted as follows. The 14% (top left) means 14% of non-union establishments decreased their employment by 20% or more between 1975 and 1980.
Source: Blanchflower and Millward (1988).

shop workplaces were four times more likely to suffer such job losses than gains. A similar pattern holds – albeit a little less starkly – for 1975–80.

Clearly, *changes* in jobs cannot necessarily be explained by *levels* of unionisation. Small workplaces may be more prone to experience job gains and less likely to be unionised. Similarly, jobs may be being shed across the world in older industries which just happen to be unionised in Britain. In order to control for such extraneous influences on jobs Blanchflower and Millward (1988) used WIRS 1 and 2 data to regress employment changes in over 1000 workplaces on unionisation, holding constant establishment size, industry characteristics, demand for the product made by the establishment and previous employment level. The conclusion from this sophisticated exercise is that 'even when appropriate statistical controls are incorporated, there is still evidence of an effect from unionisation on to the rate of increase or decrease of employment. Unionism apparently retarded employment growth in Great Britain in the 1980s' (Blanchflower and Oswald, 1988b).

The impact of unionisation on employment has also been analysed using aggregate data. Union militancy may raise real wages above the level warranted by productivity. Such militancy might reflect a shift in the relative valuation of real wages and employment. Union militancy

is often measured by the wage premium received by union members over comparable non-union members (though whether this is a truly independent measure of union power, or instead itself depends on employment changes is a moot point). This union mark-up rose substantially in the post-war period. Layard and Nickell (1985) estimate that the consequent increase in labour costs accounted directly for over one-sixth (over 2 percentage points) of the increase in unemployment 1956–83. There was also an indirect effect of a similar amount because a more restrictive macroeconomic policy was required to control inflation in the face of enhanced union power. Nickell and Andrews (1983) provide corresponding evidence for manufacturing alone and suggest that enhanced union activity on the wage front cost some 300,000 jobs in that sector between 1957 and 1979.

Two profoundly important conundrums remain concerning the link between union activity and jobs. First, are restrictive practices good or bad for jobs and unemployment? Secondly, would corporatism – which implies strengthening rather than weakening unions nationally – deliver a higher level of employment? These puzzles have been investigated (see, for example, Jackman, Layard and Nickell, 1988, and Metcalf, 1988c, respectively) but, alas, with no definitive conclusions.

6 SWORD OF JUSTICE

Unions are undoubtedly a force for equality in the workplace. Workers covered by collective agreements have significantly lower pay dispersion than uncovered workers. Further, lower paid groups and minorities gain more from union membership than their opposite numbers. When the union impact on pay is combined with membership information, the wage structure is shown to be narrower than it would be in the absence of unions.

Earnings dispersion is lower for union workers than it is for non-union employees. It can be calculated from Gregory and Thompson (1981) that the coefficient of variation (standard deviation/mean) of weekly pay of male workers in 1978 was as follows shown in Table 11.6.

This greater equality of pay among union members, as compared with non-union members, reflects two forces. First, it seems likely that union members are less heterogeneous than non-members.

Table 11.6 Coefficient of variation of weekly pay of male workers, 1978

	Covered workers	Uncovered workers
NON-MANUAL		
Managerial	0.38	0.64
Professional	0.35	0.48
Intermediate	0.29	0.42
Junior	0.29	0.40
MANUAL		
Foremen	0.30	0.34
Skilled	0.29	0.35
Semi-skilled	0.29	0.37
Unskilled	0.30	0.39

Secondly, union goals play an important part. As early as the beginning of this century Sidney and Beatrice Webb (1902) wrote 'one [trade union regulation] stands out as practically universal, namely, the insistence on payments according to the same definite standard, uniform in its application'. More recently Clegg (1970) indicated than in multi-plant firms in the engineering industry, for example, shop stewards combine committees 'exchange information about pay and conditions, but sometimes they go beyond this to agitate for equalisation of pay and conditions between factories'. WIRS 2 confirms the continuing dominance of collective goals in the union sector. When asked to list any factors that had influenced the level of pay in the most recent settlement, managers in the non-union sector were six times more likely to mention merit or individual performance than their counterparts in the union sector (Blanchflower and Oswald, 1988a).

In recent years there have been a spate of studies which estimate the union mark-up (that is, pay of a union member compared with an otherwise similar non-union member) for different groups. These inquiries confirm that it is the lower paid or minority groups who gain most from union membership. The union mark-up is higher for women than men (Nickell, 1977), for blacks than whites (Blanchflower and Stewart, 1987), for unskilled than skilled workers (Blanchflower, 1984) and for the disabled compared with the able-bodied (Blanchflower and Oswald, 1988b). Thus once these discriminated-against or less-productive groups get under the union umbrella they do better, relative to their non-union counterparts, than do white, male, skilled, able-bodied union members relative to their non-union counterparts.

Table 11.7 Impact of unions on pay differential by race

Race	Pay differential compared with whites (%)		
	Non-union members	Union members	Average
West Indian	–19	–11	–14
Asian	–19	–16	–17

Note: Data refer to male manual workers in 1982. Union membership defined as union member or working in plant where unions recognised for collective bargaining. Control variables are: age, school leaving age, whether had an apprenticeship, marital status, whether a secondary worker, if working part time or shifts, whether supervises others, region, whether on short time, establishment size.
Source: Blanchflower and Stewart (1987).

This is illustrated in the case of whites, Asians and West Indians in Table 11.7. For male manual workers in the British labour market in 1982, union membership narrows the race wage differential from –19 per cent to –11 per cent for men of West Indian origin and from –19 per cent to –16 per cent for men of Asian origin.

It does not follow automatically from these results that unions reduce wage inequality compared with what it would be in a world with no unions. This overall impact of unions on inequality depends on both their impact on pay and on the proportion of the different age, skill, sex, race and occupational groups which are union members. However, when the required information is brought together (Metcalf, 1982) unions are indeed shown to have an egalitarian effect. Union activity narrows the wage structure by the following amounts:

	Per cent
Female – male	1
Black – white (male)	5
Unskilled – skilled (male)	2
Manual – non-manual (male)	9

Unions cause less inequality in pay. Further, union presence in the workplace tends to reduce arbitrary treatment of employees by managers and it ensures proper representation on other important

non-pay matters like health and safety. But for unions the labour market would surely be a more unequal place.

7 1980s – THE TRANSFORMATION OF INDUSTRIAL RELATIONS IN MANUFACTURING

There has been a sea change in the industrial relations climate in the 1980s (Metcalf, 1988a). The evidence above implies that this change in the environment has not (so far) fully overturned either the vested interest or the sword of justice roles played by unions. What it has done, however, is to contribute to the labour productivity miracle in our manufacturing industry. Even though union plants may still have lower labour productivity than non-union plants, in the last seven years labour productivity growth has averaged nearly 6 per cent a year, more than double the growth rate of the 1960s and 1970s. The transformation of industrial relations is of paramount importance in explaining this turnaround in our performance.

Thatcherism in the workplace rests on market forces, the legal framework and employee involvement. This contrasts sharply with the approach of the 1970s which emphasised joint regulation of the effort bargain between trade unions and employers.

Industrial relations methods in manufacturing in the 1970s stemmed from the prescriptions of Royal Commission on Trade Unions and Employers Associations, chaired by Lord Donovan, whose report was published 20 years ago. Donovan advocated for-malising workplace procedures. Personnel specialists grew by leaps and bounds, single employer bargains rose, the number of shop stewards increased faster than union membership and they were given more facilities. Scientific management techniques like job evaluation and work study became pervasive.

Hand in hand with all this formalisation, our labour productivity deteriorated relative to both other countries and our own past record – yet Donovan had been established to recommend solutions which would rupture the link between bad industrial relations and poor economic performance. In fact the formalisation process was not to blame. WIRS 2 shows that the progress towards formalisation and company bargaining continued in the 1980s. So the key to our improved performance must be the changed climate in which unions and employers operate. My research (Metcalf, 1988b) shows that the 1980s productivity boost in manufacturing rests on three industrial relations factors.

First, there is an element of fear. Labour productivity has risen most in those industries which had the biggest job haemorrhage in the early 1980s. The fear of bankruptcy around 1980 and 1981 led, on the employers' side, to an assault on over-manning and other restrictive practices. Employees, often fearful for their jobs, were prepared to work harder. The index of mental and physical effort put in by workers in manufacturing – based on work study techniques – shows far greater work effort in the 1980s compared with the 1970s.

Secondly, competition has intensified, so firms now pay more attention to their labour costs. State handouts to unionised, male, monopolistic sectors like coal, steel, ships and cars reached an all time peak in the 1970s but have withered away to almost nothing today. Many goods and services previously supplied by the state have been privatised or contracted out. In the private sector the channel tunnel and proposals to auction ITV franchises have, for example, undercut traditional manning arrangements in ferry and TV operation.

Thirdly, the decentralisation of collective bargaining to company and plant level in the private sector has sharpened discipline on employers. At least a fifth of manual workers in manufacturing were covered by a fully-fledged flexibility agreement between 1980 and 1986. Further, CBI data show that where unions are recognised, every year one third of all pay settlements involve concessions to boost productivity including removal of restrictive practices, introduction of new technology and the extension of shift work.

The industrial relations climate is very different now to that of the 1970s. Then incomes policies took bargaining about productivity off the agenda for nearly half the decade. And the attempts to cooperate with the TUC at national level resulted in laws to extend union-determined pay rates to the non-union sector, to strengthen recognition procedures and the closed shop and to extend the umbrella against unfair dismissals. These laws may well have been desirable but were more likely to reduce than enhance productivity growth.

The role played by the 1980s industrial relations legislation is less clear cut. Real union power rests on the closed shop and the strike threat. The closed shop has, to all intents, been outlawed. The strike threat has been checked by narrowing the definition of a trade dispute – action beyond the workplace renders a union liable for fines and sequestration.

This legislative revolution must have played its part in the superior

productivity performance of the whole manufacturing sector in the 1980s. But there is a bit of a puzzle here. There is certainly more scope for increasing labour productivity in highly unionised than in less unionised sectors. And there have been some celebrated cases – newspaper printing and ferries for example – where the legislation has been used against a powerful union which acted illegally in the face of management attempts to alter traditional work practices. Yet the evidence shows clearly that labour productivity has in fact grown just as fast in industries like clothing and electrical equipment where union presence is low as it has in cars, railway vehicles, aerospace and printing where unions are pervasive. So the legislation must be an important background factor determining the industrial relations climate, but it has not caused the highly unionised industries to outperform those where the unions are weaker.

Only time will tell whether the reformation in industrial relations is permanent and if the higher productivity trend will endure. One route to durable productivity growth lies in greater cooperation between management and labour. Such cooperation depends on corporate cultures and on union organisation and goals. The other route rests on managerial control.

There is no strong evidence that we have entered a new era of reciprocity between employers and unions. Corporate cultures change only slowly. So far things like employee involvement and quality circles are simply piecemeal fads which sometimes get re-labelled as human resource management – old wine in new bottles. Profit sharing is more hopeful. Companies with profit sharing have higher labour productivity than those without it. While profit sharing is on the increase it represents only a minute fraction of the British pay bill.

Co-operation is more difficult to achieve if more than one union is represented in a workplace. Multi-unionism is just as widespread now as it was in the 1970s. The less adversarial style of industrial relations represented by single union, participative, single status agreements with pendulum arbitration is growing but presently only covers a tiny proportion of employees.

So the productivity boost must mainly be due to greater managerial control and more compliant unions. It does not seem likely that these circumstances will change much in the near future, but if they do our productivity performance may slacken.

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12 On the Divergence of Unionism among Developed Countries

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1 INTRODUCTION

In this paper I explore the evolution of unionism in 1970s and 1980s when the post oil-shock world economy created a 'crisis of unionism' throughout the western world. I try to explain why union representation of work-forces fell in some countries but not in others and contrast union responses to the challenge of the period. I find that:

1. Rates of unionisation diverged greatly among developed countries (Section 2.1).
2. The composition of union members shifted from private sector blue-collar workers to public sector and white-collar workers in all countries, producing increased divisions within union movements by category of worker (Section 2.2).
3. Changes in the industrial composition of employment, changes in public attitudes toward unionism, and the growth of governmental protection of labour do not explain the divergence in density (Section 3.1).
4. Differing rates of inflation contributed to the divergence, with unions doing better in countries with high inflation. In addition, unemployment raised density in settings where unions disperse unemployment benefits (Section 3.2; Section 3.5).
5. The primary reason for the divergence are differences in the incentives and opportunities different industrial relations systems give employers to oppose unions. Unions fared best in neo-corporatist settings and worst in settings where decentralised bargaining creates a strong profit incentive for managers to

oppose unions and where management is relatively free to act on that incentive (Section 3.3; Section 3.5).

6. Union organisations and modes of operating changed significantly in some countries with declining or endangered unionism but not it others (Section 3.4).

Most strikingly, my analysis indicates that if 1980s trends continue the west will be divided between countries with strong trade union movements operating in a neo-corporatist system, as in Scandinavia, and countries with 'ghetto unionism' limited to special segments of the work-force, as in the USA.

2 CHANGES IN UNIONISM AMONG DEVELOPED COUNTRIES

In contrast to business firms, which behave similarly in all capitalist countries, maximising profits or something closely akin to it, trade unions have a 'national' dimension, operating under distinct institutional arrangements across countries. In the United States unions negotiate detailed collective bargaining contracts with firms; in Sweden they are involved in national wage-setting and neo-corporatist social agreements; in Australia they argue wage cases before arbitration tribunals; in France they negotiate industry or regional minima that are extended to entire sectors; in Japan they represent workers at the company level and organise the Shunto offensive; and so on. Separated by national barriers, union movements are like distinct species of animals, developing differently in some dimensions even in similar economic and technological environments. In the 1970s and 1980s the union representation of workers underwent particularly dramatic changes across developed countries, rising in some countries to reach virtually complete organisation of the work force, while falling sharply in other countries. At the same time the composition of unionised labour underwent similar changes across countries, as the white collar and public sector worker share of union members rose while the manual and private sector manufacturing workers share of members fell.

2.1 Divergence in Union Density

The first and seemingly simplest fact to establish is the claimed divergence in union density among countries. However, because

counts of union membership include large numbers of the unemployed or of pensioners in some countries but not in others; come from diverse sources – labour force surveys, reports by unions, employer surveys, union financial records (see Eurostat for a detailed comparison of union data by country); and reflect differences in what unions do in different settings, the seemingly simple is fraught with problems. As examples of the difficulties in cross-country comparisons note the following: in Australia unions represent virtually all workers before the tribunals that formally set wages but enlist only half of the work-force; in France and Germany unions have a larger role in wage-setting than density figures indicate because agreements between representative employers and unions are legally extended to other employers; in Italy the growth of autonomous union groups in the public sector and of quadri among foremen and lower level management makes membership data from the major confederations an incomplete indicator of union organisation (Ministero del Lavoro e della Previdenza Sociale, 1988). These and other data/conceptual problems mean that even the most careful estimates of density provide only crude indicators of cross-country differences in union strength and must be informed by direct knowledge of institutions so as not to be misleading.

This said, Table 12.1 records estimates of the union proportion of non-agricultural wage and salary workers in OECD countries from 1970 to the mid-1980s. While comparisons of changes in density over time are less likely to be distorted by cross-country differences than are comparisons of levels, even the trends are not problem free. The United Kingdom figures understate the 1980s decline in British density as some unions exaggerated membership to maintain high representation in the Trade Union Congress and Labour Party. The American data mix two opposing trends: a disastrous drop in private sector density and a spurt in public sector unionism. The Italian data may overstate the 1980s drop due to absence of membership outside the three confederations.

Measurement issues notwithstanding, Table 12.1 shows a divergence in densities that is unlikely to change with better data. From 1970 to 1979 density increased in most countries, rising 10 or so points in several, but fell in the United States, Japan, and Austria. From 1979 to 1985–6 density dropped in the United Kingdom, the Netherlands, and Italy as well as in the USA and Japan while stabilising in most other countries. Two decades of decline make the USA and Japan the centres of de-unionisation, greatly reducing their share of union membership in the West. In 1970, 42 per cent of all

Table 12.1 Levels and changes in union membership as a percentage of non-agricultural wage and salary employees across countries, 1970–86

	1970	1979	1985/6	1970–79	1979–86	1970–86
Countries with sharp rises in density						
Denmark	66	86	95	+20	+9	29
Finland	56	84	85	+28	+1	29
Sweden	79	89	96	+10	+7	17
Belgium[a]	66	77	–	+11	–	–
Countries with rises in density in 1970s/ stable in 1980s						
Germany	37	42	43	+ 5	+1	6
France[b]	22	28	–	+ 6	–	–
Canada	32	36	36	+ 4	+0	4
Australia	52	58	56	+ 6	–1	5
New Zealand	43	46	–	+ 3	–	3
Ireland	44	49	51	+ 5	+2	7
Switzerland	31	34	33	+ 3	–1	2
Norway	59	60	61	+ 1	+1	2
Countries with rises in density in 1970s/ declines in 1980s						
Italy	39	51	45	+12	–6	6
United Kingdom	51	58	51	+ 7	–7	0
Countries with declining density						
Austria	64	59	61	– 5	+2	– 3
Japan	35	32	28	– 3	–4	– 7
Netherlands	39	43	35	+ 4	–8	– 4
United States	31	25	17	– 6	–8	–14

Notes:
a Visser (1985) excludes pensioners, and reports: 55% in 1970, 69% in 1979, and 74% in 1983.
b Visser (1985) reports densities of 26, 24, and 21, which would put France in declining density.
Sources: US Bureau of Labor Statistics; London School of Economics OECD Data Set, updated using relevant Country Statistical Abstracts

union members of the countries in the table were American or Japanese. In 1985/86, despite an increase in the American and Japanese share of wage and salary workers from 50 per cent to 54 per cent, the two countries accounted for only 34 per cent of union

members.[1] As a result of the different trends in unionisation, the coefficient of variation of density rose from 0.31 in 1970 to 0.39 in 1985–6.

Note, finally, that density changed differently between pairs of countries with similar industrial relations systems – the United States and Canada; the United Kingdom and Ireland, Netherlands and Belgium – indicating that the diverging trends represent more than disparate development of greatly different forms of unionism. The differing evolution of unions between close pairs suggests that *relatively modest differences in industrial relations laws and institutions can significantly affect the evolution of unionism.*

2.2 Membership Composition

Despite differing trends, the composition of union membership in virtually all countries shifted in the 1970s and 1980s from the blue-collar private sector workers who constituted the vast majority of members in earlier decades to public sector workers and in some countries to white-collar private sector workers as well (see Table 12.2). In the United States, where the public sector was viewed as unorganisable in the 1950s and 1960s, state and local legislation legalising public sector collective bargaining spurred huge increases in union membership and collective bargaining representation (Freeman and Ichniowski, 1988) with dramatic effects on the public sector share of unionists due to the decline in private sector membership. In countries like Denmark and Sweden, where blue-collar private sector organisation rates were high at the outset of the period, growth was necessarily concentrated among public sector and white-collar workers. In Canada, public sector membership expanded rapidly, partly as a result of favourable public sector labour laws, while private sector density drifted downward. One reason for the increased attractiveness of unions to public sector and white-collar workers was a perception that they needed unions to maintain real wages during the 1970s rapid inflation. Once established, moreover, public sector membership tends to be more stable than private sector membership due to the stability of public employment.

The shift to white-collar and public sector membership has begun to change the face of union movements traditionally dominated by industrial workers. In the USA the locus of power in the AFL-CIO is shifting to public sector organisations while the non-affiliated National Education Association has achieved considerable national

Table 12.2 Public sector and private sector blue-collar shares of union membership, by country

Country	Private sector blue-collar share 1970	Private sector blue-collar share 1980s	Change	Public sector share of union members 1970	Public sector share of union members 1980s	Change
United States	67	54	–13	14	36	22
United Kingdom	55	45	–10	34	39	5
Japan	–	–	–	29	29	–
Canada	–	–	–	26	45	19
Germany	54	48	– 6	33	35	2
Italy	65	55	–10	18	24	6
Sweden	45	32	–13	36	44	8
Austria	52	44	– 8	33	35	2
Netherlands	51	39	–12	37	46	9
Switzerland	50	46	– 4	29	30	1

Source: USA: 1980s from US Bureau of Labor Statistics, 1988
USA: 1970, from US Bureau of Labor Statistics, 1972, where I estimate the private sector blue-collar union members by subtracting public sector members outside public administration and services from blue-collar.
Japan: Japan Ministry of Labor, 1 March 1971 and 1 April 1985
Canada: 1970 is 1971 from Wood and Kumar (1977); 1980s from Kumar *et al.* (1986). I have taken union workers in public administration plus 89 per cent of those in the services (=education and health and welfare share of union members in services in 1986) as estimate of union membership in government jobs.
All others: from Visser (1985).

influence. In Italy the new autonomous public sector organisations and quadri pose a challenge to the three traditional confederations. In Sweden and Denmark the white-collar unions have shown an increasing willingness to develop their own economic agenda rather than to follow the lead of blue-collar manufacturing unions.

3 REASONS FOR THE DIVERGENCE

Several hypotheses can be advanced for explaining the divergence in density: changes in the composition of employment, in attitudes toward unionism, and in governmental protection of labour which reduce worker desires to organise; macroeconomic developments;

management opposition to unionism; and differential responses of union movements to the problems of the period.

3.1 Structural Explanations

One often suggested explanation for changing unionisation is the differential changes in the *composition of employment* among jobs or workers, which in the 1970s and 1980s took the form of a shift toward traditionally less unionised areas. In countries where employment shifted rapidly from manual to white-collar jobs, from goods to service industries, from small to large firms, and from female to male or from less-educated to more-educated workers, unions are, after all, likely to have greater difficulties organising than in countries where those shifts occur more slowly.

The shift hypothesis does not, however, stand up to scrutiny. Shifts in the composition of employment cannot explain divergent country experiences because shifts have occurred similarly across countries: the share of employment in manufacturing fell, for example, by roughly as much in high and increasing density Sweden, Canada, or Denmark as in the de-unionising USA or Japan.[2] Contrary to the shift hypothesis, moreover, large changes in union representation are accompanied by changes in density *within* sectors, as Table 12.3 demonstrates for countries with declining unionism.

A second possible explanation for diverging union density is that public opinion of unions has come to differ greatly among countries. Perhaps density is declining in countries where the public has less favourable attitudes and increasing/stabilising in those where the public has more favourable attitudes. Lipset (1986), for one, has argued that reduced public approval is a major cause of the decline in American union density.

I reject this hypothesis as inconsistent with within-country and cross-country and evidence. First, there is little relation within countries between changes in opinion polls and in union density. Polls for the UK show that attitudes toward unionism became more favourable during the 1980s decline in unionism; while those for the USA show public approval of unions steady between 1972 and 1985 when density fell sharply in the private sector and rose in the public sector, where public opinion ought to be especially important.[3] Moreover, for what it is worth, cross-country opinion poll data show no substantial differences in approval of unions between countries with decreasing density and those with stable density: 'polls show about a 33

Table 12.3 Changes in union density by sector: USA, Canada and Japan

	United States			Canada			Japan		
	1973–5	1986	Change	1975	1984	Change	1975	1986	Change
Total	29	18	–11	35	37	2	34	28	– 6
Manufacturing	37	24	–13	49	45	– 4	40	33	– 7
Construction	38	22	–16	63	39	–24	18	19	1
Transportation, communication & utilities	50	35	–15	56	60	4	66	56	–10
Services	7	6	– 1	15	38	23	26	19	– 7
Mining	35	18	–17	47	33	–14	41	42	1
Trade	11	7	– 4	9	13	4	9	9	0
Finance, insurance & real estate	4	3	–1	1	9	8	20	18	– 2
Government	24	36	12	73	67	– 6	67	69	2

Sources: USA 1973–5: Richard B. Freeman and James Medoff (1979) with government estimated from May 1973–5 Current Population Survey Tapes.

USA 1986: US Bureau of Labor Statistics, January 1988.

Canada: Kumar *et al.*, (1986).

Japan (1970 & 1986): Japan Ministry of Labour, *Basic Survey of Trade Unions. Foreign Labour Trends.*

per cent (confidence) in the United States . . . higher than in Britain (26 per cent) and Italy (32 per cent) and scarcely worse than German and France (both 36 per cent)' (Hecksher, 1988, p. 258). Perhaps most strikingly, comparisons of opinion polls between the United States and Canada show that Canadians have, if anything, less favourable attitudes toward unions than Americans (Chaison and Rose, 1988), which runs counter to the decline in density in the United States and stable density in Canada.

A third possibility is that the divergence results from differential changes in worker need for unionism among countries. Perhaps *governmental protection of labour* increased more in some countries than others, offering a substitute for unionism (Neuman and Rissman, 1984, argue that this explains the decline of unions in the United States). Perhaps wages and personnel practices improved more in some countries than in others, offering a substitute for unionism.

There is compelling evidence against this hypothesis. First, unionism has remained strong in Scandinavia and other European countries with highly regulated markets while losing strength in the United States under Reagan and in the United Kingdom under Thatcher – the opposite of what one would expect if governmental regulations substitute for union protection at work places. Within-country evidence is also inconsistent with the government substitution hypothesis: in the United States unions have done no worse in states with the greatest legal protection of labour than in those with the least (Block *et al.*, 1987; Freeman, 1987). At a conceptual level the argument that unionism and government regulation are substitutes is flawed because it fails to recognise that 'enacting a law and securing the realisation of the purpose the law is aimed to secure are two vastly different matters' (Gompers, 1965, p. 54). To benefit from legal regulation workers need a union or union-like agency to monitor compliance at the shop-floor. As for the substitution of good employment practices for unionism, while high wages and positive industrial relations can deter unionisation, the large firms that pay above-market wages and have progressive human resources policies – of which IBM is the exemplar – employ similar moderate and *declining* proportions of work-forces in industrial economies (OECD, 1986). Changes in union density are, moreover, uncorrelated with levels or changes in real wages across countries, contrary to what one would expect if high or improving pay reduced the desire for unions.[4]

If none of the above explains the divergence in density, what does?

3.2 Macro-Economic Factors

One likely factor is the differing *macro-economic* experiences of countries. On the basis of studies of the cyclical pattern of union growth, high unemployment, low inflation, and slow economic growth ought to reduce unionism while the opposite conditions should increase density.[5]

To explore this hypothesis I contrast in Figure 12.1 the growth of employment and GDP per capita, the rate of inflation, and the rate of unemployment between countries with increasing, decreasing, and roughly stable union density. The results are, with the exception of inflation, rather mixed. Rapid inflation is associated with union growth, presumably because non-union workers see a need for contractual arrangements to preserve real earnings. Employment growth is higher in declining union density countries while growth of GDP per capita and most strikingly, unemployment rates do not differ noticeably. As will be shown in Table 12.4 these patterns or lack of patterns hold up in multivariate regressions covering longer periods of time. The lack of a linear relation between unemployment and changes in density is partly attributable to the concordance of high unemployment and increased union density in Belgium and Denmark – two countries where for historical reasons unions disperse government-funded unemployment benefits (as in Sweden and Finland), inducing workers who lose jobs to maintain or join unions in periods of increasing unemployment.

3.3 Management Opposition to Unionism

The factor that, I believe, explains best the divergence in union experiences are differential changes in the difficulty of organising new workers due to changes in the level and effectiveness of *management opposition to unionism*. Here, the rapidly de-unionising United States is the prima-facie case of what aggressive management can do to unionism. In the 1970s and 1980s US management turned against unions and collective bargaining to a degree not seen anywhere else in the free world. Virtually all firms that faced National Labor Relations Board representation elections (the government-run secret ballot process by which American workers can choose to unionise) engaged in expensive aggressive campaigns to persuade/pressure workers to reject unions. Unfair labour practices of diverse forms (including firing upwards of a thousand union activists in a year)
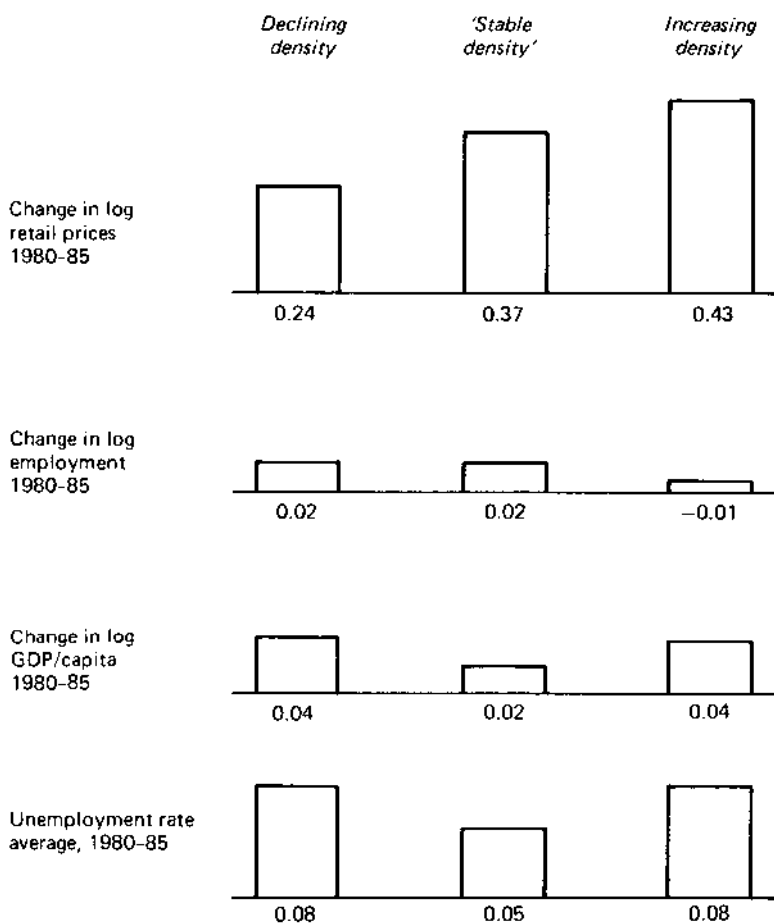
Declining density	'Stable density'	Increasing density

Change in log retail prices 1980-85
0.24   0.37   0.43

Change in log employment 1980-85
0.02   0.02   −0.01

Change in log GDP/capita 1980-85
0.04   0.02   0.04

Unemployment rate average, 1980-85
0.08   0.05   0.08

Figure 12.1   Macro-economic differences by countries with different changes in union density, 1980–6

Notes: Figures are averages for countries.
Declining Density Countries defined as United States, Japan, United Kingdom, Netherlands.
Increasing Density Countries defined as Denmark, Sweden, Belgium, *Ireland*.
Other Countries: all others from Table 12.1.

skyrocketed to rates five or six times those in earlier decades. Large non-union firms consciously copied union seniority and grievance procedures to deter employee interest in unions. Forty-five per cent of the relatively progressive firms in the Conference Board's Personnel Forum declared in 1983 that operating 'union-free' was their main labour goal (Kochan *et al.*, 1986) – a far cry from the 1950s and 1960s when most large firms accepted unions at the workplace. Even when workers voted to unionise, moreover, management avoided a first contract in one-third of the cases, effectively negating the election. On the basis of diverse studies that show management opposition to have been a major factor in the failure of unions to organise in the period (Freeman, 1985), most analysts have come to believe that it is a, if not *the*, major cause of the decline in private sector density.

Why did American management declare war on unions? One reason is that unionism became more costly to firms. It became more costly because the union wage premium rose in the 1970s (Freeman, 1986) and because growth of trade, deregulation, and other factors increased product market competition, making it more difficult to pay above-market wages. A second reason is the growth of a militant market-oriented ideology that justified virtually any anti-union action as preserving managerial flexibility. A third reason is the development of a sophisticated union-prevention technology that exploits the opportunities US labour laws give management to campaign against unions. In Canada, where labour law limits management's ability to fight unions, often by certifying unions after card checks, many of the same firms that go all out to defeat unions in the USA accept unionisation of their Canadian plants.

Is management opposition important in other countries with rapidly declining density?

In the United Kingdom, the principal cause of the 1980s drop in density appears to be the Thatcher government's industrial relations laws, which shifted the balance of power at workplaces to management and weakened the ability of unions to organise (Freeman and Pelletier, 1989). While management opposition to unionism has not taken the form of virulence shown in the USA the new features of the law have enhanced resistance to union activities.

In Japan, government and management opposition have played a major role in the drastic loss of membership of Kokuro, the militant union of now privatised Japanese National Railway. Once the largest railway union with over 500,000 members, in 1988 it had only 42,000 members due to management's union-busting tactis (Nagashima,

1988). Similarly, the Japanese Teachers' Union has suffered major losses of membership due in part to government efforts to discourage newly-hired teachers from joining the union. More importantly, data on the number of workers newly organised shows a pattern remarkably like that in the United States, with the bulk of the drop in unionism attributable to a precipitous fall in union organisation of new workers relative to the growing work-force. The drop in new organisation occurred after the oil shock placed severe economic pressures on Japanese employers, was accompanied by changes in court interpretation of labour law favourable to management, and was concentrated in industries facing the greatest profits squeeze (Freeman and Rebbick, 1989). Given the close ties between companies and unions in an enterprise union system, and the role of white-collar employees in company unions, I find it hard to believe that changes in company attitudes toward unionism has not played a role in the inability of unions to organise new workplaces.

In Italy and the Netherlands, management opposition of the American or milder British type would appear to have little to do with the observed changes. The 1980s decline in density in Italy has been attributed to the disorganisation of the union movement that developed after 1983. The 1980s decline in density in the Netherlands may be largely the result of the high unemployment that developed in the mid-1970s and persisted for over a decade.

What about management behaviour in countries where union density reached unprecedented peaks in the period under study? If differences in management opposition contributed to the divergence, one would expect less opposition in those countries, either because firms have little profit incentive to avoid unionism or little legal or institutional opportunity to express opposition.

The prime factor that appears to reduce the profit incentive to fight unions is centralised wage negotiations. In countries where unions and management engage in national bargaining – so-called neo-corporatist systems – managements form employers' federations to establish going national wages and often pressure non-union firms to recognise unions, presumably to assure that they pay the going rate. The notion that business should engage in a *jihad* for union-free environment as in the United States is anathema to employers in such a setting. Unionism has accordingly fared well, with density increasing in the 1970s and 1980s even though density was already high at the outset of both periods (Figure 12.2).

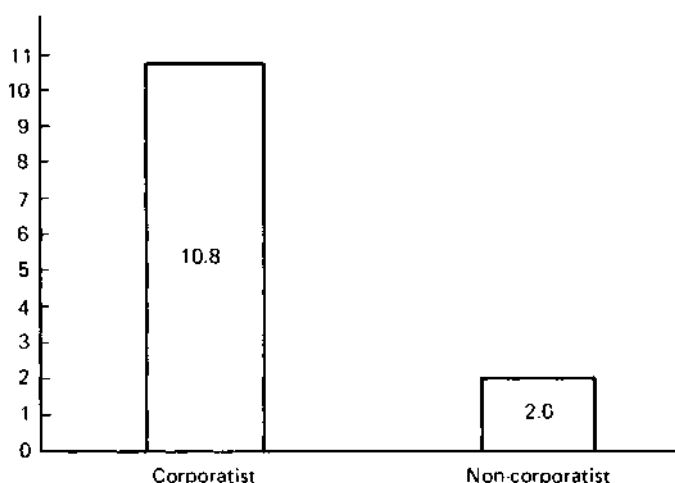Countries where the state extends collective contracts to non-union

Figure 12.2   Percentage point changes in union density, 1970–85/86

Source: Corporatist countries taken from Crouch (1985). They include: Austria, Denmark, Finland, Netherlands, Norway, Sweden, Switzerland, and West Germany.

firms such as West Germany and France and where workers are represented by works councils (much of Western Europe) might also appear to give employers little reason to oppose unions at the plant level. Here, however, the likelihood that plant-level agreements will go beyond representative contracts suggests that employers will be more opposed to unions than in neo-corporatist settings. In fact, unionisation trends in West Germany and in France (as best one can tell from available data) are intermediate between those of the USA, UK in the Thatcher era, and Japan and the neo-corporatist countries.

Finally, the growth/stability of unionism in Canada and in Ireland shows that even in industrial relations systems where management has a substantial profit incentive to oppose unions, legal restrictions on opposition can produce developments that differ from those in neighbouring countries (USA and UK) where the laws are less favourable to organisation.

3.4   Union response

Another likely cause for diverging union densities are cross-country differences in *union responses* to economic changes. Sidestepping

wage setting (most union movements moderated wage demands relative to inflation for the sake of job security or to reduce unemployment) and strike behaviour (strike days lost in strikes fell in the 1980s in all countries) there was a wide range of union organisational responses to the crisis of the 1970s/80s.

The Australian union movement made perhaps the most dramatic adjustment to the new economic environment. After careful study of the German and Swedish experiences, the Australian Council of Trade Unions (ACTU) sought to transform Australian industrial relations from a confrontational British-style system to a neo-corporatist system, in part to pre-empt growing anti-union management sentiment that might fuel US or UK type losses of membership. In the mid-1980s the Secretary-Treasurer of the ACTU was doing his best to convince constituent unions to accept a national wages accord that required some unions to take lower wage settlements than they could otherwise get.

The American labour movement reacted more sluggishly. In the 1970s many top AFL-CIO leaders downplayed falling density on the grounds that absolute membership was stable and that an economic boom would cure all. In 1978 the Federation tried but failed to get a modest labour law reform bill. It was not until 1985 that top leadership sounded alarm bells with 'The Changing Situation of Workers and their Unions' report. Since then national unions have been slow to adopt the 'evolutionary blueprint' laid out in the report. While many now offer union Mastercards with attractively low rates of interest for their members (McDonald, 1987) few have actively pursued the key recommendation to create new forms of membership outside the collective bargaining structure. A major reason for the slow adaptation is the decentralised structure of organised labour, which consists of some 90 or so independent national unions in the AFL-CIO; others outside the federation; and hundreds of independent locals within the national unions. Each national and local has its own concerns, guaranteeing slow response to problems that affect unionism in general and making problematic implementation of reforms recommended by the AFL-CIO.

In the United Kingdom there has been a similar effort to devise new benefits (of the US Mastercard type) to attract workers. There have also, however, been more dramatic changes in industrial relations practices in some sectors: the Miners Union split; the Electricians and Engineering unions have developed co-operative single plant/single union bargaining strategies; the Boilermakers, among

others, have sought to enlist part-time workers. The big organisational change is, however, the splitting of the Trade Union Congress when it revoked membership of the Electricians in September 1988.

In some other countries where unions have been in trouble, there have been structural changes in union organisations. In Japan, two federations, Domei and Churitsu Roren, have dissolved and their private sector unions have formed the new federation Rengo to break free from the more politicised public sector unions. Sohyo plans to dissolve itself in 1990. In Italy, the three major confederations, which united briefly in the early 1980s, separated to engage in competitive recruiting efforts, each with its own style and selling points.

3.5 Regression Analysis

To estimate the quantitative impact of some of the aforementioned factors on cross-country changes in union density, I pooled data on density and its determinants across 18 developed OECD countries for the period 1973–85 and estimated a regression model linking changes (d) in density *(DENS)* to: a dummy variable for corporatist industrial relations *(CORP)*; the rate of inflation *(INF)*; changes in the unemployment rate *(UNE)*; a dummy variable for union delivery of unemployment benefits interacted with changes in the unemployment rate *(UI*dUNE)*; and selected other variables *(Z)*. Because density is bounded between 0 and 1 I use a log odds ratio form as well as a linear form:

dDENS or *dln (DENS/1-DENS)* = *a* + *bINF* + *cdUNE* + *UI*dUNE* + *eCORP* + *fZ* + *u*, where *Z* = set of variables that includes growth of employment and growth of GDP per capita and a vector of dummy variables for individual years. Controlling for individual years removes common cyclical variation from the data to focus on the cross-country differences of concern.

The regression estimates summarised in Table 12.4 show that, consistent with the simpler tabulations given earlier, density grew more in countries with corporatist industrial relations; with rising unemployment when unions deliver unemployment benefits; and with rapid inflation.

4 CONCLUDING COMMENTS

This study has shown that, contrary to the view that industrial relations characteristics converge as countries develop (Kerr *et al.*,

Table 12.4 Impact of corporatism, inflation, and changing employment
on annual growth of percentage unionised 1970–85

Explanatory variables	Dependent variables	
	Change in % union	Change in Log odds ratio of % union
(Mean in parenthesis)	(t statistics in parenthesis)	
Corporatism (0.48)	0.005 (2.53)	0.036 (3.61)
Inflation (0.079)	0.065 (2.60)	0.406 (2.99)
Change in unemployment (0.003)	–0.109 (0.77)	–0.655 (0.83)
Change in unemployment if		
unions give benefits (0.0009)	0.823 (4.19)	6.31 (5.81)
Growth of GNP (0.028)	–0.054 (1.18)	–0.19 (0.74)
Time	–0.001 (5.30)	–0.004 (3.26)
R-squared	0.23	0.25
Number of observations	259	259

Sources: Calculated from London School of Economics, Centre for Labour
Economics OECD Data Set.
Countries where unions give benefits: Denmark, Belgium, Sweden
and Finland.
Corporate countries: as in Figure 12.2.

1964), union density diverged among developed countries in the
1970s and 1980s. As all of the countries are advanced capitalist
economies undergoing similar economic changes, the divergence
implies that *relatively modest differences in the institutions that govern
labour relations exert a substantial influence on the evolution of
unionism*. The decline in union density in the United States and
Japan, where unions were thought to be part of the established order,
further implies that private sector unionism is a more fragile insti-
tution than is widely recognised. The broad implication is that in a
world of economic and social flux the structuring of labour relations is
not a once and for all process of setting up procedures and insti-
tutions. Rather, it is a process that must be undertaken time and again
as environmental changes alter the balance of power between workers
and management and their conflicting and coincident interests. There
is no rest in the practice or study of industrial relations.

Notes

1.   I calculated the coefficient of variation for 1985–6 using 1979 densities
     for Belgium, France, and New Zealand. The average density for the top

six countries was 65 per cent in 1970 and 79 per cent in 1985–6 while the average density for the bottom six countries was 31 per cent in 1970 and 30 per cent in 1985–6. I calculated the United States and Japanese shares of wage and salary employees using the data from the Centre for Labour Economics, OECD Data set, updated, and with union figures based as much as possible on the US Bureau of Labor Statistics data. The calculation is crude, using figures for the year closest to 1985 for countries with missing data.

2. OECD data show that the shift of employment out of manufacturing, was actually larger in OECD Europe than in the de-unionising United States. See OECD (1986) *Historical Statistics*.

3. The rise in favourable ratings of unions in the UK is documented in *The Financial Times*, 18 November 1987. Data on approval of unions in the United States are given by Lipset (1986). Because the US figures are from two separate surveys they are not strictly comparable.

4. This claim is based on correlating changes in real wages and in density using the LSE-OECD Data Set.

5. The literature here is enormous. The most influential modern econometric paper is by Ashenfelter and Pencavel (1969).

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Part III
Labour Flexibility and Unemployment

13 Labour Market Flexibility and Decentralisation as Barriers to High Employment? Notes on Employer Collusion, Centralised Wage Bargaining and Aggregate Employment*

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1 A PUZZLE: QUASI FULL EMPLOYMENT WITH WAGE BARGAINING CENTRALISATION

In the face of massive long-term unemployment, the early 1980s witnessed the resurgence of an old orthodoxy, based on two premises. First, mass unemployment results from the excess of wages with respect to productivity. Secondly, this should be removed, via reforms of industrial relations: enhancing market mechanisms would

be the best method to promote the required adjustment towards fuller employment. Academic researches and an impressive array of official reports have promoted (OCDE, 1986) or discussed this general view (BIT, 1987; Boyer, 1988). The related strategies have tentatively been applied in most OECD countries, with varying degrees of intensity and with contrasting results. For example, the outstanding job creation in the USA has been related to the significant flexibility and highly competitive nature of the American labour market, whereas the poor performance of much of Europe is frequently attributed to labour market rigidities, partly linked to the role of unions and state regulations.

Nevertheless, a series of recent theoretical and econometric studies point out more complex relations between competitive wage formation, the degree of centralisation, and unemployment rates. During the last decade, more decentralised industrial relations have not been associated with the best employment performance. Quite the contrary, the more centralised systems exhibit a high degree of success in containing unemployment, without impeding fostering inflation (OCDE, 1988, p. 36). The empirical record suggests that labour market flexibility is not the only road towards higher employment: adequate collective institutions for labour mobility, wage determination, training and re-skilling may be more efficient. This will be our central theme. The current concern with labour market institutions recalls the literature of the 1970s on neo-corporatism (Schmitter, 1974; Lehmbruch, 1977; Streeck, 1978) which has been taken into account more recently by macroeconomists (Bruno and Sachs, 1985; Bean *et al.*, 1986; Newell and Symons, 1987), with the general conclusion that macroeconomic outcomes are related to industrial relations and the structure of bargaining both in the labour market and at the level of national politics.

Throughout his academic life Tarantelli contributed to this area of investigation: his early concern with the economic role of unions (1978) is still present and elaborated in his essay on the relation between inflation and the degree of neo-corporatism (1983). His empirical studies for the period 1968–80 exhibited a close linear negative relationship between the degree of corporatism and a measure of macroeconomic achievement. More recent studies in the 1980s yield a somewhat different result, that is, a U-shaped relationship between unemployment and centralisation (Calmfors and Driffill, 1988) or wage dispersion (Freeman, 1988). Another and more complete paper

(Boyer, 1988) deals with the intermediate case of balkanised wage bargaining and tries to cope with the U-curve challenge. For simplicity's sake and to stick to Tarantelli's legacy, the present analysis will focus on a comparison between purely decentralised and totally centralised systems. Given this last restriction, the argument will be mainly theoretical, although the conclusions will be related to some very stylised facts.

Basically, the model starts from recent advances in microeconomic theories of the capital labour relation. Notwithstanding the fact that labour is hired in the market, it is not a conventional commodity since its productive use presupposes adequate devices for promoting workers commitment and involvement. Monitoring and high wages are the usual tools deployed to enforce labour discipline (Bowles, 1985) or consent (Akerlof, 1984). This paper examines the consequences of the labour commitment problem in a series of models in which the degree of centralisation varies from the purely competitive case to an idealised social-democratic institutional setting.

First, in Section 2 a previous model by the authors (Bowles and Boyer 1988) is extended to an open economy, in order to scrutinise the possible links between economic openness and the effect of wage bargaining on unemployment. The following analyses then compare various institutional settings. If purely decentralised wage bargaining prevails, that is, if the market is the only method for making workers' and firms' strategies compatible, can full employment be reached? Paradoxically, the endogeneity of labour intensity prevents such an outcome and this is discussed in Section 3. One may recognise the old Kaleckian analysis of the disciplinary role of unemployment, not to mention the more recent Shapiro and Stiglitz (1984) argument. If on the contrary as discussed in Section 4, all the firms collude and act as a single monopsonist in wage setting, then a higher employment level is generally possible. In another polar case, a single strong union sets its strategy taking into account the likely macroeconomic effects of its own decision. Again, the comparison with the purely decentralised case is interesting: it does not exhibit any *a priori* superiority, see Section 5. Finally, in another extreme institutional setting, a small open economy is a price taker, that is, it is subjected to very strong international competition. Again the result is surprising: the social-democratic model can generate a higher level of equilibrium employment than the purely competitive model as shown in Section 6. A final section discusses the meaning and the robustness of the models.

2   LABOUR DISCIPLINE, WAGE, AND AGGREGATE DEMAND: A BASIC MODEL

Recent advances in the micro foundations of the capital-labour relationship have stressed the role of the wage in enhancing the productivity of workers, once hired by the firm. This is the starting point of new and stimulating theories (Akerlof and Yellen, 1986; Solow, 1979). The wage has a contradictory role: on one side that of allocating workers among alternative occupations (the informational role of prices), on the other controlling work intensity within each firm (the managerial role of wages). This emendation to conventional neo-classical theory seems devastating for the normative properties of purely competitive markets: rationing, absence or multiplicity of equilibria, involuntary unemployment all result when price and quality are difficult to disentangle (Stiglitz, 1985).

In contrast to this new literature on labour markets, we will model a process of endogenous productivity and wage formation in a framework in which price and interest rate movements do not automatically clear to product market. Summarising and extending a previous work by the authors, let us present briefly the basic model.

2.1   Firms' Optimal Wage: A Tool for Controlling Work Intensity

In a class conflict model of Marxian spirit, wage-earners will work the harder, the larger the prospective loss associated with dismissal if caught not working or working insufficiently by a monitor (Bowles, 1985; Schor, 1988; Bowles and Gintis, 1989). The cost of job loss (wc) will be equal to the difference between the actual income earned by the wage-earners working for a given firm and the alternative income if fired. This second variable is itself related to the wage in other firms (wa) and the level of income replacing social benefits received by a worker who does not find another job. For simplicity's sake, the probability of being rehired will be assumed to be equal to actual employment rate n.

The firm will select the wage rate and employment level to maximise its profit, given the production function $F( )$ and the effort function $e( )$.

$$\begin{cases} \text{Max } [p \ Q - wN] \quad \text{s.t.} \\ (N, \ W) \\ Q \quad = F\left(e(w_c).N\right) \\ w_c \quad = w - [nw_a + (1-n) \ w_u] \end{cases} \tag{1} \tag{2}$$

The firm's optimal wage, w, does not depend on the level of production but only on the shape of the effort function and the degree of collusion in wage setting between firms:

$$e' (\widetilde{\widetilde{w}}_c).dw_c / dw = e(\widetilde{\widetilde{w}}_t) / \widetilde{\widetilde{w}} \tag{3}$$

Various outcomes may result from the interaction between the strategy of any firm and the expected reaction of its competitors. Let us first assume that the firm does not expect any change in the alternative wage when it varies its own, that is, $dw_a/dw = 1$. The optimum wage for the firm is now an increasing function with respect to the employment rate. The result is rather intuitive: when the opportunity of being re-employed, if fired, increases due to an increase in the employment rate, the optimal effort can only be provided by a higher wage differential with respect to the rest of the economy.

One of the strengths of modern wage theory is its ability to explain wage discrimination by the firm even if labour is homogeneous (Akerlof and Yellen, 1986). Labour segmentation may therefore be explained by sectoral or firms differences in labour management. Nevertheless, what would happen if the labour market was assumed to deliver uniform wages for the same category of skill? One has to impose on the optimal individual wage strategy the constraint that *ex post* $w = wa$. Let us call w^* the corresponding solution, which is the labour market equilibrium, in the sense of a single price for workers with identical skills.

It is easy to check that wage w^* is an increasing function of the employment rate. But it is more interesting to note that *the wage explodes before full-employment is reached*. This limit is directly related to the labour extraction problem facing the firms: the stronger the concavity of the effort function (Figure 13.1), the lower the limits (Bowles and Boyer, 1988).

When the control of work intensity or commitment is essential and if firms are optimising individually while allowing the market to make incentives compatible *ex post*, there is a strict barrier to employment levels beyond which a sufficient wage differential can no more be created. Therefore work control and full employment appear as contradictory in competitive and atomistic labour markets.
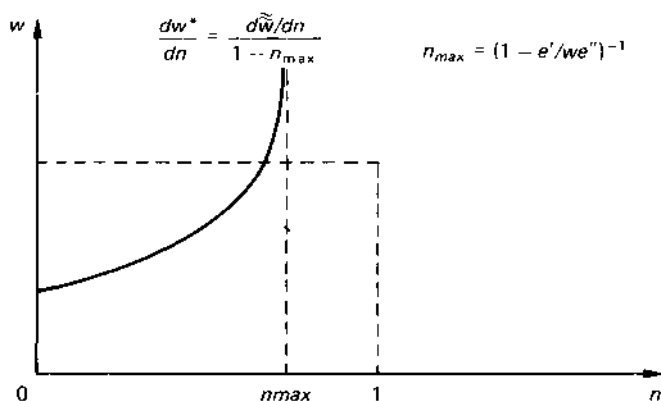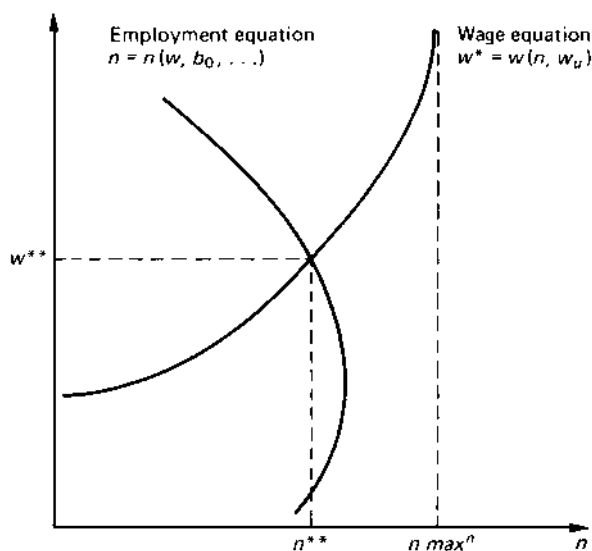
MODEL ONE: LABOUR MARKETS ARE PURELY ATOMISTIC

Figure 13.1   The aggregate wage: $w^* = w(n, w_u)$

Figure 13.2   The macroeconomic equilibrium of the model with a classical employment regime

2.2 Various Demand Regimes: Consumption – Investment – or Export-led

The previous reasoning is incomplete; while optimal wages will depend on the activity level of the economy, the converse is also true: aggregate demand and hence the activity level of the economy will also depend on the wage rate. Disequilibrium theory has convincingly argued that when prices are no longer Walrasian, quantity rationing has to be taken into account.

Here let us suppose that marginal and average productivity of a unit of effort are constant and equal to q, whatever the level of employment, and that the unit cost is less than the sales price. Then, by definition, each individual firm and the aggregate economy will always be limited by demand. The demand constrained nature of firms might be motivated by monopolistic competition considerations (Bowles, 1988) but we here merely posit $p > Mc$ so as to focus on the interaction between aggregate demand and labour relations. The present macroeconomic model is also based on a second premise: income distribution between wages and profits influences the level of consumption and investment. Econometric studies for United States (Marglin, 1984), and for France (Phan, 1988) exhibit a higher saving propensity out of profits than out of wages. Similarly (although the view is more common), investment will depend on capacity utilisation on the one hand, and profit margins on the other, each determining aggregate profit, a key variable in firms' decision making. Finally, the total unemployment benefits paid will vary inversely to the employment rate for any given structure of social regulation. These expenditures are financed by issuing money via the central bank, then endogenously generating a level of government deficit. We abstract from the financial sector of the economy and thus assume that endogenously generated real interest rate effects on investment and saving are insignificant.

For the subsequent analysis of small open economies, the analysis will have to deal with external trade. Since there is assumed to be only one good, the competitiveness of a given national economy will be expressed via a comparison between the world price and the export price of home producers. The excess of exports over imports will vary with the relevant cost differentials. These hypotheses motivate the following demand side macro-model, in which each variable is normalised by the total working population.

$$q.e(w_c).n = d = c + i + b$$

$$+ x - m \qquad \text{Product market clearing (4)}$$

$$c = (1-s_w).n.w + (1-s_r).n.$$

$$(qe-w) \quad 0 \leqslant s_w < s_r \leqslant 1 \qquad \text{Consumption demand (5)}$$

$$i = i_o + i_r . n (qe-w) \quad i_r > 0 \qquad \text{Investment demand (6)}$$

$$b = b_o + (1-n) . w_u \qquad \text{Government borrowing (7)}$$

$$x - m = f(t.uc - w/(qe(w_c)))$$

$$f' > \phi \qquad \text{External borrowing constraint (8)}$$

$$q.e(w_c^*) - w^* \geqslant 0 \qquad \text{Non negative profit constraint (9)}$$

with c: consumption; i: investment; b: State deficit; $n = N/N$: employment rate; w: real wage; w_u: unemployment benefit paid by the State; x, m: import and export; t: exchange rate; uc: world unit labour cost.

These previous equations can be summarised into *a reduced form* which shows the product market clearing employment rate associated with any level of real wage, taking into account the consequence of income distribution upon aggregate demand. We term this reduced form the employment function, $n^* = n(w)$. But this is not the traditional Keynesian equation since labour productivity is endogenous and varies with the level of wages, the employment rate and the unemployment benefit. Therefore, new effects will appear.

Under most plausible wage formation assumptions with endogenous effect, profits will first increase and then decrease, with the employment rate, inducing correlated changes in investment. Near the firm's optimum wage rate, the real wage and therefore consumption increases with the employment rate. These effects are possibly balanced by the decrease of public deficit when the economy reaches higher levels of employment. Therefore, the relation between demand and employment can have various forms:

- When *monotonic increasing* with real wage, the corresponding employment function defines a *wage-led employment regime.*

Therefore, a shift of the income distribution in favour of wage-earners raises equilibrium employment, at least in the admissible range of this variable.

• When *monotonic decreasing*, this function expresses a *classical employment regime*. In this case, a distributional shift in favour of firms spurs the employment level. Figure 13.2 gives an example of such a regime. The first case has often been put forward by the Keynesians, while the second is the pet idea of old or modern classical/neo-classical economists.

An interesting irony: wage-led regimes are more likely when the labour extraction problem does not lead to a full-employment profit squeeze; alternatively, the classical view is well founded if the control of labour intensity is a real problem. Thus a result favoured by conservative economists is generated by the class conflict view of the production process and labour markets, while the wage-led results favoured by some Keynesian economists is more likely occurring if class conflict does not extend to questions of labour discipline.

3   ATOMISTIC COMPETITION IN LABOUR MARKETS: A BARRIER TO FULL EMPLOYMENT?

A macroeconomic equilibrium can now be defined as the result of a dual determination. On the one hand, managers optimise their wage policy in order to minimise unit costs; through labour market equilibrium, a first relation emerges linking this wage with the rate of unemployment for any given unemployment benefit. This is the wage equation $w^* = w(n)$ (Figure 13.2). On the other hand, for each real wage, firms decide about investment, while wage earners spend a constant proportion of their total income and unit labour costs determine net exports. This gives the reduced form employment relation $n^* = n(w)$.

The joint equilibrium in the product and labour markets can exhibit various forms (for more details see Bowles and Boyer, 1988). *A stable wage-led equilibrium* results when the demand for labour is increasing with the wage, with a slope greater than that of the optimal wage function. *A stable classical employment equilibrium* requires, on the contrary, that the economy is investment- or export-led: a reduction in the real wage stimulates aggregate demand, even if reducing consumption. *An unstable wage-led employment equilibrium* is ob-

served when the optimal aggregate wage function is steeper than the employment relation. In a wage-led equilibrium, any rise of the wage-earners' bargaining power will promote both higher real wages and employment. The challenge then is indeed to see what happens in a highly open and/or profit led economy, that is in a classical employment equilibrium.

3.1 Public Spending may have an Impact on Employment

In this model, in which effective demand limits production, public spending, via monetary creation, exerts a definite influence on equilibrium employment equilibrium. Even in a profit led case, for any likely values of the various demand parameters, the impact will be positive (Figure 13.3).

Similarly, the state may increase the unemployment benefit, financed via monetary creation. If the employment regime is wage-led, the result is unambigously positive for real wages and employment. First, the optimal wage has to be raised by the firm in order to reestablish the required income differential between firm and social

MODEL TWO: THE TWO LIMITS OF AN EXPANSIONARY
POLICY
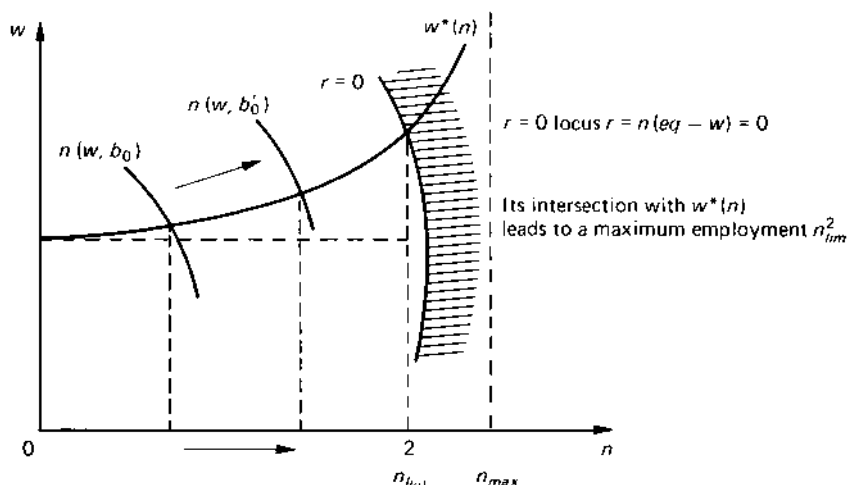
Figure 13.3   The reproducibility condition of positive profit
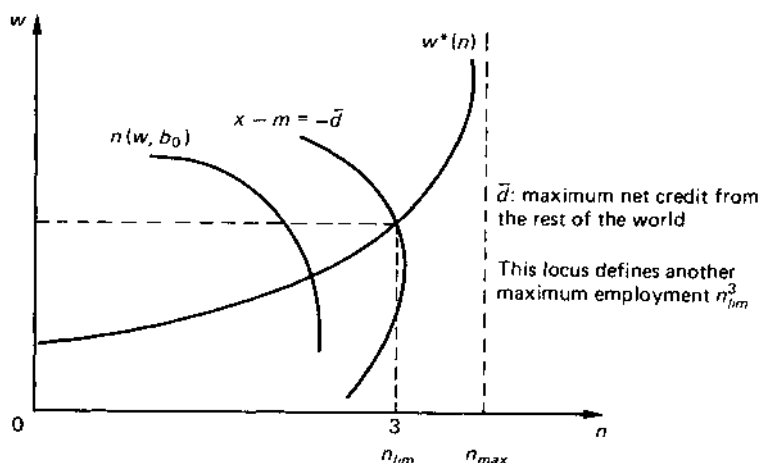
Figure 13.4   The external balance constraint

wages. Second, consumption from unemployment payments is increasing, which shifts the employment relation to the right. In a classical employment regime, the results will depend on the relative shift in wage and demand relations. The central issue is, then: using an adequate combination of these tools, can state intervention lead to full-employment?

3.2   The Contradiction between Workers' Effort and Atomistic Labour Markets

The answer is clear enough: a Keynesian expansion can hit *two limits*, either the vanishing of profits or an unsustainable external disequilibrium.

● When a classical employment regime prevails, the economy can run into a series of contradictions: at high levels of employment, the optimal mechanism for motivating workers *may entail such high wages as to eliminate profit*. Such a barrier is represented by the zero profit locus (Figure 13.3). This expresses is the equivalent of *a long-run reproducibility condition*. Very likely this is an upper limit to any expansion. The sharp decline in profits and (later) investment in the USA during the high employment mid 1960s, is suggestive of the empirical relevance of the barrier.

- *A second barrier* would probably be still more constraining for any Keynesian reflation. An expansionary policy by public expenditure and still more via unemployment benefit would increase national production costs (productivity will slow down, but wages increase), in such a manner that *the economy will become uncompetitive* with respect to world prices (Figure 13.4). This limit will manifest itself through a reversal in national economic policy, frequently triggered by capital flight and national currency depreciation. From an empirical point of view, this factor seems to have played some role in the decline of Keynesian expansions . . . and ideas. The 1981 experience in France and, in contrast, the second Reagan term are good examples of this point. In the first case, the expansionary policy had to be stopped under severe external constraints, in the form of trade deficits, capital flight and depreciation of the French franc. On the contrary, in the USA the ability to finance a large external imbalance by attracting foreign capital allowed a sustained expansion during the mid and later 1980s.

To substantiate the major argument of this section – the impossibility of reaching full employment while controlling labour intensity in purely competitive labour market – let us now study the consequence of other institutional settings.

4 COLLUSION BETWEEN FIRMS BUT NOT WORKERS

Based on experience, firms might learn that their choice of strategy is not independent of their competitors' decisions. They might use this knowledge in the design of a more adequate strategy. But this supposes considerable competence in gathering and processing relevant information. Therefore a different hypothesis will be adopted: by trial and error, firms learn the advantage of co-ordinating their wage policies. Let us imagine that every time a given firm varies its wage, it expects that others will react to a degree as measured by parameter b. Furthermore, to get clear cut analytical results, we will assume that effort has a constant elasticity with respect to the cost of job loss.

4.1 Wage Formation is Less Sensitive to Labour Utilisation

In this new institutional setting, the optimum wage is determined by the previous model (equations (1), (2), (3)), with the two following additions:

$$e = e_o w_c^a \qquad : \text{the effort function} \qquad (10)$$

$$dw_a / dw = b \quad : \text{the degree of collusion} \quad 0 \leqslant b \leqslant 1 \qquad (11)$$

Therefore the previous first order condition requiring the equalisation of marginal and average effects of wage upon labour intensity, equivalent to unit labour cost minimisation, leads to a very simple expression for the optimal wage under condition of collusion among employers:

$$w^o = \frac{w_u (1 - n)}{1 - a - (1 - ba) n} \quad : \text{the optimal real wage} \qquad (12)$$

This new solution for wage formation includes a range of relationships between w and n (Figure 13.5). On the one hand, if atomistic competition prevails, that is, firms' wage strategies are not co-ordinated and $b = 0$, one gets the previous solution w^*, which expresses itself very simply given the constant elasticity formula adopted for the labour extraction function. The wage increases with the employment rate and goes towards infinity when the employment rate approaches $(1-a)$. One notes again, that *the position of wage explosion barrier is inversely related to the size of labour intensity effect*. At the other extreme, if firms collude ($b = 1$) then the wage is constant over the whole range of employment rates. In that case, the wage depends on unemployment income, determined exogeneously with respect to the strategies of individual firms, and by a multiplier which increases with the size of the labour intensity effect. Of course the constancy of colluding firms' optimal wage derives from the very specific shape chosen for the labour extraction function. Nevertheless, the general result is that the resulting wage is always less than the purely competitive wage and its derivative with respect to the employment rate is lower.

4.2 Higher Employment Levels can be Reached

It can be seen at once that in a classical employment regime, collusion among employers will raise the equilibrium level of employment

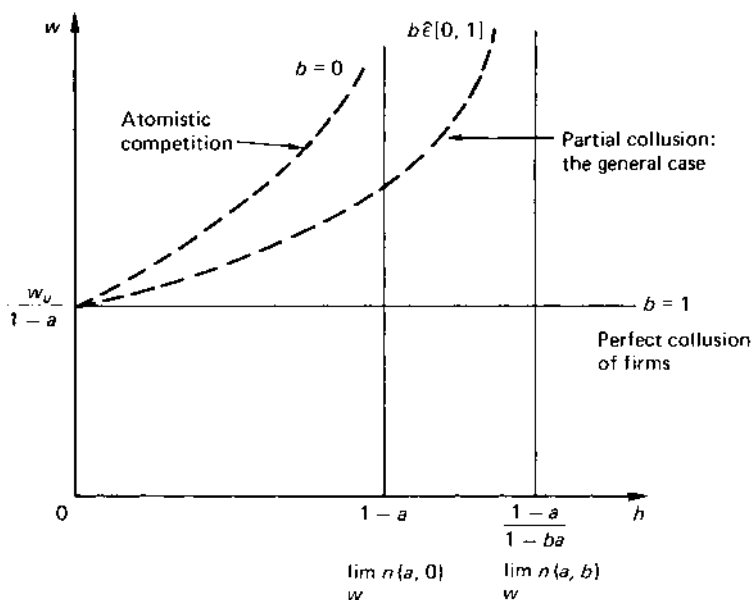## MODEL THREE: FIRMS COLLUDE, WHILE WORKERS ARE NOT ORGANISED

Figure 13.5   The aggregate wage curve flattens with the degree of collusion

nb above that obtained with atomistic and myopic competition among employers *no*; because the employment function is negatively sloped (by the definition of a classical regime) and collusion shifts the wage function downward, the result must be an increase in equilibrium employment.

The scope for expansionary fiscal policy will also be expanded. Consider the case in which the state varies autonomous expenditure to maximise the level of employment subject to the zero profit and external balance constraint. Along the atomistically determined wage equation, these two constraints may be described by negatively sloped *iso* profit (at zero level) and *iso* external imbalance (at level *d*) functions. The negative slope expresses the fact that with atomistic wage setting for any given level of employment there exists a lower wage which would both raise the profit share and reduce real unit labour costs (thus promoting net exports). Because the effect of collusion among wage setters is to lower the wage equation, collusion
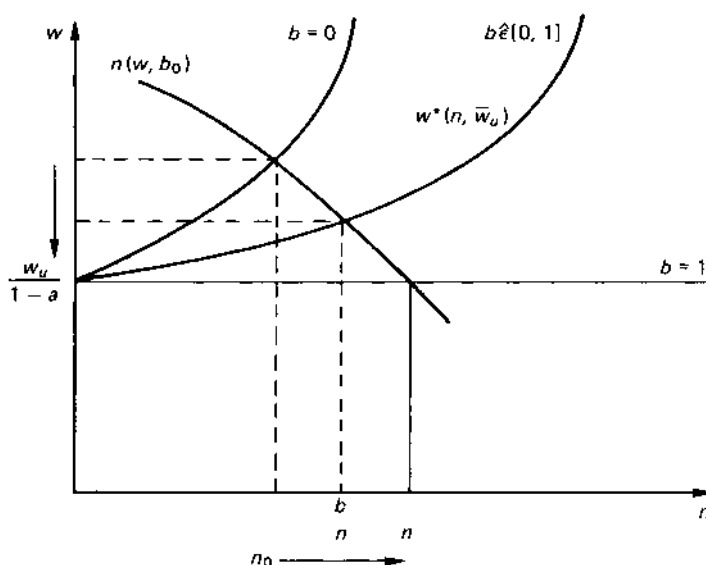
Figure 13.6 A macroeconomic equilibrium

Real wage decreases with the degree of collusion, but employment increases.

will relax both the profit and external balance constraints. The result is that autonomous state expenditure may generate a higher level of equilibrium employment if firms collude than if they do not.

The economic intuition behind the positive effect of employer collusion on equilibrium employment levels and on the scope of employment-generating fiscal policy is transparent: because the wage explosion represents a barrier to high employment and because collusion among firms attenuates the competitive bidding up of the real wage on which it is based, collusion may promote higher employment levels.

None the less, full employment is still unattainable even under the most optimistic conditions of complete employer collusion and the absence of obstacles emanating from the monetary side of the economy (from which we have abstracted). For while wages do not explode at high employment levels, unit labour costs do, rising to infinity at an employment level less that full employment. Hence the profitability constraint and the external balance constraint remain decisive barriers to full employment.

5 A SINGLE UNION WITH A MACROECONOMIC STRATEGY

In the previous analyses, full employment was out of reach, even if it could be approached by an adequate organisation of bargaining and a linkage between the micro and macro levels. The most favourable case occurs when the firms collude, without any symmetric organisation for the workers – a highly unrealistic hypothesis indeed, except for some very specific countries or periods. Let us consider other labour market institutions, motivated by two provisional guidelines. First, the more complete *the co-ordination between economic agents*, the better the macroeconomic outcome. Remember that the worst case thus far is that of purely atomistic and competitive labour market. A natural idea is then to investigate what does happen if *a single union bargains at the national level*. Second, *the wider the bargaining set*, the better the outcome since the economic actors can make Pareto-improving deals. If, for example, workers fight only for the unit real wage, then the likely strategy of firms will be to cut down employment (Goodwin, 1967's model, and its extension to game theory by Mehrling, 1986).

Let us mix these two hypotheses and develop a new model in which a single representative of all workers negotiates at the level of the national macroeconomy bargaining over the real wage and implicitly, at least, labour intensity (Figure 13.6).

5.1 The Union is a Stackelberg Leader which considers the Aggregate Demand Function

The two players now bargain directly over the wage, while the level of effort expended by workers remains determined by individual workers according to $e = e(wc)$, and the determination of aggregate demand remains as in equations 4 to 9. The game between the workers' union and the capitalists' association is the following. The union is the leader and tries to maximise the satisfaction of its average member, constrained by its cognizance of the aggregate demand function that is, the union internalises the likely macro consequences of its own bargaining. This supposes a rather sophisticated use of economic information, not too far from the existing pattern in some social democratic countries. Wage uniformity prevails – either due to an equity principle or due to labour mobility – and given the optimal wage, firms react via their investment, produc-

tion and employment decisions, here incorporated into the demand regime $n(w,bo)$. This new macroeconomic equilibrium is defined by:

$$\left\{ \begin{array}{l} Max \;\; U(w,e,n) \\ \quad w \\ e \quad = e(w_c) \\ \\ w_c \quad = (w - w_u)\,(1 - n) \\ \\ n \quad = n(w) \end{array} \right. \tag{13}$$

For an interior solution, the first order condition takes a very simple expression:

$$\left[\; \frac{U_w' + U_e'.e'\,(1-n)}{U_n' - U_e'.e\,(w-w_n)} \; \right] = \frac{dU/dw}{dU/dn} = n' = \frac{dn}{dw}$$
$$\text{with } U_w' \;=\; \frac{\partial U}{\partial w}, \;\; U_e' \;=\; \frac{\partial U}{\partial e}, \;\; U_n' \;=\; \frac{\partial U}{\partial n} \tag{14}$$

The economic interpretation is straightforward: the union should push for wage increases until the marginal rate of substitution between the wage and employment, taking account of the effect of each on labour intensity, is equal to the derivative of employment with respect to real wage among the employment function. In what follows we will assume that dU/dw is positive; workers always prefer higher wages, even taking account of the higher levels of work intensity thereby induced. Therefore the macro equilibrium nS (for Stackelberg) will depend upon the relationship of the demand regime to the preferences of the workers, as expressed by the union.

• *In a classical employment regime*, by definition demand decreases with the real wage. The inner solution only exists if the workers give a positive value to employment, quite a natural hypothesis since their total income is increasing both with real wage and employment, as in the traditional bargaining model (McDonald and Solow, 1981). Since work intensity is costly on the margin to workers, the wage is set accordingly in order to take into account the corresponding loss. Consequently, the Stackelberg macroeconomic equilibrium is characterised by less than full-employment (Figure 13.7). Of course, if facing large unemployment, the union decides to value employment more than real

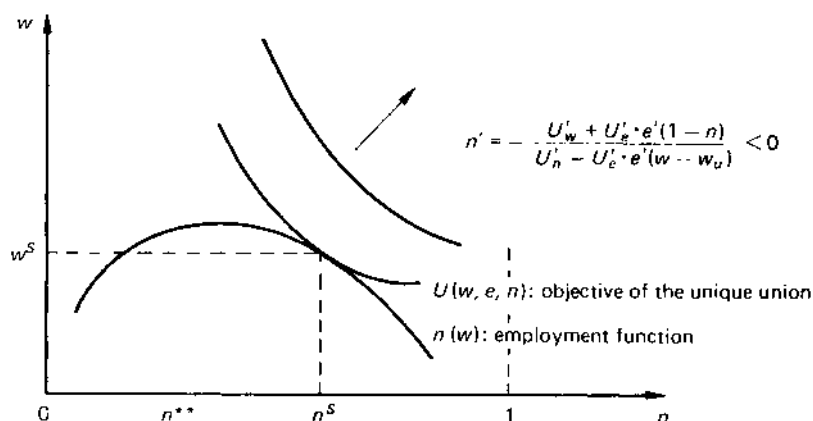## MODEL FOUR: AT THE MACRO LEVEL. THE UNION ACTS AS A STACKELBERG LEADER

$$n' = - \frac{U'_w + U'_e \cdot e'(1-n)}{U'_n - U'_e \cdot e'(w - w_u)} < 0$$

$U(w, e, n)$: objective of the unique union

$n(w)$: employment function

Figure 13.7 Classical and wage-led employment regimes: the union values employment positively

$$n' = - \frac{U'_w + U'_e \cdot e'(1-n)}{U'_n - U'_e \cdot e'(w - w_u)} > 0$$
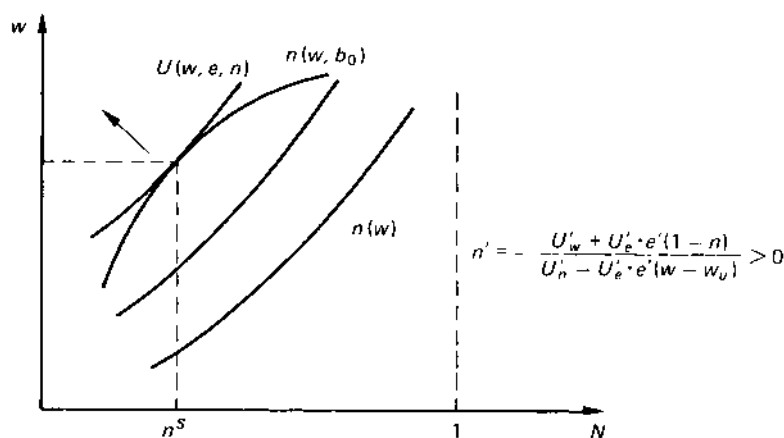
Figure 13.8 The employment regime is wage-led and the union values employment negatively: a low employment equilibrium

wage, then the equilibrium is shifted to the right. Consequently such an equilibrium may possibly be superior to the purely competitive case: the monopoly union can express *a joint strategy about real wage and employment*.

- *In a wage-led employment regime*, the existence of an equilibrium requires, on the contrary that the union considers employment as a burden. In traditional micro theory, the households are assumed to make a trade-off between income from activity and leisure time. The wage earners are therefore so hedonistic and fond of free time that the union adopts *a Malthusian low employment equilibrium* (Figure 13.8). The more the wage earner appreciates leisure, the lower the equilibrium employment – a rather trivial result indeed! Is this very old argument more realistic in the context of a so-called 'post-industrial' or 'post-materialist' era, when workers have new qualitative demands? It is far from evident.

However, the major point is that models have to be compared in terms of their equilibrium employment levels.

5.2 Centralisation may lead to Higher Employment than Atomistic Labour Markets

The comparison with the *purely decentralised case* is easily done in both employment regimes, assuming that employment has a positive effect upon workers welfare:

- *When union values employment positively*, for a *wage-led employment regime*, a superior equilibrium solution emerges. If not blocked by the external or the positive profit constraints, the centralised union will naturally propose *a full-employment equilibrium*. As already suggested by a previous paper by the authors (Bowles and Boyer, 1988), a wage-led demand regime and a strong centralised union reinforce each other in promoting full employment: from a theoretical point of view, these might be the two pillars of the social-democratic model. However, such economies are generally highly open and of small size, preventing a wage-led regime.
- If investment is highly sensitive to profit or if net exports react strongly to cost differentials, *the employment regime is profit led*. This could be an effective characterisation of existing social democratic systems, in Scandinavian countries and in Austria. Under

this condition, is the Stackelberg equilibrium employment level higher than the competitive equilibrium employment level? It may be if the control of labour intensity entails a wage explosion at relatively low levels of employment (this may be confirmed by comparing n^{**} in Figure 13.2 with nS in Figure 13.7). Worker welfare will necessarily be superior in the Stackelberg equilibrium and total profits may be either higher or lower. Thus the Stackelberg equilibrium may be Pareto superior to the decentralised competitive equilibrium.

The conventional wisdom is therefore upside-down. Are not perfectly competitive labour markets considered the condition for Pareto optimality and full employment? In the present analysis, *centralisation and a large scope for capital labour bargaining are in general favourable to macroeconomic improvements*. This is specially so when the control of labour intensity and the workers' commitment is a key issue to the firm's management. Note that the union is assumed to know the elasticity of the workers' effort function, while the workers either individually or through their local or sectoral union organisations will have no interest in breaking the national collective wage agreement. Here is the basic dilemma of collective action: what are the relations between the union and its constituents? A tentative analysis will be sketched in a subsequent work by the authors and will not be presented here. Let us focus on another objection. Will not the results disappear when a very small open economy loses most of its autonomy in demand management and cost formation?

6   THE SMALL OPEN ECONOMY AND SOCIAL DEMOCRACY

Let us now consider a very small, global price-taker social democratic country which has adopted an economic strategy of free trade and which faces strong external competition. This kind of country combines two apparently conflicting features: strong centralisation in wage and labour relations bargaining in midst of very competitive international markets. Many economists would posit the necessary failure of such an institutional arrangement.

But for the last one or two decades the empirical evidence seems to indicate the opposite (Flanagan, *et al.* (1983); Brunhes, (1986); Przeworksi and Wallerstein, (1988); Standing, (1988); stress that

balance of payment problems offer a danger signal which 'probably remains the most effective incentive to union cooperation with income policy'. Katzenstein (1985) adds:

> For the small European states a reactive, flexible and incremental policy of industrial adjustment occurs together with an astonishing capacity to adjust politically to the consequence of economic change . . . In sum, the small European states embody the politics of neither liberalism nor statism but of corporatism.

Let us try to capture these two features by incorporating in our previous model the related hypotheses about small open social democratic economies.

6.1 A Limiting Case: The Country is a Global Price-taker

The demand regime then collapses into a new limiting case in which macroeconomic equilibrium is possible only if the economy matches cost conditions in the rest of the world. Imagine that in the demand relation net exports are becoming dominant and that the cost differential is generating a larger and larger external deficit. In this case the employment function – describing the combination of w and n which clear the product market – collapses towards the *iso*-cost curve associated with the average productive conditions prevailing at the world level.

Not surprisingly, Swedish economists were the first to note that: in price taking country, wage increments should be determined by adding national productivity gains to world inflation; this would guarantee income shares stability and therefore sufficient investment to cope with external competition (Edgren, *et al.*, 1969). The union will replace the traditional employment equation by the *iso*-cost curve, itself set according to international unit costs. This gives a typical social democratic configuration. Therefore, the centralised social democratic union cannot benefit from internal expansion via public spending. Acting as a Stackelberg leader, its optimum strategy is then given by the new programme:

$$\begin{cases} \text{Max } U(w,e,n) \\ \quad w \\ e = e(w_c) \\ w_c = [(w - w_u)\,(1 - n)] \\ w/q\; e(w^c) = t.uc \end{cases} \tag{15}$$

The optimum bargaining for the union will equalise the two substitution rates between wage and employment:

$$\frac{dU/dw}{dU/dn} = \frac{U'_w + U'_e\,(1-n)}{U'_n - U'_e.(w-w_u)} = \frac{1 - t\,uc\,q\,e'\,(1-n)}{t\,uc\,e'\,(w-w_u)}$$

$$= \frac{dulc/dw}{dulc/dn} \tag{16}$$

6.2   The Possible Superiority of Complete Centralisation

- *In the short run*, if a deflation occurs out at the world level, the social democratic government can devalue its own currency, while limiting the negative inflationary effect via an income and price policy in order to maintain the previous equilibrium. In this case the union will accept a wage reduction which limits job destruction, by comparison to an alternative strategy of real wage constancy. Here, the unified national union is essential for ensuring that wage moderation is actually associated with reduced job destruction (Figure 13.9). Atomistic or balkanised labour markets would block such a process: the distrust between unions and managers as well as the lack of control of national macroeconomic policy will lead to open and often disruptive conflicts, delaying the adjustment and destroying jobs. The British case in the 1960s and 1970s gives a good description of such prisoner's dilemma and its poor welfare achievements.
- *In the long run*, the only strategy which preserves a steadily improvement in living standards is to encourage labour mobility towards high value added jobs, to upgrade the skills of workers and finally to spur high productivity growth via R&D expenditures, the importation of capital goods and so on. On the one hand, the openness of the economy makes evident to firms, unions and workers that rapid technical change is a condition necessary to maintain national foreign competitiveness and real wage increases. This model gives a new expression to the traditional Swedish income formation: ideally the wage should react to world price and productivity increases. On the other hand, the centralisation of wage bargaining under condition of Stackelberg leadership by labour makes sure that an explicit trade off between the real wage and employment will prevail (Figure 13.10). Such
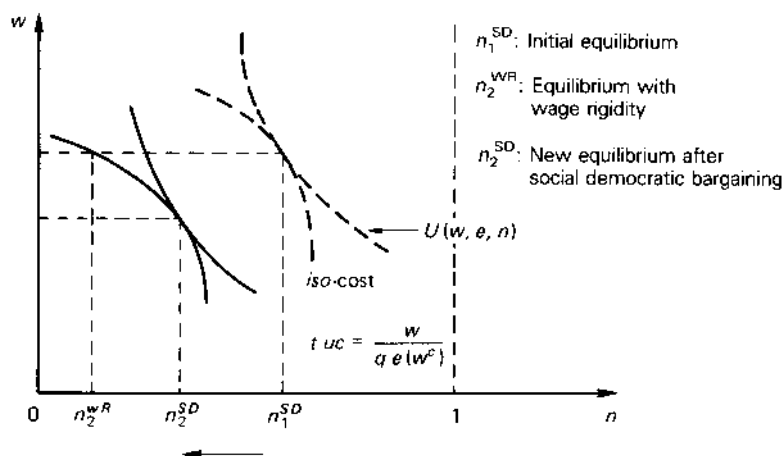
MODEL FIVE: A SINGLE UNION IN A SMALL OPEN ECONOMY

Figure 13.9   Short-run wage flexibility if devaluation is not sufficient to cope with world deflation
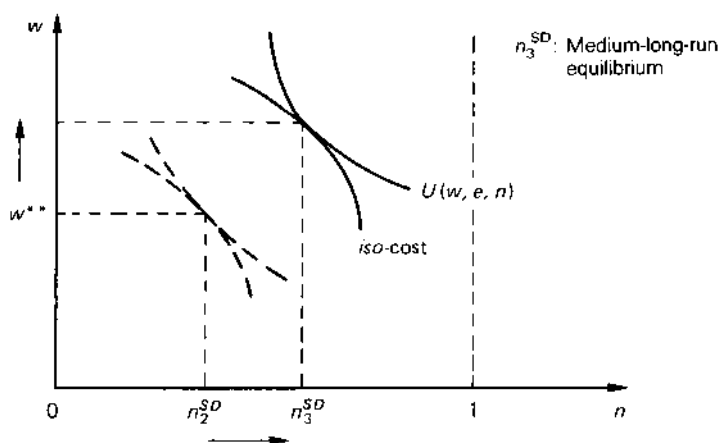

Figure 13.10   Long-run stimulation of productivity via technical change

an outcome is not fulfilled in highly decentralised industrial systems: the attempt by every firm to recreate a wage differential will approximate the atomistic wage formation equation $w^*(n)$ and will thus hit a barrier below the full-employment level. Alternatively, a solidaristic wage policy (that is, the acceptance of

minimum wage differentiation) is an essential part of the social bargaining process and interacts symbiotically with its other components: centralisation of both firms and unions.

Once again, under some circumstances market flexibility can promote economic and social rigidity, whereas negotiated compromises, often considered as rigidities, induce firms to innovate and make progressive adjustments to achieve flexibility in the long run. Unemployment performance, and probably welfare achievements, appear closely related to the precise institutional setting of wage bargaining.

7 CENTRALISATION VERSUS DECENTRALISATION: AN ISSUE TO BE RECONSIDERED

If perhaps suggestive, the present analyses are far from conclusive. It can be expected that the study of relation between markets, institutions and co-operation will be a very active area of investigations, refining or contradicting these very preliminary results. Nevertheless, let us bring together the following conclusions:

1. *Purely competitive markets and uncoordinated strategies may lead to greater unemployment than is possible under alternative more centralised or collusive arrangements.* This insight, at odds with conventional wisdom deriving from the Walrasian model, is the logical outcome of a new conception of the role of the wage in modern capitalist economies. Its use by firms in order to control workers' level of effort interferes with its allocative purposes, making rationing an usual feature of labour markets. Contributing to the large literature on the topic, the present paper stresses the existence of an employment barrier arising because workers react to the expected cost of job loss, and firms set optimal wage without any ex ante coordination. In that context, pure market coordination may be inefficient.
2. *The wider the scope for bargaining, the more satisfactory the macroeconomic outcome.* In traditional models, unions bargain for the wage level without reference to the macroeconomic consequences, while firms reply by setting the employment level. The resulting levels of employment and labour intensity, as well as the wage, are generally Pareto-inefficient. If, on the contrary,

the union bargaining over the wage takes account of both the associated labour intensity and employment effects of wage demands, a more satisfactory outcome can be reached, both from a welfare point of view and in terms of the ideal of fuller employment. Various outcomes may occur, either if firms totally collude, or if a single workers' union takes into account the macroeconomic consequences of its own strategy. The superiority of centralisation and/or cooperation is to attenuate the market failures associated with the triple role of wage: as a method for controlling workers within the firm, as a crucial factor of aggregate demand and finally as a signal for allocating workers among firms.

3. *Quasi full employment in a small open economy with a strong and single union* can therefore be explained. It has been shown that the optimal strategy choice of a large union depends on the prevailing demand regime. In a consumption-led regime, it is clear that the union will push wage demands until one of the two employment barriers is reached, either external equilibrium or the vanishing of profit. In a classical regime, the equilibrium employment will usually be less than full employment. In an extreme case, a totally open small economy loses control of demand management and has to adjust to world prices. Nevertheless, the social democratic system with a negotiated national wage may be superior to a purely competitive wage bargaining, insofar as workers' commitment is a crucial problem. Institutionalised compromises can promote short run and long run flexibilities, whereas purely decentralised bargaining may exacerbate the search for wage differentials, resulting in a form of rigidity: the impossibility of the economy reaching full employment.

4. *Very different labour market institutions may deal effectively with the challenge of full employment.* In the early 1980s, after the severe problems of the previous decade, it was appealing for economists to call for more decentralisation in wage setting, ostensibly to make labour markets more efficient. In retrospect it appears that the so-called rigidity came from the inadequacy of the previous capital/labour compromise, along with the new trends in the world economy. The surprising recovery of the Swedish brand of social democratic strategy, now suggests that, in spite of severe external and internal pressures, a quasi full employment has been maintained. Our very simple models have tentatively provided a rationale for such an outcome. More

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14 The Passing of the Golden Age*

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1 INTRODUCTION

This paper asks and answers the question of why British unemployment has risen from its levels of the 1950s and 1960s. Since the British experience reflects that of the other countries of the industrialised world, we claim we have answered the corresponding question for them as well. What is this answer?

The key is to replace the question with another, namely: why was unemployment so low in the 1950s and 1960s? Our answer is simply that the labour force had an extremely low taste for it. These individualistic tastes were the primary cause; the low level of unemployment was the effect. We call these tastes 'home and hearth'. We believe they were created by the experience of hardship in the Great Depression and the First World War and caused a particularly strong desire for regular, steady, uneventful family life. Home and hearth causes workers to be unemployment-hating: they will change jobs less often, spend less time between jobs, and reduce wage claims to reduce the risk of becoming unemployed. The first section is devoted to substantiating these claims.

In the second section we study the plight of the British Government as this generation waned and the natural rate of unemployment deteriorated. We show that incomes policies were efficacious in reducing the unemployment rate but at the cost of extreme electoral

unpopularity: the new natural rate was to prove irresistible. One feature of the second section that might be of interest is that we develop a small model of the British labour market, of the sort we have developed elsewhere, but which has a wage equation, both simple and stable over the 1980s.

2   THE GOLDEN AGE

Any contemporary economist must surely find it difficult to escape a twinge of envy when considering the marvellous self-confidence with which his British wartime counterpart planned for peace. With the exception of a brief boom ending in 1920, the UK had been afflicted by mass-unemployment since the end of the First World War. Unemployment averaged over 8 per cent in the 1920s, over 10 per cent in the 1930s, and it was generally perceived that such widespread hardship posed a real threat to liberal democracy. Yet Keynes and his followers believed they had both a diagnosis and a cure. This belief had rapidly permeated conventional economic thought, making some famous converts. Consider the views of Jewkes (1949, p. 60), himself an implacable enemy of state planning and intervention:

> In the past twenty years the work of Lord Keynes has revolution-
> ised our thinking about the operation of the economic system, has
> isolated the flaw which may lead the free economy to run at less
> than its full power and has pointed clearly to the methods to be
> adopted to remedy the defect. There need never be mass unem-
> ployment again.

Jewkes elaborates (p. 60):

> Mass unemployment is due to a deficiency of demand for goods
> and services. If this kind of unemployment threatens, it is the
> responsibility of the State to intervene and either to spend more
> money itself or to put its citizens in the way of spending more.

Consider also the case of Lionel Robbins (1971, chap. VII), enough of a classical to have brought von Hayek to the LSE. Robbins was flattered and a little over-awed as a young professor to be appointed to serve with Keynes in the early 1930s on a secret committee of the Economic Advisory Council, but had so violently

dissented from a prescription of increased public expenditure to combat the Great Depression that he had, much to Keynes's fury, insisted on a minority report. By 1944, however, Robbins had become a Keynesian in the sense of accepting that: 'the fluctuations of aggregate demand must not be left to look after themselves and that it is an important function of government, national or international, to pay attention to these matters' (Robbins, 1971, p. 188). These views were by then official policy: in its White Paper of 1944 the Coalition Government had accepted 'as one of its primary aims and responsibilities the maintenance of a high and stable level of employment'.[1]

But at what level? What was the 'full-employment' level of unemployment to act as a trigger for fiscal response? The 8 per cent of the 1920s? Or should one look back beyond the First World War to average rates of half this? People seldom think their own times normal, but in 1944 it was plain to all that the British economy had been subject to abnormal influences for 30 years. The sequence of the First World War, a perhaps premature return to the gold standard, the Great Depression and now Hitler's war had made it difficult to discern the system's state of rest. A number of economists, including Keynes and Meade, believed that if unemployment fell to about 5 per cent, wages were likely to rise 'uncomfortably fast'.[2] The Beveridge Report assumed a rate of 8.5 per cent, which was immediately investigated by a sceptical cabinet subcommittee to see if this was indeed practical (Jones, 1986, p. 22).

One thing at least is certain: no one predicted the 20 years of low rates following the Second World War: unemployment did not exceed 2 per cent till 1963, 3 per cent till 1971; and Keynes's apparently Utopian 5 per cent till 1976 (see Figure 14.1). St George was ready, but the dragon had fled. Moreover the British could hardly attribute the golden years to the superior exercise of macroeconomic policy. Table 14.1 shows unemployment was extremely low throughout the developed world until 1970, say, whereas the commitment to demand management varied widely (see Bispham and Boltho, 1982, p. 293). Why was this? What caused the Golden Age?

This question of why unemployment was so low world-wide for the 20 years following the Second World War is a natural alternative and rival to the most asked question in contemporary macroeconomics, namely, why was unemployment universally so high for the 20 odd years after 1970? (These are rivals, of course, because they entail radically different assumptions about what is normal.) We shall

Figure 14.1 The British unemployment rate 1856–1987
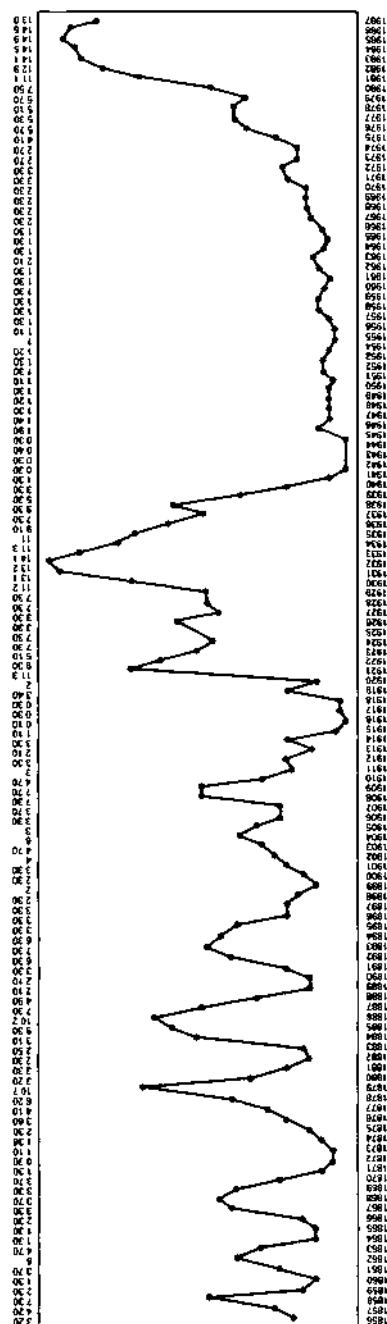
Source: Feinstein (1976) and Department of Employment Gazette (various issues).

Table 14.1   Decade average unemployment rates

	1904–14	1921–29	1930–38	1950–59	1960–69	1970–87
Australia	5.4[1]	8.2	17.8	1.6	2.1	5.6
Austria	–	9.8	12.8	3.9	2.0	2.0[3]
Belgium	2.1	2.4	14.0	6.9	3.5	10.8
Canada	–	5.5	18.5	4.1	5.0	8.0
Czechoslovakia	–	2.6	11.9	–	–	–
Denmark	9.7	17.1	21.9	9.5	3.6	10.0[3]
Finland	–	1.6	4.1	1.4	1.9	4.6
France	7.1	3.8	10.2	1.8	1.8	6.0
Germany	3.5	9.2	21.8	4.9	0.7	4.2
Ireland	–	4.9	8.8	5.5	5.0	7.9[3]
Italy	–	3.3	9.6	10.1	5.0	6.8[3]
Japan	–	–	4.9	2.2	1.3	2.0
Netherlands	3.8[2]	8.3	24.3	2.1	1.2	7.1
Norway	3.0	16.8	24.4	1.9	1.8	2.0
New Zealand	–	–	–	0.0	0.2	2.0[3]
Poland	–	1.9	13.4	–	–	–
Spain	–	–	–	2.4	2.4	10.2
Sweden	5.1[2]	14.2	15.8	2.2	1.7	2.3[3]
Switzerland	–	–	3.0	0.2	0.0	0.4
UK	4.7	8.3	11.7	1.4	1.9	8.1
USA	4.6	5.1	14.5	4.5	4.8	6.8
Average[4]	4.9	9.3	17.6	3.7	2.3	6.3

Notes:
1. 1913.
2. 1911–1914 average.
3. 1970–86.
4. Average of the ten countries for which data are available in all periods.
Sources: Sources of the pre-1940 data are described in A. Newell (1985).
Data for 1950 onwards are chiefly from OECD sources. Details are given in Newell (1986).

answer this question within the framework of the Phelps-Friedman Phillips curve, interpreted as saying that economy-wide unemployment differs from its natural rate in direct proportion to the extent that economic agents must have misforecast the level of demand, in particular the price level. Whether this model is true, or consistent with the views of Keynes and his school, will not concern us: rather we are interested in where this assumption leads.

A commonly advanced reason for the golden years after the Second World War is that they were due to high levels of demand. It

is certainly true for example that capital formation was extremely high by historical standards over the period, both in the UK and abroad. Moreover, under fixed exchange rates, a high level of demand across the world *on average*, would, via trade, lead everywhere to a high level of demand. In principle the Phillips curve could translate this high level of demand into low unemployment if, over the golden years, agents consistently misforecast the price level. It is indeed true that the price levels of the industrialised countries started to rise over this period. It is sometimes asserted that price errors cannot plausibly show a consistent bias over long spans. While we have never found this argument particularly convincing, we have, however, been convinced by the behaviour of British wages and prices during the inflation of the Korean War (see Figure 14.2, taken from Jones, 1986 p. 44). A large part of this inflation was surely external in origin,[3] yet wages seemed to respond appropriately to preserve the real wage. Regressing the real consumption wage on three lags of itself and three, six and twelve lags of annual price inflation,[4] we found we could always accept the hypothesis that the inflation terms were jointly zero ($F(3, 60) = 1.12$, $F(6, 57) = 1.06$, $F(12, 51) = 0.94$ respectively). Taking the first model, we found that a once and for all 1 per cent increase in the price level is simulated to generate the following per cent reductions in the real wage:

1 month	3 months	6 months	12 months
–0.11	–0.06	–0.04	–0.02

This evidence would seem to destroy any hope of basing an account of the golden age on price errors. It follows that the explanation must lie with the natural rate. We adopt Friedman's (1968, p. 11) classic definition:

> the level that would be ground out by the Walrasian system of general equilibrium equations, provided there is imbedded in them the actual structural characteristics of the labour and commodity markets, including market imperfections . . .

To these structural characteristics we would add tastes. For example, the central determinant of unemployment in a world where all markets clear is the agent's allocation of time between working, leisure and job-search. One would therefore naturally expect in-
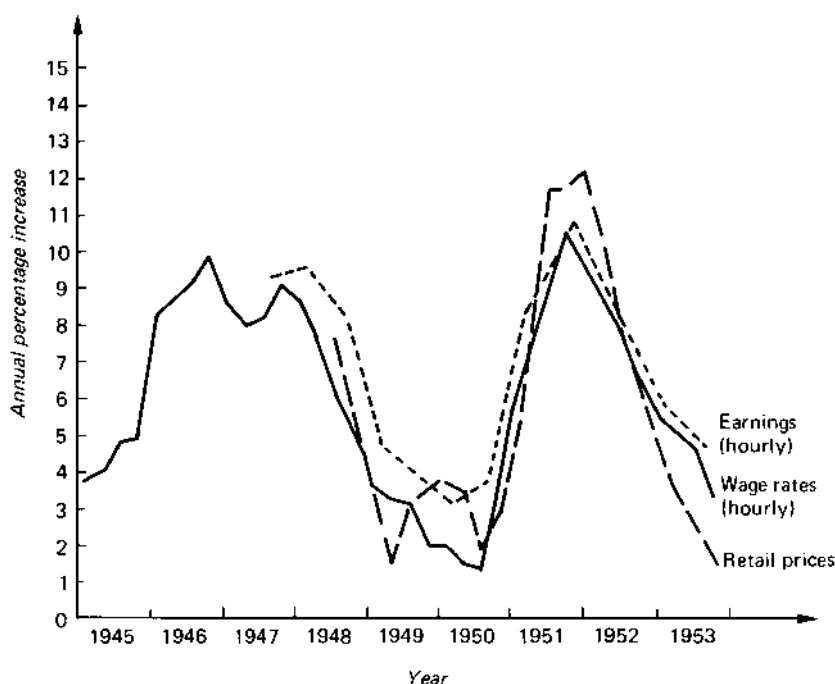
Figure 14.2   Wage and price inflation 1945–53

trinsic tastes for these activities to be important, provided they showed some temporal variation.

Assume accordingly that the natural rate depends on tastes and market structure. How important is the latter? Clearly it cannot be the cause of the golden years for the simple reason that the labour markets of the developed countries have embraced a variety of structures from competitive to corporatist (see, for example, Bruno and Sachs, 1985), while the golden years were common to all. Moreover, interpreting market structure as union power, this was presumably least benign for employment in Britain immediately following the Second World War, when the unions were very strong. We are left with tastes.

Let us present the bones of our argument. We believe British unemployment was low for two decades after 1945 because the British worker had a low taste for it. The labour market outcome was simply the expression of these fundamentally different tastes. We

believe further that these tastes were the consequence of the experience by this generation of the Great Depression and the First World War. We shall present evidence that these events made people *relatively less willing to tolerate the existence or prospect of hardship.* Applied selfishly this principle means individuals became more risk averse; applied altruistically, it means individuals came to desire a more equal distribution of income. We shall describe both generically as risk aversion. The taste change we have in mind is thus an increase in risk aversion.

Consider the representation of the British labour market given in Figure 14.3. The schedules n^d, n^s and l are respectively labour demand, labour supply and the labour force. At each real wage the horizontal distance between l and n^s is the frictional unemployment rate or, equivalently, the notional supply of job search. The locus labelled b is a bargaining function, different from n^s because of the existence of some monopoly power of labour. The locus slopes upwards because at lower levels of unemployment wage bargainers rationally fear less the consequences of layoffs and hence push for higher wages. There is involuntary unemployment here at the equilibrium E. An increase in risk aversion will typically cause the schedule b to shift to the right as workers settle for lower wages to reduce the variability of income either altruistically or selfishly if their own jobs are at risk from layoffs. Thus an increase in risk aversion can eliminate some or all of the involuntary unemployment implied by market power, that is, we may pass from E to F in Figure 14.3.

We can build our case on risk aversion, but we believe there is a deeper cause. We shall shortly establish that for 20 years following 1945 marriages and birth rates were uniformly high. There was thus an increased desire for 'home and hearth'. It is both intuitively clear and, we shall see below, well established that home and hearth and unemployment are substitutes so that an increased demand for the former can be expected to be accompanied by a reduced supply of the latter. Moreover a desire for home and hearth would seem naturally to imply risk aversion so that it could be considered logically prior.

We introduce home and hearth into our discussion in particular because, while increased risk aversion can explain a reduction of the natural rate in an economy where there is some involuntary unemployment, it cannot explain an increased natural rate in a competitive economy. The argument in the preceding paragraph is that home and hearth leads to a rightwards shift of n^s in Figure 14.3 and hence to a fall in unemployment when markets clear. This is an important
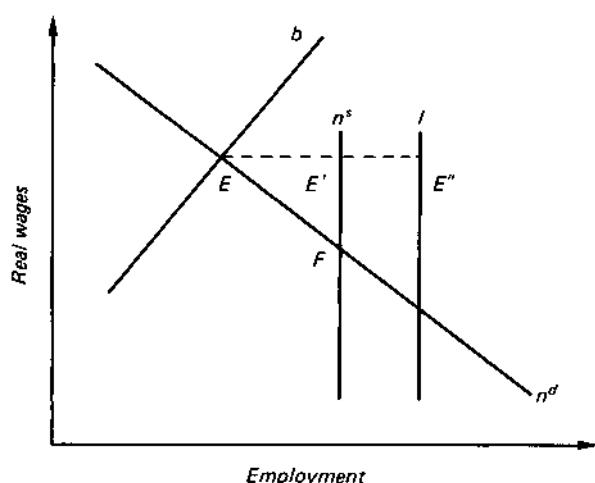
Figure 14.3   The aggregate labour market

Key: n^d = labour demand
  n^s = labour supply
  b = the wage bargaining function
  l = the labour force

broadening of our argument because, without it, we should not be able to explain why the natural rate fell after the Second World War in economies like the USA with fairly competitive labour markets. It is certainly true, however, that the reduction in the unemployment rate in Canada and the USA after the war seems less than in Europe.

Positing an exogenous change in tastes may be considered too easy a way out, but we do not know a standard economic explanation that is wholly satisfactory. One could seek to explain how unemployment after the war was due to the effect of wealth reductions on labour supply, but, while this is an elegant argument (wars quintessentially destroy wealth), we do not think it will run. The effects of wealth on labour supply are themselves too ambiguous empirically for them to generate the completely unambiguous golden years. A perhaps more plausible argument is that profit opportunities were temporarily high after the war due to deferred investment and new discoveries, thus creating temporarily both high real wages and labour supply. This is an attractive argument and may have something to it. But the golden years are perhaps too long for this to be the key.

Our argument is thus that the First World War and the Great

Depression together created increased risk aversion and desire for home and hearth; and that each of these resulted in a lower natural rate. We intend to examine this argument from a number of perspectives; but before we embark on this, consider how enticing this explanation is. First, since the Depression and the First World War were world-wide phenomena, the theory can explain why the natural rate was low world-wide. Secondly, since the low natural rates depend upon the idiosyncratic experiences of a single generation, the analysis can explain also the deterioration of the natural rate as that cohort passed out of the labour force. We thus obtain much from little, Friedman's acid test of a good theory.

As evidence of increased risk aversion we offer the creation of the British welfare state after the war. It is clear that *instructing political representatives to support increased social welfare at the price of increased taxation is similar to instructing bargaining representatives to strike lower bargains to reduce the possibility of lay-offs in that both are costly ways of smoothing consumption.* If it is accepted that creation of the welfare state at that time must have been due to a critical change in tastes, then it must be accepted also that those changed tastes would lead to lower equilibrium unemployment. To the two enticements of our theory set out in the last paragraph we add a third, namely that it proposes a single cause for the two most striking social phenomena of the immediate post-war years, low unemployment and the creation of the welfare state. Nor was the welfare state an isolated British experience: the post-war years saw rapid growth in social insurance and low unemployment go hand in hand throughout the developed world, as is confirmed in Table 14.2.

These changes in tastes would be transmitted to the labour market as a reduction in wage pressure. If labour disputes arise because workers' wage aspirations are higher than firms believe them to be, we would expect reduced wage pressure to be accompanied by low strike rates, as is confirmed by Table 14.3 both for the UK and for the OECD generally.

Strikes increased in the UK and throughout the world towards the end of the 1960s. Simultaneously real wages began to increase faster than warranted by productivity growth, practically everywhere. This real wage 'explosion' has been discussed by a number of authors (for example, Nordhaus, 1972; Sachs, 1979; Grubb, 1986) and can be demonstrated virtually independently of theoretical framework. It is also true that militant young workers were crucial in obtaining these advances, as is shown in many of the essays in Flanagan *et al.* (1983).

Table 14.2   Social insurance growth

	1895	*1905*	*1915*	*1925*	*1935*	*1945*	*1955*	*1965*	*1975*
%	0.5	0.8	1.2	3.4	2.8	3.9	6.2	6.1	1.7

Note: Western European median growth of social insurance coverage (averages of decade up to date).
Source: Flora, P. and Heidenheimer, A. J. (1984) p. 56.

Table 14.3   Index of strike activity

	1951–60	*1961–70*	*1971–80*	*1981–85*
OECD	100	149	159	114
UK	100	109	100	56

Notes:
1. Period averages.
2. The OECD index is an employment-weighted index of the number of conflicts per worker in Australia, Belgium, Canada, Finland, France, Ireland, Italy, Japan, Netherlands, Norway, Sweden, Switzerland and USA.
3. The 1981–5 entry for the OECD is, in fact, 1981–3.
Source: As for Table 14.1.

Our interpretation of this is that the wage explosion was in some measure due to the passing of a risk averse cohort of workers and a consequent shift to the right of the *b* locus in Figure 14.3. We quote at length an important passage on West Germany from Flanagan *et al.* (1983, p. 251):

> The consensus [in other countries, on the need for wage restraint] was eroded as the growth that took place under its sway generated impatience in the wage earner and also as a younger generation of workers with shorter memories progressively replaced the veterans. It could hardly be denied that similar corrosive agents have been at work in Germany, when managers expressed concern over the passing of the works council leader who was described as . . . 'a man in his late fifties or early sixties who has worked in the plant for twenty years or more, a solid family man, who is well known to a large segment of the personnel and well respected by both his colleagues and his superiors . . .'.

In our 1987 paper we found that the British and some other wage equations became unstable at the end of the 1970s, and we interpreted this structural shift as due to the breakdown of corporatist wage-setting. We noted separately the wage-explosions of the late 1960s and early 1970s but we did not investigate any connections between these two phenomena, which together amount to a trend increase in the real wage from the 1960s. This is now attributed to a single cause.

We turn to home and hearth. The years from the end of the war till the mid 1960s were marked by higher marriage rates, lower divorce rates, larger family sizes and increased fertility in all age groups. We attribute these to the taste factor we call home and hearth. First the evidence. Table 14.4 gives age-specific marriage rates (that is, the proportion who are married) of males at the census years. These data need careful interpretation because it is well documented that, as incomes grow, people marry and form households earlier, so the taste effect and an income effect are both at work in the two younger age groups. Notice however that marriage rates for the two older age groups fell sharply after the 1960s. Simultaneously the fertility rate fell, while the divorce rate and the illegitimacy rate rose sharply (Table 14.5), all indicating surely a reduced attachment to the conventional family. It is possible to date the turning point of fertility quite precisely at 1964: of the six age groups of women 15–44, all reached maximum post-war fertility in this year except 40–44 (1962) and 15–19 (1971). Table 14.6 shows that completed family size (which, for ease of comparison, we proxy by children after 15 years of marriage) was, of marriages begun at all times since the end of the First World War, highest for marriages begun in 1960, after which it fell very rapidly.

Table 14.4 Proportion of males married

	1931	1951	1961	1966	1971	1976	1981
20–24	13.8	23.7	30.9	33.0	36.6	32.2	44.5
25–34	64.0	72.0	76.1	78.7	78.6	76.1	80.0
35–44	85.5	86.2	86.6	86.9	87.0	86.1	85.7
45–54	84.7	87.7	88.1	88.3	87.5	86.1	82.7
All over 15	59.3	68.4	70.0		70.0		65.0

Note: England and Wales, Census years.
Source: *Annual Abstract of Statistics*, various.

Table 14.5   Births, divorces, illegitimacy

	1910	1920	1930	1950	1960	1970	1980
Birth rate	99.3	92.6	66.0	72.9	89.8	82.1	61.8
Divorce rate	–	–	–	2.7	2.6	5.7	12.4
Illeg. rate	4.6	4.9	4.8	4.9	5.9	8.4	12.9

Notes: Rates are, respectively, per 1000 women 15–44, per 1000 married men, per 100 live births.
Source: *Annual Abstract of Statistics*, various.

Table 14.6   Mean family size of women married once only at age under 45

Years of marriage	5 years	Children after: 10 years	15 years
1920	1.38	2.02	2.34
1925	1.23	1.78	2.06
1930	1.17	1.69	1.98
1935	1.09	1.63	1.97
1940	0.97	1.66	1.90
1945	1.26	1.81	2.09
1950	1.27	1.87	2.15
1955	1.31	2.02	2.26
1960	1.47	2.16	2.35
1965	1.43	1.99	2.13
1970	1.24	1.81	–

Note: Data are for Great Britain.
Source: *Annual Abstract of Statistics*, various.

At this point we review the structure of our argument. We assert that some such psychological taste factor as we have christened home and hearth is the only plausible cause of the observed increase in marriage and fertility. If we now make the case that low rates of unemployment and propinquity tend to be found together then we can claim to have shown that home and hearth acts causatively on unemployment. That these two are indeed found together is embodied in the *cliché* 'to get married and settle down' since 'settling down' in normal English usage would certainly preclude periodic spells of unemployment. However, there is hard scientific evidence. In their authoritative study of British unemployment spells, Narendranathan *et al.* (1985) found that, controlling for age, ethnicity,

Table 14.7 Unemployment rates by age and marital status

	Married	Non-married
18–24	21.6	25.0
25–34	10.7	15.1
35–44	6.2	17.3
45–54	6.5	26.0
55–59	8.1	26.0
60–64	15.2	26.0
All	9.1	22.4

Source: Office of Population Censuses and Surveys (1984) *General House-hold Survey, 1983* (London: HMSO)

housing tenure, education and training, previous labour market history, local labour market conditions, income in work and income while unemployed, 'getting married' reduces the expected duration of an unemployment spell by about 30 per cent. Moreover if 'settling down' is taken to mean completing education and buying a house then 'getting married and settling down' reduces the duration of a given unemployment spell by fully 65 per cent. These model-based estimates are supported in Table 14.7 by simple cross-tabulations from the 1983 General Household Survey which show that married men have a much lower chance of being unemployed, at each age level.

Let us cast our net a little wider. Consider the emergence in the late 1950s and early 1960s of the 'Angry Young Man' School represented, for example, by the novelists Kingsley Amis and Alan Sillitoe, and the dramatist John Osborne. The protagonists of their works, typically young, rebellious, working-class men had been too young for war service; indeed they tend to be resentful of the mystique of the war. None have children, none desire to become *patres familias*. Frequently the hero is forced into an unsatisfactory marriage by the unwanted pregnancy of his mistress. Sexual irregularity is the norm; almost always the main characters are involved in one or more duplicitous love affairs, often adulterous. They are nominally socialists, but are, in reality, anarchists, interested primarily in self-realisation. A frequent theme is escaping working-class or bourgeois life to become some sort of artist. One cannot imagine any of them reading the Beveridge Report or joining the Labour Party; nor can one imagine them counselling moderation at a union meeting.

The significance of this group of writers in our context lies in their consistency of theme. They were immensely influential and popular, particularly in the film versions of their key texts, which were made in the early 1960s and thus disseminated beyond the *literati*. Clearly, and this is our point, they reflect a broad social movement.

One searches in vain for a slightly earlier school, reflecting earlier values, with which to compare the Angry Young Men. The war and the returning soldiers created no recognisable school in Britain. Between the end of the war and the Angry Young Men, major new literary works were by authors who had made their reputations before the war (Waugh, Greene, Orwell), and concerned non-mundane themes. It is true that two of Waugh's greatest works, *Brideshead Revisited* and *The Sword of Honour* trilogy are set in the war; but both works express only deep alienation from the spirit of the times. It seems to us that the most characteristic artefact of the generation who fought the war is the Welfare State itself. As Marwick (1968, p. 522) puts it:

> at the end of the war the majority had a clearer idea than ever before of what it was they expected of a modern civilised industrial society: decent living standards, income and health security, a taste of the modest luxuries of life.

This would hardly do Jimmy Porter.

A natural test of our contention that the experience of the Great Depression and the First World War created a low-unemployment generation of workers is to see what happened to the natural rate after the First World War. This is very tricky because of the nature of the data: only 1922 to 1929 could be considered remotely normal years after the war; and pre-war data are fairly questionable. Thus both observation and benchmark are dubious, but, forewarned, consider Table 14.8. It is fairly clear that unemployment was higher in the 1920s than before the First World War in the UK. The possible reasons for this were extensively discussed at the time, for example by Pigou and by Clay in the *Economic Journal* at the end of the decade. Some have blamed the return to the Gold Standard at too high a parity; others (Benjamin and Kochen, 1979) unemployment insurance. It is true that the British experience was not shared by her allies; both the USA and France had lower unemployment in the 1920s than before the First World War. Average German unemployment rates were higher after the First World War than before it, but

Table 14.8 Pre- and post-First World War average unemployment rates

	Pre-First World War	1922–29
UK	4.4	7.9
Germany	3.9	10.0
France	7.4	3.6
US	6.8	4.2

Note: The Pre-First World War years all end in 1913 and begin respectively
   in 1856, 1887, 1895, 1890.
Source: Newell (1985).

the long-run trend is difficult to isolate in the 1920s in Germany due to the distortions of the hyperinflation and the occupation of the Ruhr. One finds in general that the losers of wars generally experience a few years of unusually high unemployment. We do not regard this as evidence against our proposition which assumes an effectively functioning economy, in which intrinsic tastes can be made manifest.

For the world as a whole, Table 14.1 shows unemployment tended to be lower in the 1960s than in the 1950s. Remarkably, the exceptions to this rule are almost precisely the victorious allies, Australia, Canada, New Zealand, the UK and the USA, all of whom had large numbers of long-serving servicemen demobilised after 1945. If it is accepted that military service increases the desire for home and hearth, this is further evidence of the effect of home and hearth on unemployment.

3 WAGE-SETTING

The view taken of the natural rate of unemployment in Figure 14.3 is that it comprises two parts, search or market clearing unemployment $E'E''$, and a component EE' representing equilibrium involuntary unemployment created by the market power of labour. We have argued in the preceding section that the Depression and the First World War so changed the tastes of the generation experiencing them that both varieties of unemployment were reduced in consequence. As this generation passed out of the labour force, both components of the natural rate rose, manifested by increasing real wages and falling employment. Now changes to search unemployment correspond to changes in fundamental preferences and are

difficult and undesirable to resist; but one might try and do something about the second component.

Unemployment created by the market power of labour cannot be efficient and there will exist in principle sets of contracts to effect a Pareto improvement. Presumably involuntary unemployment exists because of the transactions costs associated with these contracts. We define corporatism as the active exercise of central authority in wage-setting, whether it be by a bargaining system that is formally centralised such as Sweden or by statutory incomes policies in the UK, where little formal structure exists. We see the essential justification of corporatism as reducing the above transactions costs.

One particular transaction that corporatism can facilitate is the exchange of wage moderation for tax cuts. In a regime of involuntary unemployment, a wage claim by a bargaining unit which results in job losses imposes externalities on other agents in the economy. Taxation is the most obvious: there is increased social insurance to be paid and fewer wage-earners to do it (Blanchard and Summers, 1987). When such externalities are important (taxation is by no means the only one), it is possible that, while lower wage claims throughout the economy would benefit labour, they would not be forthcoming because small bargaining units are trapped in a Prisoner's Dilemma: any single bargaining unit which lowers its wage would not significantly lower the aggregate unemployment and tax rate, without which benefit it prefers the higher wage. In these circumstances an imposed wage-cut would achieve a Pareto improvement across the whole economy; and, for example, government action to achieve this by incomes policy would be generally popular. Thus in principle there are incomes policies which could be implemented with democratic approval: but in Britain the principle was not the practice, as we shall see.

Corporatism in the structural sense was never achieved in Britain. Indeed, despite occasional fond northwards glances by the Labour Party's right wing, it was always out of the question, as it would have required extensive reform of the union movement, including the surrender of much autonomy by formerly independent organisations. Even if corporatism solved a Prisoner's Dilemma, who could have achieved it? Not the Tories: one might as well have the mongoose write the snake Bill of Rights. Nor Labour: the union movement is

Before 1979 it thus seemed as if the British Union movement was simply too fragmented to play a role in solving the problems its own power had created. In consequence the British Government sought to control wages by formal incomes policy. Between 1961 and 1979, when they were irrevocably abandoned by Mrs Thatcher's government, incomes policies were in operation for a total of just under 12 of the 19 years.

The wage equation in Table 14.9 shows the interplay of all the above factors. We have discussed this form of wage equation in a number of places (for example, Newell and Symons, 1988a): it is perhaps best thought of as derived from the outcome of a bargain between firms and employed workers which sets wages to hold over some horizon, with the path of prices known. The negotiated real product wage depends upon productive capital per employed worker (adjusted by an index of labour-augmenting technical progress) which we call somewhat inaccurately 'equilibrium wage'; and a term to reflect the income of workers who might be laid-off in consequence of the wage bargain, which we call, again inaccurately, 'outside wage'. In fact we take

$$\text{outside wage} = -(1 - \rho)u$$

where u is the unemployment rate and ρ the unemployment insurance replacement rate. The term 'Δ wedge' is standard in our work and allows the possibility that increases in the consumption wage arising from, say, increases to the price of raw materials flow-through in the short run to increases in the product wage. The empirical and theoretical evidence against long-run increases of this type can be found in the work cited above. As a crude proxy for the taste factor discussed in the preceding section we employ the *proportion of the population of working age born after 1930*, which we call 'golden age'. Finally we measure the severity of incomes policy on the scale constructed by Desai *et al.* (1984). All variables are correctly-signed and significant at conventional levels. We were surprised and pleased to find that this specification is econometrically stable over all subperiods we have tested, rare for a contemporary wage equation. Details of these and other tests of this equation are given in the notes to Table 14.9.

A labour demand curve (Table 14.10) completes the model. The theoretical foundation is dual to that of the wage equation. Monopolistically competitive firms set prices to hold over some horizon,

Table 14.9   Real wage equation UK 1950–87 (dependent variable: log (real product wage))

Explanatory variable	Coef.	t-stat.
Log (real product wage)$_{-1}$	0.31	(2.2)
Equilibrium wage	0.69	(imposed)[2]
Incomes policy	–0.025	(2.7)
Δwedge	0.86	(1.9)
Outside wage	1.36	(3.6)
Golden age	0.12	(3.6)

standard error = 0.017; Durbin-Watson = 2.27; Durbins 'h' = −1.81; CHOW1: F(6, 32) = 0.82 (sample split at 1969–70); CHOW2: F (8, 32) = 0.39 sample split at 1979–80).

Notes:
1. Estimated by instrumental variables. Δwedge and outside wage were treated as endogenous and instrumented by their lagged values and the change in the world price of manufactured exports.
2. a *t*-statistic testing this restriction gave a value of –0.16. The restriction is a technical one, discussed in our earlier work, and guarantees unemployment is neutral to capital and labour in the long run.
3. The equilibrium wage was defined as follows:
   equilibrium wage = 0.27 $(k-n_{-1})$ + 0.52λ,
   where k is (log) capital stock, n_{-1} is (log) employees in employment last period and λ is log of the technical progress index. The weights are derived from the Labour Demand equation in Table 14.10.
4. Data sources and the construction of variables are given in Newell and Symons (1988c).

with known wages. Intraperiod all revealed demand at these prices is supplied by the firm, generating a relationship between current employment, the current real wage and unanticipated demand. This seems to us the appropriate generalisation of the competitive labour demand curve: see our 1988b paper for further discussion. We have taken some care over modelling demand shocks. In particular we sought to escape direct modelling of the monetary sector. The approach was based on the open economy *IS* curve $y = y(z)$ where z is taken to consist of the real interest rate, government spending, world income, and competitiveness. (Note we take a Ricardian position by excluding taxation. In any case, we thought that, such is the nature of tax changes, economic agents are unlikely to be surprised by them.) Shocks are then

$$y - y^e = y(z - z^e)$$

Table 14.10   Labour demand, UK 1954–87 (dependent variable: log (employees in employment))

Explanatory variable	Coef.	t-stat.
Log (employees in employment)$_{-1}$	1.31	(7.3)
Log (employees in employment)$_{-2}$	–0.43	(2.6)
Log (capital stock)	0.12	(imposed)[3]
Log (real product wage)	–0.44	(3.0)
Log (technical progress)	0.23	(1.9)
(Aggregate demand shock)	0.62	(2.5)

Standard error = 0.013; Durbin-Watson = 2.28; CHOW: F (6,28) = 0.98 (sample split at 1971/2).

Notes:
1. Estimated by instrumental variables. The real wage, technical progress and the Aggregate Demand Shock (*ADS*) were treated as endogenous. The instrument set included lags of the real wage and technical progress, lagged unemployment, and, for ADS, the current US real interest rate and world income.
2. The *ADS* variable was constructed as follows: $ADS = 0.22\ (GSH) - 0.234\ (RIR) + 0.046\ (COMPSH) + 0.055\ (DYS\text{-}TAR)$, where *GSH* and *COMPSH* are residuals from regressions of real government expenditure and UK price competitiveness on their lagged values and time trends, *RIR* is a measure of the ex-ante real interest rate and *DYSTAR* is the rate of growth of world GDP. The weights were obtained as discussed in the text.
3. The t-statistic for this restriction was 1.3. The restriction is constant returns to scale.
4. Data sources and the construction of variables are given in Newell and Symons (1988c).

The coefficients on the right were calculated by estimating small models of the GDP components, aggregated using sample average weights. Again all variables are correctly signed and significant at conventional levels.

The system given by the models in Table 14.9 and Table 14.10 is essentially a Phelps-Friedman Phillips curve. The advantage of the structural equation approach is that it aids interpretation and exact study of the sources of changes to the natural rate. A decomposition of these changes is given in Table 14.11, using the average level of unemployment between 1963 and 1967 as a base.

Most of the numbers in Table 14.11 concur with conventional wisdom. In the middle column we see for example that high real

Table 14.11   Accounting for the rise in unemployment 1963/67–1983/87

	1963/67–1975/79	*1975/79–1983/87*	*1963/67–1983/87*
Actual change	3.4	7.5	10.9
Simulated change	2.7	7.0	9.7
due to:			
1. Aggregate demand factors	–1.7	3.3	1.6
of which:			
Fiscal policy	–0.3	0.3	0.0
Competitiveness	–0.4	0.2	–0.2
Real interest rate	–1.2	2.8	1.6
International demand	0.2	0.0	0.2
2. Incomes policy	–0.6	1.7	1.1
3. Replacement rate	–0.4	0.7	1.1
4. Golden Age	4.2	2.7	6.8
5. Tax and import			
price wedge	–0.6	–0.1	–0.7
6. Transient dynamics	1.0	–1.2	–0.2
Residual	0.7	0.5	1.2

Notes:
1. Each cell is a percentage point change in the five-year average unemployment rate between the periods indicated.
2. The breakdown in the simulated rise was calculated by simulating the model holding each explanatory variable constant in turn. The change in the simulated path of unemployment was then attributed to the variable-held constant.
3. Row and column totals are not always exactly consistent due to rounding.

interest rates contribute about 3 points to the increase in current unemployment over the levels of the 1970s. The apportioning of this between domestic and international monetary factors is beyond our present scope. Compared to Layard and Nickell's (1986) similar exercise we attribute relatively more to incomes policy and replacement rate, and relatively less to taxes. Where we differ markedly is that, in our system, most of the increase in unemployment over the levels of the 1950s is due to the changed tastes of a new generation, while, for them, the prime cause is adverse exogenous demand factors.

Figure 14.4 gives the path of the contribution to British unemployment of incomes policies. It suggests perhaps an attempt to submerge a rubber ball by hitting it with a paddle. Incomes policies were always broken in the end, for the simple reason that they were electorally unpopular, as is confirmed by the popularity function:

$$govpop_t = 0.49 govpop_{t-1} - 0.67\Delta infl_t - 0.44\Delta unemp_t - 0.038 incpol_t$$
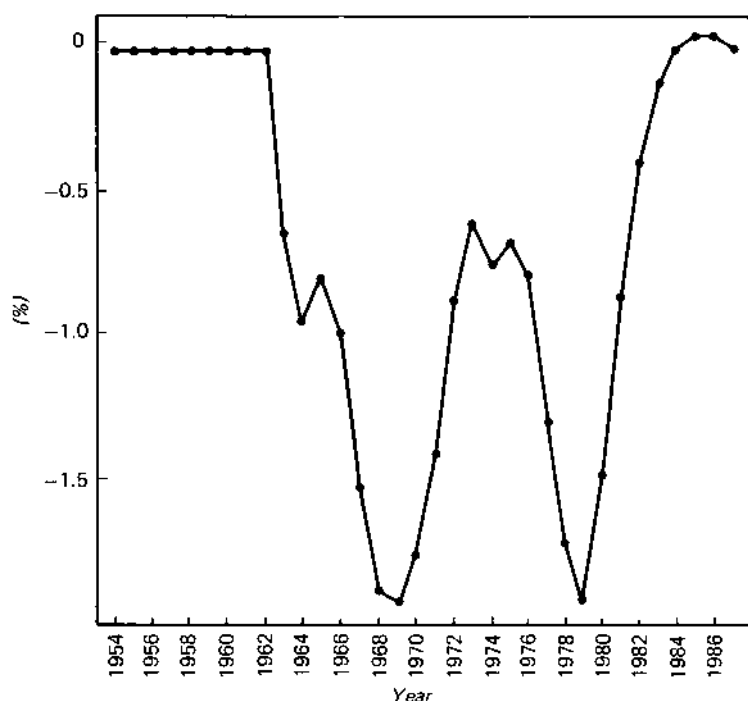$$\quad\quad\quad (2.8) \quad\quad\quad (2.2) \quad\quad (0.6) \quad\quad\quad (2.2)$$

Figure 14.4 The simulated effect of incomes policies on unemployment in the UK 1954–87

($R^2 = 0.68$, $DW = 1.9$, 1949–87. Dummies on election years included.)

where *govpop* is the share of the ruling party in the voting intention count of the top two parties, *infl* is the inflation rate, *unemp* is the unemployment rate and *incpol* is our incomes policy variable. Ex-British Cabinet Minister Shirley Williams notes that incomes policies were instrumental in the downfalls of the last three British governments (Williams, 1981). The above equation implies that a permanent severe incomes policy entails a long-run swing against the government of about 8 per cent.

4 CONCLUDING REMARKS

As the Golden Age passed successive British Governments found themselves unknowingly in an unwinnable war against steadily rising unemployment. The only effective weapon they had was incomes policies. It is possible that a superior institutional structure might have helped in reducing some part of unemployment due to the monopoly power of labour, but, when the chips were down, this would have required lower wages from the employed. Reducing wages by incomes policy proved to be extremely unpopular and British governments which sought to achieve it tended to end up out of office. Some large part of the decisive triumph of the Conservatives in 1979 on a platform of 'free collective bargaining' and their success thereafter is due to a belated recognition that the Golden Age has passed.

Notes

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1. Jewkes (1949) tellingly juxtaposes this quote with one from Churchill's 1929 Budget Speech 'It is the orthodox Treasury dogma steadfastly held that, whatever might be the political and social advantages, very little additional employment can, in fact, and as a general rule, be created by State borrowing and State expenditure'.
2. Jones (1986) p. 21 (note the implicit Phillips curve).
3. There is two-way Granger-causality between wages and prices in monthly data 1948(10)–1956(1). Six lags of each variable were used and the F-tests were significant at the 1 per cent level in both cases. The price series was for retail prices from British Labour Statistics Historical Abstract (BLSHA), Table T90. The wages series is manual basic hourly rates, BLSHA T27.
4. Sample 1949(7)–1956(1). Data as in note 3, above.

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15 Interindustry Wage Structure and the Power of Incumbent Workers

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1 INTRODUCTION

The apparent stability of the interindustry wage structure across occupations, age groups, durations of job tenure and countries has received renewed interest among economists. Industries which pay comparatively high wages to blue-collar workers also tend to pay comparatively high wages to their white-collar workers. The same tends to be true for a variety of occupational groups (see, for example, Dickens and Katz, 1986a). This regularity is also apparent for young and old workers and for workers with long and short job tenure (Krueger and Summers, 1986, 1988). Such evidence suggests that wage differences among industries cannot be fully explained by differences in human capital or in seniority.

Turning from the stability of the interindustry wage structure to its determinants, a few tentative empirical generalisations can be made. Industries which pay comparatively high wages tend to be characterised by high profits (for example, Dickens and Katz, 1986b; Blanchflower *et al.*, 1987; Pugel, 1980), high concentration ratios in the product markets (for example, Dickens and Katz, 1986b; Kwoka, 1983; Mishel, 1982), high capital-labour ratios (for example, Dickens and Katz, 1986b; Lawrence and Lawrence, 1985) and high union density (for example, Dickens and Katz, 1986b; Podgursky, 1986).

Various attempts have been made to explain this evidence. For

example, according to the perfectly competitive theory of labour markets, interindustry wage differences among workers with identically measurable characteristics must be due to unmeasured differences in job attributes or in labour quality. However, it is beyond the scope of this theory to explain why interindustry wage structure is related to interindustry differences in concentration ratios and union density. Nor does the perfectly competitive theory explain why quit rates are comparatively low in the high-wage industries (Pencavel, 1970). If the industries which pay comparatively high wages are compensating their workers for onerous jobs or high abilities, then it is not clear why these workers should be comparatively disinclined to leave their jobs.

Another approach is to try to understand the interindustry wage structure in terms of a competitive labour market model that is modified by adjustment costs. According to this approach, industries whose products are in rising demand are the ones which earn comparatively high profits and pay comparatively high wages. In this way, they encourage the entry of new firms and attract workers from industries whose products are in falling demand. This process is gradual and continues for as long as interindustry demands are changing. In this context, the stability of the interindustry wage structure across occupations, countries, age groups, and durations of job tenure may be viewed as the outcome of gradual, dynamic, free-market responses to changes in the composition of demand. The relation between wages and marginal profits across industries may be rationalised in this way as well. Note, however, that this approach does not predict wage differentials across industries with equal marginal profits and unequal average profits. Moreover, this theory, like the perfectly competitive approach, is not designed to explain how interindustry wage differentials are related to interindustry differences in concentration ratios and union density.

A quite different explanation of the interindustry wage structure is offered by the efficiency wage theory, which focuses on interindustry differences in the relation between wages (on the one hand) and productivity and quit-related costs (on the other). In particular, industries which pay comparatively high wages are the ones which, according to the theory, are comparatively successful in eliciting work effort and reducing quits (Krueger and Summers, 1988). However, since the theory assumes wages to be set in accordance with firms' profit-maximising principles, it cannot explain the relation between wages and union density. Nor does the theory appear to

have been successful in explaining the relation between wages and profits across industries.

This paper suggests another possible explanation of interindustry wage structure, one rising from the insider-outsider theory (for example, Lindbeck and Snower, 1986; 1987, a, b; 1988a). It does not share the particular drawbacks above and is complementary to the efficiency wage explanation. The basic idea underlying the paper is quite simple. According to the insider-outsider theory, wages are the outcome of a bargaining process whereby firms and their 'insiders' (that is, incumbent employees whose positions are protected by substantial labour turnover costs) share the economic rent from insider employment. In this context, the insiders' wages will be higher (*ceteris paribus*), the more their firms stand to lose from a breakdown in wage negotiations. We show that, under specified conditions, firms stand to lose more, the greater (a) their potential profit opportunities, (b) their capital-labour ratio, and (c) the concentration ratio and workers' market power in their industries. In addition, our analysis suggests a further determinant of interindustry wage structure: (d) the industries that have comparatively high labour turnover costs tend to pay comparatively high wages (*ceteris paribus*). The reason, of course, is that the greater these costs, the greater the rent from insider employment and, given the relative bargaining strengths of firms and their insiders, the higher the wage which the insiders will be able to achieve.

Our analysis is also meant to shed some light on why the industries which offer high pay to workers in one occupation tend also to offer high pay to workers in other occupations. The high-wage industries may be particularly vulnerable to the exercise of insider power. For example, industries which earn comparatively high profits tend to have a comparatively high stake in avoiding labour conflict among workers of *all* relevant occupational, age and seniority groups.

Our model has two parts. The first describes the behaviour of imperfectly competitive firms, each of which sets their price, production, and employment levels. This part of the model is quite standard. The second part is less conventional; it deals with wage determination in the context of the insider-outsider theory.

We assume that the above decisions are made in two stages. First wages are set, taking the effect of this decision on prices, production, and employment into account. Then the price, production, and employment decisions are made, taking wages as given.

The paper is organised as follows. Section 2 deals with the firms'

decisions. Section 3 describes wage determination as the outcome of a bargaining process between each firm and its insiders. Section 4 explores the implications of our model for interindustry wage structure. Section 5 contains concluding remarks.

2 THE FIRMS' BEHAVIOUR

Let there be a fixed number (n) of identical firms in a particular industry, producing a homogeneous product. Each firm has three factors of production: capital (K) and two labour inputs $(L_A$ and $L_B)$, corresponding to two occupations. It produces a non-durable output (q). Its production function is $q = f(L_A, L_B, K)$, where $f_i > 0, f_{ii} < 0$ for $i = 1, 2, 3$.

Each firm is an imperfect competitor in the product market, defined by its industry. Let the industry-wide demand curve be

$$P = A \cdot \psi(Q), \tag{1}$$

where P is the product price and Q is industry-wide production. The elasticity of this demand curve,

$$\eta = -\frac{\partial Q}{\partial P} \cdot \frac{P}{Q} = -\frac{\psi}{\psi' \cdot Q} > 0, \tag{2}$$

is assumed to be constant.

We depict the firm's imperfectly competitive behaviour in the product market by the simple device of letting the firm have a linear conjectural relation between its output and the overall industry output:

$$Q = Q_o + v \cdot q, \tag{3}$$

where the firm takes Q_o and v to be positive constants. This formulation has the advantage of simplicity without removing our analysis from the domain of conventional Nash bargaining games, on account of the following special cases: $v = F$ is the 'cartel case', in which all firms engage in joint profit-maximisation; $v = 1$ is the 'Cournot case', in which each firm expects its production decisions to have no effect on the production decisions of the other firms; and $v = 0$ is the 'Bertrand case', in which each firm expects its production decisions to

have no effect on the price decisions of the other firms – since all firms produce a homogenous product. Bertrand conjectures give rise to perfectly competitive behaviour.

In the industry-wide equilibrium, the firm's conjectures are correct. This consideration determines the equilibrium level of Q_o: $Q = n \cdot q = Q_o + v \cdot q$, so that

$$Q_o = (n - v) \cdot q. \tag{4}$$

Let W_A and W_B be the nominal wages of labour of types A and B (respectively) and let R be the nominal user cost of capital. The firm takes these factor costs, together with its stock of capital (K), as exogenously given when it makes its price, production, and employment decisions.

The costs of labour turnover (which, as shown below, can be exploited by incumbents in wage bargaining) may come in a wide variety of guises. They include costs of hiring, training, and firing (for example, Lindbeck and Snower, 1984; Solow, 1985), insider-outsider differentials in co-operation and harassment activities (Lindbeck and Snower, 1988a), and effort responses to labour turnover (Lindbeck and Snower, 1986). However, for brevity (but without loss of generality), we consider only firing costs (for example, severance payments) here.

The firm's incumbent workforces (m_A and m_B) of the two types of labour are historically given. The firm's total firing costs are $\sigma_A = \sigma_A(m_A - L_A)$ and $\sigma_B = \sigma_B(m_B - L_B)$, where $\sigma'_A > 0$ for $m_A > L_A$, $\sigma_A = 0$ for $m_A \leqslant L_A$, $\sigma'_B > 0$ for $m_B > L_B$, $\sigma_B = 0$ for $m_B \leqslant L_B$. Furthermore, we assume that the cost ($\bar{\sigma}_A$) of firing a single insider of type A is a finite, positive constant, and similarly for the cost ($\bar{\sigma}_B$) of firing a single insider of type B. The user cost of capital (R) is also exogenously given to the firm.

For simplicity, we suppose that the firm maximises its profit (π) over one time period. Its decision making problem is

$$\begin{aligned}
\text{Maximise } \pi &= P \cdot q - W_A \cdot L_A - W_B \cdot L_B - R \cdot K \\
q, L_A, L_B \\
&\quad - \sigma_A(m_A - L_A) - \sigma_B(m_B - L_B)
\end{aligned} \tag{5}$$

subject to

$$q = f(L_A, L_B, K)$$

$$P = A \cdot \psi (Q)$$

$$Q = Q_o + v \cdot q$$

In the absence of firing, the first-order conditions for an interim optimum are

$$\frac{\partial \pi}{\partial L_A} = f_A \cdot P + q \cdot A \ \psi' \cdot v \cdot f_A - W_A = 0 \tag{6a}$$

$$= f_A \cdot P \cdot [1 + (q/Q) \cdot (Q \cdot \psi'/\psi) \cdot v] - W_A = 0$$

$$= f_A \cdot P \cdot e - W_A = 0,$$

and

$$\frac{\partial \pi}{\partial L_B} = f_B \cdot P \cdot e - W_B = 0, \tag{6b}$$

where

$$e = 1 - \frac{v}{n \cdot \eta} \tag{7}$$

and $\eta = -(dQ/dP) \cdot (P/Q)$ is the industry-wide price elasticity of product demand. The term $(\eta \cdot n/v)$ may be interpreted as the firm's individual (conjectured) price elasticity of product demand. We call e the 'market power parameter', since it is related to Lerner's index of monopoly power in the product market. In particular, let the proportional price-cost margin be $x = (P - MC)/P$, where MC is the marginal labour cost of production (say, for t-type A labour): $MC = (W/f_A)$. Since $P = W_A/(f_A \cdot e)$ by equation (6a), we find that $x = 1 - e$ $(f_A - e)$. Thus, as the market power parameter e rises, Lerner's index of monopoly power falls.

The behaviour of the firm, as summarised by conditions (6a) and (6b), is taken into account when the firm engages in wage negotiations with its insider. We now turn to these negotiations.

3 WAGE DETERMINATION

As noted, our account of wage determination rests on the insider-outsider theory. This theory presupposes the existence of substantial labour turnover costs, which generate economic rent and thereby permit insiders to exert market power. Furthermore, the insiders are assumed to exercise this power with a view to pursuing their own interest, rather than interests of 'entrants' (newly-hired workers) or 'outsiders' (unemployed workers or employees whose positions are not protected by labour turnover costs). We suppose that insiders' wages are the outcome of a Nash bargain between each firm and its insiders.

The insiders may be assumed to bargain individualistically or collectively (for example, through a union)[1]. According to one interpretation of the analysis below, the firm bargains singly with each insider, and both parties take the strategies of all other employees as given. Thus, the object of the bargain is the economic rent associated with the employment of the marginal insider. By another interpretation, the firm bargains with a union comprising all the firm's insiders and the union wage objectives are formulated so as to ensure that all insiders are retained. Here, too, the object of the bargain is the economic rent associated with the employment of the marginal insider. Our aim is to avoid tying our explanation of interindustry wage structure closely to assumptions about the presence of or absence of unions, since this wage structure is similar in countries which differ significantly with regard to unionisation.

To fix ideas, however, our discussion will follow the former interpretation. Specifically, imagine a firm and an insider of type A bargaining over the insider's wage W_A. We assume that the firm has already reached wage agreements with all other insiders, whereby these workers are retained, type-A insiders receive the wage $\hat{W}_A$, and type B insiders receive $\hat{W}_B$. We assume that all the firm's insiders of a particular type (A or B) are identical in terms of their productivity, bargaining strength, and turnover costs. Work is taken to be a discreet activity, so that an employee can be either fully employed or fully unemployed.

If the firm reaches an agreement to retain the insider (at a particular wage) with whom it bargains, then its type A incumbent workforce will be m_A (since all other type A insiders are retained as well). If an agreement is not reached, with the consequence that the remaining insider is fired, then the firm must decide whether to keep

the insider's position vacant or whether to replace him by an outsider. As shown in Lindbeck and Snower (1988a) this decision depends (among other things) on the size of the type A incumbent workforce. (With diminishing returns to type A labour, replacement is optimal when m_A is sufficiently low, and keeping the position vacant is optimal when m_A is sufficiently high.) For brevity, we simply suppose that the parameters of the firm's profit-maximisation problem (including m_A) are such that keeping the position vacant is the optimal choice.

Assuming that the type A incumbent workforce is 'large' (so that a single type A insider represents a negligibly small fraction of this workforce), the difference between the firm's profit in the presence and in the absence of an agreement is (by (6a) and 7):

$$C = \left\{ P \cdot \frac{d_q}{dL_A} + q \cdot \frac{dP}{dL_A} - (W_A - \bar{o}_A) \right\} \cdot dL_A$$

$$= \{G_A - (W_A - \bar{o}_A)\} \cdot dL_A, \tag{8}$$

where

$$G_A = A \cdot \psi[Q_o + v \cdot f(m_A, m_B, K)] \cdot f(m_A, m_B, k) \cdot e. \tag{9}$$

which is the marginal revenue product of type A labour, $f_A \cdot P \cdot e$, evaluated at the incumbent workforces m_A and m_B.

Let the difference between the type A insider's utility in the presence and in the absence of an agreement be given by

$$D = W_A - R_A \tag{10}$$

where R_A is the insider's reservation wage. The latter is the wage at which the insider would be indifferent between employment and unemployment; it depends on such things as the level of unemployment benefits, the disutility of work, and so on.

Within this setting, the insider's wage may be derived as the solution to the following generalised Nash bargaining problem:

$$\text{Maximise } \Omega = C_A^\alpha, D_A^{1-\alpha}, \tag{11}$$
$$W_A$$

where α is a constant ($0 \leqslant \alpha < 1$) which measures the bargaining

strength of the firm relative to that of the insider. Note that since the insider is assumed to capture at least some of the available economic rent, α must be less than unity.

The first order condition of (10) yields the following negotiated wage:

$$W_A^* = \alpha_A \cdot R_A + (1 - \alpha_A) \cdot [G_A + \bar{\sigma}_A]. \tag{12a}$$

Since all of the firm's type A insiders face the same bargaining environment, they all receive W_A in equilibrium. Similarly, all the firm's insiders of type B receive the following wage:

$$W_B^* = \alpha_B \cdot R_B + (1 - \alpha_B) \cdot [G_B + \bar{\sigma}_B], \tag{12b}$$

where α_B, R_B, and G_B, are defined analogously to α_A, R_A, and G_A (respectively). Observe that if $\alpha, \beta = 1$ (complete firm market power, which we rule out by assumption), then $W_A^* = R_A$ and $W_B^* = R_B$, as the perfectly competitive model of the labour market would predict. However, so long as $\alpha, \beta < 1$ (that is, workers have some market power), then the marginal value products of labour (G_A and G_B) and the marginal turnover costs ($\bar{\sigma}_A$ and $\bar{\sigma}_B$) have a role to play in wage determination.

4   INTER-INDUSTRY WAGE STRUCTURE

Now consider the implications of this analysis for the interindustry wage structure. To fix ideas, let us compare two industries, each containing a fixed number of identical firms. We assume that these industries differ in terms of profits earned, capital–labour ratios, and concentration ratios and degree of insiders' market power. Furthermore, in line with the analysis above, let the two types of labour work in each industry. These may be interpreted as workers with different occupations, different abilities (perhaps related to age), or different bargaining strengths (perhaps related to seniority.[2]) Our object is to show that:

(a)   the inter-industry wage structure depends on the profits, capital-labour ratios, insider market power, and concentration ratios of the industries, and thus

(b)   industries which offer comparatively high pay to workers of one occupation, age, or seniority level, will also tend to offer com-

paratively high pay to workers of another occupation, age, or seniority level.

First, let us consider the effect of profits on wages. In particular, we restrict our attention to interindustry profit differences which are not related to differences in capital-labour ratios, insider market power or concentration ratios. To this end, suppose that the two industries differ in terms of the shift parameter (A) in their product demand functions (1). The greater the parameter A (that is, the greater the industry-wide product demand at any given price), the higher the profits earned by the firms of that industry, *ceteris paribus*. By (9), (12a), and (12b) it is easy to verify that:

$$\frac{\partial W_i^*}{\partial A} = \frac{\partial W_i}{\partial G_i} \cdot \frac{\partial G_i}{\partial A} > 0, \quad i = A, B \tag{13}$$

In other words, the higher the profits of the firms in an industry, the greater the wage that will be paid to labour of any type.

Secondly, we turn to the influence of the capital-labour ratio on wages. Specifically, suppose that the two industries have the same type A and type B incumbent workforces but that they differ in terms of their capital stocks (K). By (9), (12a), and (12b), the effect of a change in capital intensity on the outcome of the wage bargains is

$$\frac{\partial W_i^*}{\partial K} = \frac{\partial W_i}{\partial G_i} \cdot \frac{\partial G_i}{\partial K} = (1 - \alpha_i) \cdot P \cdot e^2 \cdot f_K > 0, \quad i = A, B. \tag{14}$$

In other words, the greater the capital-labour ratio of the firms in an industry (*ceteris paribus*), the greater the wage received by both types of labour.

Thirdly, consider the effect of the concentration ratio on wages. To fix ideas, suppose that the two industries are alike in all respects except for the number of firms they contain. The effect of this difference on the interindustry wage structure may be derived as follows. As in our analysis of the demand shift parameter (A) and the capital stock (K), the number of firms (n) affects the outcomes of the wage bargains (W_A^* and W_B^*) by influencing the marginal revenue products of labour (G_A and G_B). This latter influence runs along two channels: the difference in the number of firms affects the market power parameter (e) and the firms' conjectural function (2). The first channel is straightforward: the greater the number of firms, the

greater the market power parameter (e) (that is, the lower Lerner's index of monopoly power). The second channel implies that the greater n, the greater Q_o, by equation (4) (that is, each firm takes account of how many rivals it has when it formulates its conjectures about its rivals' reactions to its own decisions). By (7), (9), (12a), and (12b), these channels are given by

$$\frac{\partial W_i}{\partial n} = \frac{\partial W_i}{\partial G_i} \cdot \frac{\partial G_i}{\partial n} \tag{15}$$

$$= (1 - \alpha_i) \cdot A \cdot \psi \cdot \frac{v}{n^2 \cdot \eta} \cdot f(m_A, m_B, K)$$

$$+ (1 - \alpha_i) \cdot A \cdot \psi' \cdot e \cdot [f(m_A, m_B, K)],$$

where the two right-hand terms stand for the first and second channels, respectively. Observe that the two channels pull in opposite directions. It can be shown that

$$\frac{\partial W_i}{\partial n} \gtreqless 0 \quad \text{if} \quad n \gtreqless \eta \cdot \left[\frac{i-e}{e} \right]. \tag{16}$$

In short, if the number of firms per industry is sufficiently large, then the greater the number of firms, the lower the wage they will pay to both types of workers. In principle, this is a testable proposition.

Fourth, consider the effect of insiders' market power on wages. Specifically, we assume that the industries are alike in all respects except for the market power parameters α_A and α_B. By (12a) and (12b) it is easy to see that

$$\frac{\partial W_i}{\partial a_i} = R_i - [G_i + \tilde{\sigma}_i] < 0, \qquad i = A. B. \tag{17}$$

Thus, the greater the insiders' market power $(1 - \alpha_i)$ in an industry, perhaps on account of the degree of unionization, the greater their wage.

Finally, let us examine the effect of labour turnover costs on wages. By (12a) and (12b), it is easy to see that the greater the labour turnover costs, $\tilde{\sigma}_A$ and $\tilde{\sigma}_B$, the greater the corresponding wages:

$$\frac{\partial W_i}{\partial \sigma_i} = (i - a_i), \tag{18}$$

which is positive as long as workers exercise some market power. By implication, industries which face comparatively heavy coverage by job security legislation will tend to pay workers of different types comparatively high wages.

5 CONCLUDING REMARKS

Our chapter addresses two puzzling questions concerning the inter-industry wage structure in many countries:

1. Why do industries which pay comparatively high wages to workers in one occupational group, age bracket, or seniority level also tend to pay comparatively high wages to other types of workers?
2. Why are wages related to profits, capital-labour ratios, insiders' market power and concentration ratios, quite independently of workers' skills and the characteristics of jobs?

We offer an insider-outsider explanation for these features. If wages are the outcome of negotiations between firms and their insiders, then wages will depend, at least in part, on how much firms stand to lose from a failure of these negotiations. In our model such a failure means that insiders withhold their productive services from their firms. Under conditions specified above, we show that the greater the profits, capital-labour ratios, and concentration ratios, the greater the firms' potential cost from a negotiation failure, and consequently the higher the wages which workers of different types will receive. In this manner, we suggest a reason why wages may not depend entirely on the productivity of workers or the disagreeableness of their jobs.

Notes

1. Existing empirical evidence indicates that industry wages are positively related to union density. However, union density does not appear to account for the lion's share of interindustry wage differences, and besides, as Krueger and Summers (1986, p. 19) note, there is reason to believe that the relationship may not be a causal one.
2. Since firm-specific skills and legal rights for job protection take time to acquire, the labour turnover costs σ_A and σ_B may be assumed to rise with seniority. They, by (12a) and (12b), the more senior workers receive the higher wages.

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16 Wage Determination and Union Behaviour in Italy: An Efficiency Wage Interpretation

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1 INTRODUCTION

In the 1970s the Italian labour market was characterised by rigidities mainly originating from institutional factors. Union behaviour and labour legislation have often been blamed as major causes of the loss of flexibility. As a result, the impact of the oil shocks on economic performance turned out to be particularly severe, both in terms of increased inflation and unemployment. In the early 1980s, although unions showed a less conflictual attitude and accepted an incomes policy, which most likely contributed to slowing down inflation; nevertheless unemployment continued along its rising trend.

This fact calls for an explanation, indeed it might prove interesting to see why the favourable circumstances encountered did not produce a lower unemployment rate.

This paper cannot provide an exhaustive answer on this issue. However it attempts to shed some light on the factors which potentially contributed to keep unemployment high. Our analysis starts from the simple observation that, in the period considered, union concessions in terms of increased flexibility were matched by large increases in labour productivity. One possible explanation for the observed relationship including decreased union wage-push, greater flexibility, increasing unemployment and high productivity, can be found in the hypothesis that firms were paying efficiency wages in order to enhance productivity.

This is the hypothesis we wish to test. The rest of the paper is

organised as follows. Section 2 briefly describes labour market conditions and the state of industrial relations in Italy. Section 3.1 and 3.2 contain an extensive empirical analysis of the wage structure and of the wage-productivity relationship respectively for manufacturing and for the metal and mechanical sectors; leading to an empirical framework and presentation of basic results. The last section contains some concluding remarks.

2   WAGES AND PRODUCTIVITY IN ITALIAN INDUSTRY: AN OVERVIEW

During the 1970s and until few years ago, nominal labour costs increased to a much larger extent in Italy than the average of other European countries. The big increase started before the first 'oil shock', in the well-known 'hot autumn' of 1969. It was much higher than could possibly have been predicted on the basis of a Phillips-like wage equation (see Onofri and Salituro, 1986). Price increases were insufficient to cover the greater unit costs; labour's share increased sharply between 1969 and 1974 and roughly remained at that high level for the rest of the decade. At the same time a very important event took place. An agreement between trade unions and employers was reached in 1975 on the reform of the automatic system of wage indexation (*scala mobile*). This agreement exhibited two main features: first, the degree of indexation was considerably increased and secondly, a flat-rate mechanism was introduced. That mechanism, combined with a high inflation, produced a dramatic reduction of wage differentials. A substantial reduction of wage differentials had already started in the early 1970s. Since the collective agreements of 1969, trade unions were pursuing an egalitarian wage policy which was implemented in different ways, but chiefly by asking for wage rises of equal amount for all workers. However the crucial factor was the 1975 reform of the *scala mobile*. The flat system of indexation, combined with an inflation which for ten years (1975–85) was constantly in the two-figure range, caused an exceptional reduction of differentials by skill and by sector (Table 16.1), in a way which was not encountered in other developed countries in recent years (see Marsden, 1987, and OECD, 1987).

Thus, it can be said that the Italian industrial relations system of the 1970s was characterised by a strong wage push and a dramatic change of the wage structure (both rooted in the institutional en-

Table 16.1 Labour market and industrial relations in Italian industry: some key-variables (1974–87)

variables		annual averages		
		1974–80	*1981–83*	*1984–87*
Annual rate of growth				
(1) Output[a]		3.0	–0.6	3.5
(2) Employment[a]		0.0	–3.4	–1.8
(3) Labour productivity[a]		3.0	2.8	5.3
(4) Real labour cost[ab]		2.2	1.7	2.7
Index numbers				
(5) Labour's share[a]	(1974=100)	103	98	95
(6) Wage drift[c]	(1974=100)	105	102	117
(7) Wage differentials:				
(i) by sector[d]	(1974=100)	85	60	66
(ii) by skill[d]	(1976=100)	96	87	105
(8) Unemployment rate[a]	(1974=100)	127	169	201
(9) Stoppages[e]	(1975=100)	102	82	27
(10) Absenteeism[e]	(1975=100)	96	70	55
(11) Union density[f]	(1977=100)	103	96	90

Notes:
a. *Source*: National Accounts (new series after 1980).
b. Labour cost is deflated by the cost of living.
c. *Source*: Federmeccanica and Assolombarda. Wage-drift is here defined as to include only the component fixed by the firm, without bargaining with the unions. Data refers to the Metal and Mechanical industry.
d. Differentials are measured with the coefficient of variation. *Source*: (i) Ministry of Labour (until 1983); ISTAT afterwards; (ii) Federmeccanica (for the metal and mechanical sectors).
e. Hours lost per employee. *Source*: Istituto di Statistica (ISTAT) and Confederation of Italian Industries (Confindustria).
f. Density is defined as union membership as a percentage of employee in employment. *Source*: Centro di Studi Sociali e Sindacali (CESOS).

vironment). Moreover, in the same period there was a drastic reduction in dismissals and in the mobility of labour in general (Dell'Aringa, 1986). In 1975, for instance, when a serious drop of industrial production was experienced, the dismissal rate reached its lowest level (5 per cent on an annual basis). Ten years earlier, in 1965, with the industrial labour market in similar depressed conditions, dismissals were approximately 20 per cent of the employed labour force. There is no doubt that the institutional framework had completely changed in those ten years, following the sharp increase

in the bargaining power of unions and in job security legislation. The opposition of unions to dismissals and to layoffs largely accounts for the fall in labour turnover, and in general in labour mobility, which occurred in those years. During the 1960s labour turnover in industry dropped from a yearly figure of around 35 per cent (a level rather close to that of the US industry) to 15 per cent in 1977, and to even lower figures in the following years. Such a change, when considered jointly with the increased internal rigidity introduced by rank and file workers, had the result of inhibiting employers' ability to adjust their level of employment to the new depressed situation. Labour hoarding and overmanning consequently increased, and can partly explain the relatively good performance of industrial employment over the period. In Italy, in fact, employment remained roughly constant (Table 16.1), while it decreased substantially in the industrial sector of other countries, for example, West Germany and the UK.

A new scenario appears in the 1980s. The Bank of Italy, after the second oil crisis, followed a strict monetary policy, in the attempt to reduce the rate of inflation and the burden of external deficit. Economic activity stagnated and the unemployment rate rose at a faster rate than in the previous period. Nominal wages decelerated their growth and a sort of Phillips-like relation reappeared.[1] To what extent the slowdown of inflation, which occurred in these years, was due to the acceptance of incomes policies by the unions is an open question (and it is left to Brunetta and Carraro in this volume to clarify it).

It is worth noting that not only did inflation decrease, but other crucial variables reverted to their trends. On the whole, it was the whole flexibility of the labour market that showed a sort of turning point. This can be seen both considering the 'labour demand-employment' side and 'the wage determination' side. As far as the former is concerned, it can be observed that, at the beginning of the 1980s, labour productivity increased along its trend despite the stagnation in industrial production (Table 16.1). It was the first time that labour productivity in Italian industry did not show a clear pro-cyclical behaviour. Afterwards, when production rose again and reverted to its trend, labour productivity increased even more. Industrial employment fell heavily and a strong increase in the unemployment rate was recorded. However, it should be noted that the rise in productivity was also due to the increased labour-saving investments made by industrial firms in previous years.

Yet, only the change in the industrial relations climate made it

possible for these investments to give results in terms of productivity, notwithstanding the drop in economic activity and the general deterioration of labour market conditions. There were signs of increases in numerical and internal organisational flexibility (Dell'Aringa, 1986). Labour gradually became more willing (and to some extent was compelled) to adapt itself to in-plant reorganisations. Turning to the wage side, it can be observed (Table 16.1) that although real wages kept increasing, roughly as much as they did in the previous period, nevertheless the increases were much lower than those in labour productivity. As a consequence, labour's share in value added decreased. Moreover, the leveling of differentials that had marked the wage structure in the 1970s was sharply reversed. A widening of both interindustry and skill differentials has occurred since 1983, and that was marginally the result of union activity. In the last few years unions have indeed asked for and obtained increases in wages differentiated by sector, by firm and by skill, primarily in order to provide a counterweight to the persistent effects of the *scala mobile*. These corrections however, were small compared with the increases provided by the wage-indexation mechanism which even after being partly reformed, remained highly egalitarian in its effects. Nevertheless the overall wage moderation expanded the room for manoeuvre for individual firms, which proceeded to grant wage increases to their workers even without being pushed by the unions to do so.[2] The weight of the wage-drift on total earnings shows great variation by skill and occupational grade. For the lowest grades it is almost non-existent, while for the higher white-collar positions it can be as high as 40 per cent (ASAP – Associazione Sindacale delle Aziende Petrolchimiche – 1986). Moreover, such rises have gone to the more skilled workers, those occupying the higher grades of the occupational ladder, and those with more responsibilities in the organisational structure. Indeed they were the most penalised by the earlier leveling of differentials. The widening gap between actual earnings and the wage components controlled by the unions reinforced the positive effect that the concessions, both in terms of external and internal flexibility, had on labour productivity. As a matter of fact the wage-drift has been used by employers in an 'efficient' way. In other words, some forms of wage premium are paid by firms to decrease unit labour costs. This, taking into account the potential advantages associated with pay incentives (higher productivity, decreased labour turnover, and so on) can be quite reasonable.

In the following section, we show that the hypothesis of 'efficiency

wages', when applied to Italian industry data, finds some empirical support. However, the extent to which firms can pay efficiency wages depends on the scope of collective bargaining. If collective bargaining (together with the indexation system) covers the whole potential earning of each worker, then there is no room left to firms. This does not apply to the Italian industry. In fact, as soon as wage pressure from the union side lessened, firms did use wage (drift) to increase productivity.

3 WAGE DETERMINATION AND THE WAGE STRUCTURE: AN EMPIRICAL ANALYSIS

In the attempt to provide more detailed empirical support for the hypotheses previously discussed, this section presents an analysis of the wage structure and of labour market adjustment. The positive correlation observed between wages, profits and unemployment, together with the negative relationship between wages and union power (see Table 16.1), seem to suggest that alternative explanations to the standard competitive model or to the traditional wage bargaining model, could represent a fruitful line of research. In recent years, several classes of models that predict either a positive co-movement between wages and profits, but *not* unemployment (McDonald and Solow, 1981;[3] Nickell and Andrews, 1983); or a positive relationship between wages and unemployment, but *not* profits (Lindbeck and Snower, 1986; Blanchard and Summers, 1987), have been put forward. Alternatively, a further set of models, which also appears to be consistent with the empirical evidence, is represented by efficiency wage models, where firms set wages, or some component of the wage-package, 'unilaterally' according to some efficiency considerations. The basic idea is that wage level plays an essential role for the level of productivity, which in turn affects firm's profits (Stiglitz, 1984; Akerlof and Yellen, 1986).

In the empirical analysis these competing, though not mutually exclusive, interpretations of the functioning of the labour market will be considered and, although the focus will be placed on 'efficiency wage' models, attempts will be made to discriminate between their different implications.

The relevance of the efficiency wage hypothesis (EWH from now onwards), in explaining the features of the Italian labour market, will be examined in two stages: firstly, a cross-section analysis of the

industrial and occupational wage structure will be presented and secondly, a direct test of the EWH using time-series data will be performed.

3.1 A Cross-sectional Analysis of Inter-industry and Occupational Wage Differentials

It is a common finding in empirical research that there are significant differences in relative pay across industries and occupations for equally skilled workers doing similar jobs. In theory, in competitive labour markets, wage differentials between industries or occupations should simply reflect differences in the skill mix and working conditions. Although differences in pay, which do not account for the above factors, could be explained by temporary disequilibrium situations such as demand shocks, monopoly power and other noncompetitive forces; nevertheless these should disappear, in the long run, through the working of the market. However, substantial empirical evidence suggests that there is a remarkable stability of wage structures over time; furthermore, this appears to be a common characteristic of many countries.[4] As far as the Italian experience is concerned the pattern of inter-industry wage differentials has remained substantially stable over the last 20 years, despite the major institutional changes which occurred in the same period,[5] and despite the strong decreases in wage dispersion of the 1970s. The observed regularities in the industry wage structure, cast some doubts on the explanation of wage differentials based on short-run imperfections, sectoral demand shocks and labour immobility. On the contrary the pervasiveness of such regularities calls for an explanation of these patterns. We investigated, for Italian manufacturing industry, the magnitude of wage differentials for similar workers, focusing primarily on the role of occupational and industry affiliation and, secondarily, on product market conditions and firms' financial structures. Our empirical analysis is based on cross-sectional data on individual workers collected by ENI-IRI (Ente Nazionale Idrocarburi – Istituto per la Ricostruzione Industriale) for the 1985 survey on remunerations (Indagine sulle retribuzioni di fatto).[6] The methodology adopted follows closely the works of Krueger and Summers (1988) and Dickens and Katz (1987a, 1987b).

In a fairly competitive wage setting process, a worker should be compensated according to his human capital endowment and to job attributes (Rosen, 1986; Becker, 1967). In this light, unless un-

Table 16.2   Estimated industry wage differentials with and without quality controls

Industry	(1)	(2)
Fabricated metal and machinery	-0.0302 (0.0083)	-0.0286 (0.0042)
Primary metals	-0.0423 (0.0155)	-0.0436 (0.0066)
Petroleum	0.0781 (0.0094)	0.1001 (0.0048)
Chemical	0.0503 (0.0085)	0.0272 (0.0044)
Textile	-0.1029 (0.0119)	-0.0878 (0.0067)
Food	0.0347 (0.0177)	0.0568 (0.0097)
Other industries	0.0269 (0.0052)	0.0111 (0.0035)
Labour quality controls included	no	yes[a]
Standard deviation of estimated differentials	0.036	0.057

Note: Standard errors in parentheses.
a. Control variables included are education, experience and its square, sex, 7 occupational dummy variables and experience sex, experience education interaction terms.
Source: ENI-IRI.

observed workers' quality or compensating differentials prove to be highly correlated with industry or occupational status, control variables for industry and occupational affiliation should play no role in wage determination.[7]

On the contrary, our findings suggest the existence of significant differences in relative pay even after controlling for a wide range of personal, occupational and industry characteristics. Table 16.2 reports estimated industry wage differentials for two-digit manufacturing industries.[8] These should be interpreted as expressing the proportionate difference in wages between an individual in a given industry and the average manufacturing employee. Industry controls show a sizeable impact on relative wages and are statistically significant both as a group and individually. The estimated standard deviation of differentials suggests the existence of a considerable variation in relative wages.

The issue of whether the observed differentials could represent a compensating device for non-wage attributes that directly affect the utility of workers (for example, night shifts, working conditions, restrictions on the organisation of work-time, and so on), has been investigated by means of specific job-attributes controls.[9] Although it

Table 16.3 Estimated occupational wage differentials

Occupation	(1)
Professional and technicians	0.0708 (0.0112)
Managers and administrators	0.0674 (0.0111)
Clerical	0.0003 (0.0096)
Sales	0.1754 (0.1241)
Transport (internal and external)	0.0979 (0.0727)
Crafts	−0.0770 (0.0072)
Operatives	−0.1032 (0.0072)
Labourers	−0.1460 (0.0081)
Labour quality controls included	yes[a]
Standard deviation estimated differentials	0.0794

Note: Standard errors in parentheses.
a. Control variables included as in Table 16.2.
Source: ENI-IRI.

can be quite problematic to capture relevant non-pecuniary attributes by simply adding control dummies for job-related aspects in the wage equation, nevertheless, if working conditions do play an important role in determining industry wage differentials, then their inclusion should alter in some way the estimated differentials.[10] In practice, estimated differentials were unaffected by the introduction of working conditions controls; furthermore no evidence was found of any compensation for unpleasant working conditions as these are associated with lower wages.

Table 16.3 reports the estimated occupational wage differentials after controlling for individual characteristics, industry status and job attributes. Occupational affiliation does represent a significant factor in explaining wage variation, though when considered individually, occupational pay premiums appear statistically less important than industry premiums.

The patterns of pay premiums analysed thus far, seem to provide evidence for some occupations and industries to receive a higher remuneration relative to others. Although this has been shown to be not inconsistent with competitive explanations of the functioning of labour markets, nevertheless further investigation found it difficult to reconcile empirical results with the predictions of the theory.

In particular, it is not clear why the pattern of wage premiums

Table 16.4 Correlation matrix of interindustry wage differentials across occupations (fixed effects)

Occupations	Prof. Tech.	Manag. Adm.	Cler.	Sales	Transp.	Skilled Wor.	Unskilled W.	Workers
Prof. Tech.	1.000							
Manag. Adm.	0.863	1.000						
Cler.	0.926	0.911	1.000					
Sales	0.371	0.616	0.582	1.000				
Transp.	0.978	0.878	0.936	0.508	1.000			
Skilled Wor.	0.863	0.858	0.912	0.743	0.944	1.000		
Unskilled W.	0.887	0.799	0.825	0.076	0.797	0.601	1.000	
Workers	0.965	0.890	0.896	0.279	0.936	0.801	0.941	1.000

Note: Control variables included in the regression are: education, experience and its square, sex and experience sex, experience education interaction terms.
Source: ENI-IRI.

ought to be the same across industries for different occupational groups. In other words, if blue collar workers, in an industry characterised by unfavourable working conditions, receive a higher wage to compensate them for the disutility associated with the job, this should not mean that secretaries or administrators in the same industry ought to earn a pay premium too.[11] Table 16.4 presents an analysis of the occupational structure of industry wage premiums. The average log-wage of eight different occupational groups have been correlated across industries after controlling for a wide variety of individual characteristics.[12] The large correlations obtained between average wages in any two occupations within an industry clearly indicate that if one occupational group in an industry receives a high wage all the remaining occupations in the same industry are highly paid. This evidence contrasts strongly with the 'compensating differentials' or the 'unobserved quality' arguments; it is in fact quite unlikely that skill requirements and working conditions will systematically vary across industries.

A possible interpretation could be that the pattern of industry wage premiums simply reflects union bargaining power across industries or some rent-sharing associated with insider power. Alternatively, as advanced by Frank (1985), it could be due to the existence of horizontal equity constraints on pay. However, it should be noted that the inter-industry wage structure, when confronted with the

empirical evidence, does not seem to mirror any particular distribution of union power across industries. Conversely, it can well be consistent with the existence of wage-norms across occupations as implied by the 'sociological' model of the EWH (Akerlof, 1982, 1984).

Finally the presence of 'ability to pay', originating from some monopoly power in protected industries, could generate the same results. This is the issue to which we now turn.

A positive relationship between product market power and wages could be related to the level of capital intensity, monitoring costs in concentrated industry, or to a solid financial structure of incumbent firms. Under these conditions it might not be very costly to a firm to pay higher, than market-clearing, wages if there are efficiency gains to be made. This hypothesis has been tested introducing into the wage equation additional variables proxying for product market and firm financial characteristics[13] (Lucifora, 1988). Both sets of variables contributed significantly in explaining log-wage variation, as a group and individually.

However, the sole reliance on the above result, due to some econometrics caveats, could prove misleading;[14] therefore an alternative approach has been considered. Inter-firm wage differentials (fixed-effects) have been correlated with average firm characteristics in the attempt to ascertain which aspects are significantly related to wage premiums.[15] Product market variables and firm's financial structure, amongst others, were correctly signed in most of the cases and significantly correlated with pay premiums.[16] These results provide some tentative support for the hypothesis that workers do share rents which arise from product market power or from a solid financial structure. Furthermore, the presence of 'ability to pay' may in turn influence the 'fairness' of the wage structure, emphasising the importance of efficiency wage considerations.

In conclusion, the pattern of wage differentials as it resulted in the analysis of Italian industry showed significant interindustry and occupational variation; the presence of high correlations in the structure of wage premiums across industries for different occupational groups suggest that some 'equity-constraint' and 'rent-sharing' processes might influence the wage determination mechanism. Since this section has been more successful in ruling out some explanations rather than producing evidence in support of others, in the following section a direct test of the EWH will be presented.

3.2   Efficiency Premiums and Firm's Productivity: a Direct Test of the EWH

In this section, the hypothesis that over an economically relevant portion of output levels wage premiums might increase firm's productivity will be tested using time series data for the Italian metal-mechanical sector.

A number of authors have recently produced substantial empirical evidence supporting the EWH (for the USA, Krueger and Summers, 1987, 1988; Dickens and Katz, 1987a, 1987b; and for the UK, Nickell and Wadhwani, 1987, 1988; van der Ploeg, 1987; Wadhwani and Wall, 1988).

There are a number of reasons why output might depend on the wage paid: high wages may increase morale and therefore the productivity of workers (Akerlof, 1982, 1984), they can lower turnover costs reducing quits (Salop, 1979; Stiglitz, 1985), deter shirking (Shapiro and Stiglitz, 1984; Bulow and Summers, 1986) or attract workers with higher unobserved quality (Weiss, 1980). Our approach follows the methodology employed by Wadhwani and Wall (1988), as we estimate an 'augmented' production function to take into account efficiency wage factors.

In the empirical literature mentioned above, in which micro-data on individual firms are used, the efficiency variable is represented by the ratio between the wage paid by the firm and the average of the industrial sector. This latter can be considered as the 'outside opportunity' for the workers employed by the firm.[17] However, when working with aggregate data, as we do, a good proxy for the 'outside opportunity' can be represented by the bargained components of the wage package; in other words, the minimum wage level that the firm must pay to employ its workers. In practice, the efficiency variable has been computed as the difference between total average earnings and 'outside opportunities' (which is equal – in the spirit of the EWH – to the proportion of the 'firm-determined' wage-drift), expressed as a percentage on total average earnings.[18]

Clearly, the existence of a positive relationship between the wage level and productivity could simply reflect the existence of workers' unobserved quality or some rent-sharing process. However, attempts will be made to discriminate between alternative explanations of the phenomenon.

In order to test the implications of the EWH, we employed a modified Cobb-Douglas production function.[19] As the form in which

the efficiency variable enters the production function is not obvious, different functional forms have been considered.[20] In particular we investigated two main hypotheses: the first in which the efficiency term enters in a 'neutral' form, as to say in some multiplicative way interacting with the labour factor;[21] the second in which a 'non-neutral' form is adopted. In this latter case a specific form for the effort function, as suggested by Akerlof and Yellen (1986), has been chosen.

In practice, we employed the following specification for the 'neutral' case:

$$Y_t = A \, K_t^\alpha \, W_t^\delta \, L_t^\beta \, exp \, (\tau t) \qquad \alpha, \beta, \delta > 0 \qquad (1)$$

where, Y_t is output, K_t the capital stock, L_t the labour factor, t a time trend, A a constant and W_t is the efficiency wage variable. The parameters $\alpha, \beta, \tau, \delta$ have to be estimated.

In the 'non-neutral' case, the elasticity of labour with respect to output (that is, the parameter β), is influenced by the efficiency variable as shown in (2):[22]

$$\beta = \beta_o + \beta_1 \, W_t \qquad \beta_1 > 0 \qquad (2)$$

In order to test for alternative formulations of the EWH additional terms have been included both in (1) and (2), results are reported in Table 16.5. Before turning to the main results, it is necessary to discuss further the estimation procedure employed and what we consider as a 'test' for the validity of an efficiency-wage type model. In practice, a positive sign and a test of significance on the efficiency variable coefficient is what we used to discriminate against the standard neo-classical model. However, as already mentioned, other reasons unrelated to the EWH could generate similar results.

As far as the 'unobserved quality' argument is concerned, we appeal to the results obtained in the cross-section analysis to rule out the possibility that some unobserved (to the econometrician) ability is responsible for a significant and positive association between efficiency premiums and firms' productivity. On the contrary we feel less confident in discarding the hypothesis that some rent-sharing process is at work. In fact, although the efficiency premium is recorded as a choice variable of the firm and we employ an appropriate Instrumental Variable estimator (IV from now onwards) to take into account the presence of potential simultaneity bias; nevertheless it

Table 16.5 Estimates of production functions for the metal and mechanical sectors: a direct test of the EWH (quarterly data: 1974:Q1 – 1985:Q4)

Independ. variab.	(1) OLS 'neutral' form	(2) IV 'neutral' form	(3) IV coll. barg.	(4) IV 'non-neutral' form	(5) IV unempl.
			Dependent variable: value added – ln(VA)		
ln (K)§	0.597***	0.599***	0.582***	0.589***	0.601***
	(4.27)	(3.22)	(3.21)	(3.27)	(3.19)
ln (L)§	0.631***	0.710**	0.627*	0.759**	0.759**
	(2.15)	(1.95)	(1.38)	(2.05)	(1.95)
(m)	0.004***	0.004**	0.003	0.004**	0.004*
	(2.31)	(1.90)	(1.20)	(1.98)	(1.83)
(HL)	0.035***	0.035***	0.038***	0.036***	0.036***
	(6.73)	(6.05)	(6.26)	(6.27)	(6.21)
ln (W_{ind})§	0.088***	0.105***	0.105***	–	–
	(2.52)	(2.57)	(2.55)		
ln (W_{col})	–	–	-0.075	–	–
			(0.56)		
ln (L) · (W_{ind})	–	–	–	0.111***	0.109***
				(2.88)	(2.66)
ln (L) · (Une)	–	–	–	–	0.066
					(0.37)

Const.	3.479 (1.32)	2.535 (0.84)	6.240 (1.71)	1.728 (0.58)	1.897 (0.45)
Diagnostic tests					
–R^2	0.95	0.95	0.95	0.95	0.95
–S.E. of reg.	0.03	0.03	0.03	0.03	0.03
–LM_1 ($X^2 = 3.84$)	2.44	2.90	2.85	2.94	2.94
–LM_{1-4} ($X^2 = 5.99$)	2.37	2.65	2.60	2.69	2.69
–Chow-test ($5\% F_{9,39} = 2.4$)	2.0	2.2	2.3	2.0	2.1
–Predict. test ($X^2 = 12.59$)	5.1	6.3	8.4	5.0	5.6
–Sample size	48	47	47	47	47

Note: Absolute *t*-ratios in parentheses.
§ denotes variables treated as endogeneous.
* 10 per cent; ** 5 per cent; *** 1 per cent significance levels.
Independent variables: (K) – services of capital; (L) – total employment; (m) – time trend; (HL) – labour force utilisation; (W_{ind}) – efficiency variable; (W_{col}) – collective wage premium; (W_{min}) – contractual wage minimum index; (Une) – change in unemployment rate.
Instruments included are: $ln(L)_{t-1,t-2}$, $ln(K)_{t-1}$, $HL_{t,t-1}$, m, $(W_{ind})_{t-1}$, $(W_{col})_t$, $(W_{min})_t$, $ln(VA)_{t-1}$ and seasonal dummies.
Source: ISTAT (Istituto di Statistica).

may well be the case that firms merely anticipate 'union-threat effects' paying efficiency premiums.

A log-linear specification, of the models implied by (1) and (2), was estimated using seasonally unadjusted quarterly data for the Italian metal-mechanical sector. The time period goes from 1974:QI up to 1985:Q4. The dependent variable is value added at constant prices. Independent variables included in the basic formulation are: service of capital,[23] total employment, individual efficiency premium (as a percentage over total compensation), a measure of labour force utilisation (Muellbauer, 1984),[24] a time trend and seasonal dummies.

In order to estimate consistently equations (1) and (2) an IV estimator was implemented, and service of capital, employment and efficiency wage variables were treated as endogenous.[25] Parameter estimates are reported in Table 16.5. The model satisfies, at the conventional level of significance, most of the diagnostic tests performed (autocorrelation, structural and post-sample predictive stability) and the fit is good. The values of the coefficients have reasonable magnitudes, are correctly signed and in general statistically significant.

In all formulations, the coefficient on the efficiency wage variable shows a positive and statistically significant effect on productivity; its value, in the 'neutral' specification, implies an elasticity of output with respect to the efficiency wage variable of approximately 0.1. Similar results have been obtained for the 'non-neutral' form. Notice that the 'Solow condition' (Solow, 1979), for the firm being at the profit-maximising level, would have implied an elasticity equal to unity. However, it has been shown that, in some cases, the equilibrium effort-wage elasticity can be lower than unity (Akerlof and Yellen, 1986); also, the use of aggregate data might contribute to explain the result obtained here.[26]

In addition to the basic model (columns 1 and 2 in Table 16.5), other specifications were tried. Coefficient estimates which resulted were fairly robust to the inclusion of additional variables and to different functional forms.[27] In order to test whether the efficiency variable was in fact capturing the effect of a component of the wage package, which was determined through collective bargaining instead, we introduced as additional explanatory variable the outcome of firm-level wage collective bargaining. The coefficient on the efficiency wage variable was largely unaffected, while the resulting collectively bargained wage premium was negatively signed and statistically insignificant.

In addition to efficiency premiums, other variables could have a positive impact on productivity. As suggested by Shapiro and Stiglitz (1984), unemployment may act as a worker discipline device. We could not detect any significant effect of unemployment on productivity. Although the coefficient bears the correct sign, it is not statistically different from zero.[28] Moreover, the general level of unemployment or its change might not be the appropriate variable to consider; unfortunately more disaggregated figures (that is, by duration, by sector, and so on) were not available for our purposes.

Finally, the implications of 'adaptation theory', according to which individuals tend to become accustomed to a certain state, have been considered. In particular – as far as pay comparison standards are concerned – the issue that productivity might be influenced not only by the level of wages but also by their change, was tested. No evidence was found in support of the hypothesis that workers quickly adjust their aspiration upwards.[29]

Before summarising the results obtained, it may be worth inspecting further which of the two functional forms adopted better fits the data. In other words we wish to discriminate between 'neutral' and 'non-neutral' specifications and evaluate how the efficiency wage variable enters the production function. On the basis of the tests implemented neither of the two specifications was rejected by the data.[30] Despite the inconclusive result obtained, a possible interpretation might be that the efficiency premium does not enter the production function in a unique, well-determined form.[31]

4 CONCLUSIONS

Some support for the EWH emerges from the analysis of Italian data. Both cross-section and time-series analyses provide some comforting, though far from conclusive, results which, together with the existing evidence relative to other countries, reinforce the potential relevance of this class of models in interpreting the functioning of the labour market. The observed pattern of differentials seems to suggest that the scope for Italian firms to pay efficiency wages is closely related to the different technologies of the various industries (and the implied wage-effort relationship). Moreover a greater scope exists when the bargaining activity is depressed.

The recent Italian experience seems to suggest that firms increase wages in an unilateral way, mainly when they are not pushed by

unions to do so. Under these conditions, income policies appear even more costly to unions in terms of their wage and employment objectives. In fact, moderation in wage bargaining can lead to a loss of control of an increasing proportion of earnings by the unions and possibly a widening of wage differentials. However, even if the immediate effects on employment, due to a buoyant wage-productivity relationship, are not positive; it cannot be excluded that in the medium term wage moderation has a significant positive impact on the employment level.

A myopic union could well think it better to change attitudes, attempting to re-establish a more conflictual climate at the bargaining level. Indeed, signs of this kind of built-in destabiliser of income policies are already present in the evolution of Italian industrial relations.

Notes

1.   It is not suprising that in the macroeconometric models, built at the end of the 1970s, the level of industrial wages was taken as an exogenous variable, while in the recent versions of the models (see for example Bank of Italy (1987), the wage has become again endogenous).

2.   Considering the wage determination mechanism and the composition of industrial earnings, it is possible to identify four major components which reflect the different sources of their increases: (1) the 'contingenza' which is determined according to the working of the *scala mobile* mechanism; (2) the wage rate which is determined through collective bargaining at the central level; (3) the component which is bargained between the unions and the single firm ('superminimi collettivi'); and finally (4) the component which is set by the employer ('superminimi individuali'), on which the union has no say. In 1986 the weights of the four different components (referred to the average of the metal-mechanic sector) were: 45 per cent for 'contingenza', 35 per cent for wage rates, 10 per cent for wage-drift fixed through local bargaining and 10 per cent for wage-drift fixed by the employer. Ten years earlier, in 1976, the percentages were different with 'contingenza' weighting much less. Nominally they were: 29 per cent, 46 per cent, 18 per cent, 6 per cent respectively. On the whole the components of wage earnings bargained at the central level ('contingenza' and wage rates) account, on average for the period considered, for more than 75 per cent of total

earnings. With that figure in mind, one is surprised by the very low ranking of Italy in the scale of centralisation of wage bargaining as it appears in most of the literature on corporatism (see, for example, the recent work of Calmfors and Driffill, 1988).

3. In some cases the McDonald and Solow model can produce ambiguous results as far as the wage-profit relationship is concerned (see Oswald, 1985).

4. Evidence for the USA can be found in Slichter (1950) and, for the post-war period, in Krueger and Summers (1987). Lawson (1982) presents evidence for the UK, while an international comparison is contained in OECD (1965).

5. The rank correlation of mean hourly wages for 21 two-digit manufacturing industries, between 1974 and 1984, was 0.91.

6. A more detailed description of the data set employed can be found in Lucifora (1987).

7. It should be stressed that it appears quite hard to explain why unobserved characteristics should be highly correlated across industries, as it seems more plausible that unobserved labour quality closely mirrors observed worker characteristics. Moreover, technology may well explain why a certain skill in an industry should receive a wage premium; however it is more difficult to explain why all occupations in such industry must be highly paid.

8. Differentials have been calculated from a regression of log-wage with human capital, occupational and industry controls. Since the wage regression contains a constant, the omitted industry variable has been considered as having zero effect on wages. We then computed the employment-weighted average of wage differentials reporting the difference between industry differentials and the weighted average. The standard errors reported have been calculated accordingly to the above methodology.

9. Controls include a dummy which takes value one if the individual works with machines and zero elsewhere; a second variable takes value one if the worker is monitored during his work and zero otherwise.

10. Table 16.2 reports the estimated wage differentials when working condition dummies are included.

11. It should be noted that working conditions, skill requirements and supervision are likely to differ considerably across occupations in an industry.

12. 'Fixed effects' were calculated for 96 industry-occupation cells, the estimates were then grouped by occupations and correlated across industries (see Dickens and Katz, 1987b for a detailed description of the methodology adopted).

13. A potential problem concerned with this methodology involves the use of variables from a different level of aggregation. The inclusion of aggregate data in a micro-specification can affect the efficiency of the OLS estimator due to the presence of common group error component.

14. Space considerations preclude any discussion of these caveats (see Lucifora, 1988).

15. These correlates refers to bivariate correlations between firm's 'fixed-effects' (after controlling for a wide range of characteristics) and average firm characteristics such as: average education, average experience, capital-labour ratio, debt-equity ratio, etc.

16. Results are not reported due to space limitation (see Lucifora, 1988).

17. Notice that in the theoretical model the 'outside opportunity' is simply the reservation wage.

18. One can reasonably think that if the worker loses the wage premium, then he should leave the firm and go to work somewhere else. At the same time there could be unemployed people who would work at the minimum wage. We do not exclude that the minimum bargained wage is greater than the reservation wage. In this particular case real wages are too high for both institutional and efficiency reasons.

19. A Cobb-Douglas specification was preferred to a more general one on the ground of its simplicity and tractability. However, a CES production function will also be tested.

20. As far as the estimation procedure is concerned, the 'preferred specification' will be selected by means of non-nested tests.

21. In a Cobb-Douglas specification this will result 'observationally equivalent' to any other shift factor affecting productivity.

22. Clearly in this case the efficiency term as it is specified in (1) disappears (that is $\delta = 0$).

23. The series used is 'gross capital stock at 1970 prices' and a capacity utilisation index. Since capital data are available only yearly, in order to convert them into quarterly series they have been interpolated using real investment data.

24. In our case 'normal' hours refer to contractual hours as specified in union contracts. In practice this variable showed, in the period considered, little or no variation. Conversely 'overtime' has been computed as the difference between actual hours worked and contractual hours.

25. We also present OLS estimates for comparison purposes. Estimates do not differ substantially, hence suggesting that the issue of simultaneity might not be so relevant.

26. As efficiency considerations are likely to vary across firms within the same industry, we expect aggregate elasticity to be smaller than establishment-level elasticity.

27. A CES production function was also experimented, and the validity of Cobb-Douglas restrictions were tested. Although the restrictions imposed were not rejected by the data, the overall performance of the equation was very poor.

28. Several specifications in addition to the one reported in table 16.5 were tried. However, neither alternative functional forms nor different expressions for the unemployed variable were significant.

29. In the specification employed to test 'adaptation' theory, the lagged efficiency term appeared with the wrong sign and not significantly different from zero.

30. The restrictions imposed (on a general functional form) and tested by means of an F-test were rejected by the data. We also tried a non-

nested test (Davidson and MacKinnon, 1981) *J*-test, obtaining similar results.
31. It can be argued that technological, institutional and sociological factors do influence the form of the wage-effort function.

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17 Institutions and Labour Mobility: Occupational and Internal Labour Markets in Britain, France, Italy and West Germany*

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1 INTRODUCTION

What role do institutions play in the formation of labour markets, how big is it, and how important is it for policy? In this chapter, I wish to concentrate on one aspect of this problem, notably the question of institutional support for occupational and internal labour markets (abbreviated to OLMs and ILMs). I shall adduce some evidence that the former type is more prevalent in industry in Britain and West Germany, whereas the latter type is more so in France and Italy. This suggests that similar functions in similar industrial sectors may, in some countries, be organised on OLMs, and in others on ILMs. Then I propose to examine the institutional support which sustains the occupational markets in Britain and Germany, and present an argument as to why such institutional mechanisms have such a critical part to play in sustaining inter-firm labour mobility, and this suggests that OLMs are an historically contingent form of labour market organisation, dependent on certain institutional arrangements, and that there is nothing automatic, or 'necessary',

about their existence. I wish to conclude with some thoughts about labour market policies.

In this analysis use is made of two contrasted types of labour market: occupational and internal labour markets, which are developed, in this paper, for skilled manual workers in industry. By occupational market, I understand a labour market in which workers have access to jobs of a particular type in many firms, this access usually being based upon the holding of a recognised diploma or qualification, or on the recognition of the worker's peers. Often such markets are organised on a collective basis. In contrast, an internal labour market may be said to exist for a particular position in an organisation when the employer regularly seeks to fill vacancies occurring in it from among its existing employees. On these definitions, it is theoretically possible for an organisation to have recourse to both types of labour market, but for different categories of workers. The typical patterns of mobility associated with each ideal type might be illustrated in Figure 17.1.

An important feature of occupational markets is that there should be a high degree of skill standardisation, and an equivalent standardisation of job vacancies, so that mobility of skilled labour between firms should be possible. The basic categories into which these skills and vacancies are standardised may be influenced by technology, the economics of training, particularly as concerns the full utilisation of investments in training, but also institutional rules, and potentially also by other factors shaping the division of jobs within enterprises in a particular society.[1] This standardisation creates a greater degree of uniformity in the division of labour between enterprises drawing on the same occupational markets than might be expected if such work is organised within enterprise internal labour markets. In the latter case, the maintenance of standardisation between firms of jobs and qualifications is unimportant, and job design can be more easily adapted to the needs of individual enterprises. However, a major disadvantage of the internal model is that vacancies for more skilled work cannot so easily be filled from outside, thus restricting the enterprise's ability to respond to short-term shifts in its demand for labour, something which can be especially disadvantageous for small firms.

This presentation of occupational markets is most plausible for skilled workers, but it may, at first sight, seem inappropriate for semi-skilled and unskilled workers. However, if skilled work is

Skilled

Semi-skilled

Unskilled

Internal LM   Occupational LM

━━━━━▶ Main inflows   ─ ─ ─ ▶ Main outflows
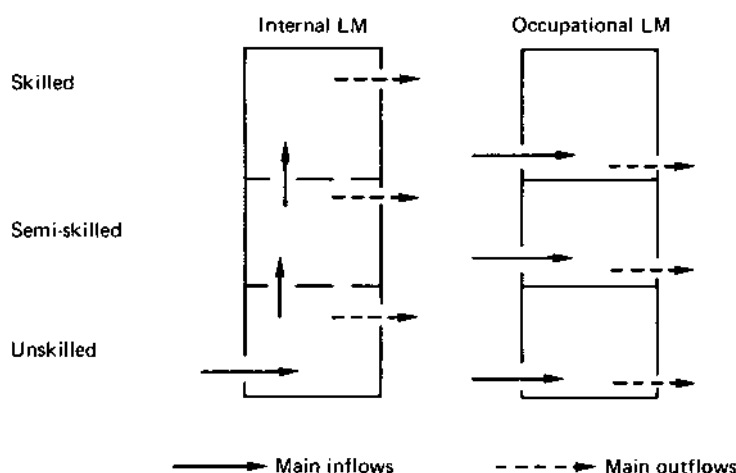
Figure 17.1   Models of internal and occupational labour markets

organised into occupational markets, the scope is thereby reduced for employers to organise internal labour markets for their unskilled and semi-skilled workers. As will be argued later, once skilled workers are integrated into a particular pattern of occupational organisation, there are strong incentives for the semi-skilled to adopt the same or similar principles. But first it is necessary to look at some statistical indicators of the predominance of one or other model in the four economies.

2   EVIDENCE ON THE PREDOMINANCE OF OLMS IN BRITAIN AND WEST GERMANY, AND OF ILMS IN FRANCE AND ITALY

Evidence for the prevalence of one or other of these forms of labour market organisation in France, Italy, Britain and West Germany can be obtained from several indicators gleaned from a number of different sources, which are summarised in Table 17.1. Because of the absence of suitable comparative longitudinal data, most of the indicators seek to detect the nature of flows from cross-sectional data, which is inevitably subject to certain cyclical influences. However, the differential impact of these on the four economies is to some extent reduced by the degree to which they have all been subject to the same external shocks over the last 15 years.

2.1 Age Indicators

If one of the prime conditions of entry into an occupational labour market consists of acquiring the necessary qualification, then the time required for this (be it training or 'time serving') will be most commonly spent at the beginning of a person's working life in order to maximise the period over which a return can be earned. Thus most workers will attain their skilled status early in their working lives, and consequently, the employment share of skilled workers in a given age range should rise correspondingly fast, and then level off at a relatively early age. In contrast, in internal labour markets, where training may be of a more continuous nature, it is likely to lead to upgrading at later ages. Indeed, in so far as some elements of training are always transferable, employers have a definite incentive to spread such training over a longer period. A good example of which can be found in Ryan (1984), where employers in a US shipyard delayed training welders in the more valuable transferable skills until they had been with the firm for some years. Hence in the ILM case one would expect the proportion of skilled workers in the firm's workforce to increase with age. A rough and ready indicator of this is given in Row 1 of Table 17.1, comparing the employment share of skilled workers in the 30–44 age group with that in the 21–29 group. In France and Italy, the ratio shows that skilled employment shares increase with age, but they do not do so in Britain and West Germany.

Secondly, if the OLM model implies greater opportunity for skilled labour mobility, then employers providing training for transferable skills will need compensation as trained employees can literally walk away with the firm's investment once the spell of training is complete. According to Becker (1975), under competitive conditions, and in the absence of family or state support, such compensation will take the form of a discount on trainee employment, and thereafter, of a flat age earnings profile for the trained worker matching the value of the skilled worker's output. Hence, OLMs will be characterised by a strong progression of earnings with age right at the beginning of a person's career, but with little further progression thereafter. In contrast, in the ILM case, because of the greater expected stability of employment, employers and workers have greater freedom as to how earnings progress with age, and one can expect employers to seek to adopt payment systems which defer earnings to later ages in order to retain skilled labour. Row 2 of Table 17.1 shows the ratio of average

Table 17.1 Summary of indicators of labour market organisation in four EEC countries (manual males in industry)

Indicator	France	Italy	Britain	FR Germany
Age indicators				
1. Progression of skill level with age[a]	1.08	1.28	0.95	1.00
2. Ratio of youth to adult hourly pay[b]	77.7	77.9	53.3	47.1
3. Growth of skill wage differences with age[c]	1.06	1.12	n.a.	1.03
Length of service indicators				
4. % < 2 yrs service[d]	15.3	12.1	22.9	16.9
5. Increase of pay with length of service[e]	1.26	1.23	1.07	1.10
6. Increase of interindustry pay differences with service[f]	1.91	1.47	0.93	0.78
Mobility indicators				
7. Downgrading of SK workers on changing jobs[g]	27	n.a.	18	(20)
8. % of SSK upgraded internally to SK 1983–4[h]	10	n.a.	0.7	n.a.
Industrial training, job classification				
9. Emp. share of apprentices in industry, %[i]	0.5	0.1	4.6	6.5
10. Job classification systems	–continuous–		–discrete–	
Behavioural indicators				
11. Elasticity of manf. employment with respect to output 1960–79[j]	0.12	0.10	0.29	0.45
12. CV (%) of earnings between industries: mean for 1971–80[k]	13.9	16.2	11.8	8.5

Key SK skilled
  SSK semi-skilled
  CV coefficient of Variation

Notes:
a Employment share of skilled in the 30–44 age group divided by that for the 21–29 age group.
b Earnings of those aged < 21 as % of those aged ≥ 21, including apprentices.
c Skilled/unskilled differential in hourly earnings of those aged 45–54 divided by same for those aged 21–29.
d Per cent with under two years service, 1978 (only year available for all four countries).
e Ratio of hourly earnings of those with ≥ 10 years service to that of those with < 2 years service.
f Ratio of CV of average hourly earnings between industries of those with > 20 years service to the same for those with < 2 years service (manual males).
g Percentage of skilled workers who, on changing jobs, took up semi-skilled or unskilled jobs.
h Based on Labour Force Surveys of Britain and France, 1984.
i Share of manual apprentices in manual employment in industry 1981, establishments with 10 or more employees (Eurostat Labour Cost Survey). Eurostat define apprentices as all employees who do not yet fully participate in the production process and work either under a contract of apprenticeship or in conditions in which vocational training predominates over productivity. Employers are asked to provide apprentices' earnings and social security contributions and other related costs separately from those of other employees.
j Elasticity of employment with respect to output in manufacturing, 1960–79.
k Unweighted CV of manual male average hourly earnings.

Sources:
Row 1–6 Eurostat Structure of Earnings Survey 1972 and 1978, except for Britain, for which Rows 1, 2, 5 and 6: New Earnings Survey; Row 6: Saunders and Marsden, 1981, Table 7.7.
Row 7–8 France and Britain: National Labour Force Surveys; FRG: Hofbauer and Nagel (1987), and note 4.
Row 9 Eurostat Labour Cost Survey, 1981.
Row 10 See main text.
Row 11 Economic Commission for Europe (1982, Table 1.1.31).
Row 12 Eurostat, Hourly earnings and hours of work, harmonised series. CV calculated across about 30 industries, including mining, manufacturing and construction.

hourly earnings of male industrial workers aged under 21 to those aged 21 and over, including apprentices. There is a stronger discount on youth and young trainee employment in Britain and Germany than in France and Italy.

Increasing rewards with age for skilled workers relative to the unskilled could be taken as a sign of further upgrading within the skilled group, much more likely in ILMs where upgrading to skilled work is much less discrete than in OLMs. Row 3 shows that skilled to unskilled pay differentials increase more with age in France and Italy than in West Germany (suitable data were not available for Britain).

2.2 Length of Service Indicators

Although potential mobility is a key benefit for skilled workers in OLMs, one might nevertheless expect this to show up in a higher rate of labour turnover than for skilled workers on ILMs. In absence of suitable comparative turnover data, the percentage of short-service workers might be taken as a rough indicator. For Britain and France in 1984 such a comparison can be made, and there indeed, a greater share of British skilled workers have short service than do French ones across a whole range of manufacturing industries (Eyraud *et al.*, 1988). For the four country comparison (Row 4), we are restricted to 1978, and to all manual men combined. This shows Italy with low, and Britain with high turnover, but only a small difference between France and West Germany.

A tendency for pay to increase with length of service, even within skill grade, is often taken as an indicator of the increasing value of employees to their employer that comes with accumulated skill and experience within an ILM. The concentration of training early in a person's career on an OLM leaves correspondingly less need to accumulate additional skill later. Hence, one would expect a stronger relationship between earnings and length of service in ILMs than in OLMs. Row 6 shows a markedly bigger differential in pay between short and long-service workers in France and Italy than in Britain and Germany.[2]

If workers' skills become more heterogeneous, or barriers to labour mobility become greater, with length of service, as would be the case in an economy dominated by ILMs, then the dispersion of earnings between firms, and thus between industries, should be greater among long service than among shorter service workers. This is because the strength of equalising pressures from the general

labour market will diminish the less easily workers are substitutable one for another. Where OLMs predominate, workers' skills should diverge much less with length of service because this would imply loss of skill transferability, and with it, a good deal of skilled workers' individual bargaining power. The OLMs would also provide pay linkages between the wage structures of individual firms, thus keeping them in closer alignment than would be the case with ILMs. Therefore, the finding that the interindustry dispersion of earnings increases as we pass from short service to longer service workers in France and Italy, but not in either Britain or West Germany is another indicator of the different labour market patterns in these two pairs of countries (Table 17.1, Row 6). Similar reasoning leads one to expect the interindustry dispersion of earnings for all workers combined to be bigger in economies where ILMs predominate than in those where OLMs do (Table 17.1, Row 12).

2.3 Labour Mobility Indicators

In OLMs, skilled workers are able to use their skills directly in many different firms. In contrast, in ILMs, skilled workers will experience greater difficulty in finding similarly skilled work, either because their skills do not match well those required in other firms, or because other firms' employment practices require upgrading. Whether the underlying causation is seen as related to technical or to institutional factors, inter-firm mobility by skilled workers in an economy dominated by ILMs is more likely to be accompanied by downgrading, at least until the worker becomes established in a new ILM. The nature of inter-firm mobility by skilled workers can be observed in Britain and France by means of their respective labour force surveys, and the picture can be complemented for FR Germany with data from the IAB (Institut für Arbeitsmarkt und Berufsforschung) cohort studies (see Rows 7 and 8 of Table 17.1).

Among skilled workers who changed employer between 1983 and 1984, in Britain, 82 per cent either retained their status as skilled workers in their new firm or were promoted to supervisor (6 per cent), and only 18 per cent had moved to semi-skilled or unskilled positions in their new firms. In contrast, over the same period in France, 73 per cent retained their skill status, (and none made it to supervisor by changing firm), but 27 per cent had moved to semi-skilled or unskilled positions.[3] Among semi- and unskilled workers who remained with their employer over the period in Britain, only

0.7 per cent were upgraded to skilled jobs, compared with 10 per cent in France. Moreover, in France, of the semi- and unskilled workers who reached skilled positions between 1983 and 1984, about 90 per cent did so by remaining with the same employer, and only 10 per cent by changing firms, thus reinforcing the picture of greater intra-firm upgrading in France than in Britain (Eyraud *et al.*, 1988). The association between job mobility and downgrading in France is also reflected in the experience of new entrants with apprenticeship level vocational qualifications as they more commonly take semi- and unskilled jobs than do equivalent new entrants in Britain or West Germany (Marsden and Germe, 1988; Stegmann and Kraft, 1987).

In West Germany, as in Britain, downgrading of skilled workers when changing employers appears to be fairly limited, despite a high volume of enterprise changes early in their working lives, (about 70 per cent of newly-graduating apprentices change employer within five years of graduating, Hofbauer and Nagel, 1987, Table 5). Using the IAB cohort survey, Hofbauer and Nagel found that, of newly graduating apprentices in 1979, by 1984, only 17 per cent were in semi-skilled or unskilled positions. This seems to indicate a similarly low rate of downgrading to that in Britain, although the data are for a longer time period, and include women for whom downgrading might be more common because of breaks in activity for maternity reasons.[4]

One important difference between Britain and West Germany is the generally tight segregation between craft occupational markets in Britain compared with the amount of movement between skilled occupations in Germany. Although the movement between skilled occupational markets often takes place without much additional formal training, most of it occurs between occupations which are closely related (Hofbauer, 1983; Hofbauer and Nagel, 1987, Table 18), and for which the content of apprenticeships has a good deal in common.

2.4 Industrial Training Systems

Training systems play an important part in the maintenance of OLMs, and traditionally, the apprenticeship has provided the key to OLMs. The reasons for this will be developed more fully later on, but unlike state vocational schools, apprenticeship offers a combination of on-the-job experience and theoretical training (the latter component of which has increased considerably in recent years); it also

offers a social induction into the norms of the occupation. In industry, apprenticeship is the predominant form of skill training in West Germany and in Britain, but in Italy and France is mostly confined to small firms, and a small number of economic sectors (Row 9, Table 17.1).

In neither France nor Italy is apprenticeship a major source of training within manufacturing, although the number of apprentices in the artisan and repair sectors is quite large: in France it has been over 0.2m in each year since 1978, and in Italy was over 0.5m in 1984. These, however, provide only a limited supply of the skills required by manufacturing. Moreover, in Italy, the majority of national agreements provide for a duration of apprenticeship of less than 12 months (ISFOL, 1982).

Thus, Britain and West Germany have training systems which are appropriate to OLMs, whereas the lack of these in industry in France and Italy leaves employers with the need to provide for their own internal training needs, and thus push them towards organising their own ILMs.

2.5   Job Classification Systems

Job and pay classification systems are usually designed to motivate employees within particular occupational structures, and in France and Italy, tend to be of a continuous nature, based on a system of indices which are attributed to jobs, and of grades which operate within these. In contrast, it is common for pay grades in British and West German industry to reserve the top grade or two primarily for apprentice-trained skilled workers. This creates discontinuity in the job classification system, as it is hard for non-apprenticed workers to pass this barrier. In all four countries, these systems are commonly set down in skeleton form in industry or in company agreements, collective agreements often being much more extensive than union membership figures suggest, as is the case notably in France.[5]

2.6   Behavioural Indicators

Turning to the short-term responsiveness of employment to changes in output, the greater ease of skilled mobility (and of lay-offs) in OLMs than in ILMs would lead one to expect greater sensitivity in OLMs of employment levels to short-run changes in output, or in the firm's ability to pay. Some evidence of this can be found in the

Economic Commission for Europe's (1982) Brechling-type employment functions for the four countries estimated for 1960–79 (Row 11, Table 17.1).[6] The interpretation of the interindustry CVs of earnings (Row 12) has already been discussed.

There remains the possibility that the differences revealed in Table 17.1 are due largely to differences in the industrial composition of the four countries. However, this does not appear to be the case, as Maurice *et al.*, (1982), and Maurice *et al.*, (1979) also found differences along these lines in individual establishments. In addition, Saunders and Marsden (1981) provide evidence that the inter-country differences in the pay structure indicators held within individual industries.

To conclude this section, ILMs would seem to prevail for manual male workers in industry in France and Italy, whereas in the same sectors in Britain and West Germany, OLMs prevail for skilled workers, and shape the possibilities open to less skilled workers. This suggests that similar product market demands can be met with similar production technologies, but with quite different patterns of labour market organisation. Given the industrial performance of the four countries since the Second World War, there would seem to be no prima-facie evidence that one or other form of labour market organisation imposes any general economic handicap likely to cause its elimination by general economic competition.

3　INTERPRETATION OF THESE DIFFERENCES

3.1　The Instability of OLMs and the Potential Drift towards ILMs

Occupational and internal labour markets often coexist in the same economy, for example, OLMs are common in construction in many economies, as are ILMs in steel-making and in chemicals. They may also coexist within the same firm, but for different categories, and they can be more or less well defined, so there is a temptation to think of them as opposite poles of a continuous spectrum. However, this analogy has its limits because there are certain requirements for the stability of OLMs, which means that some intermediate types of labour market will not be stable, but will be moving towards the ILM model.

The reason for the instability of OLMs lies in their resemblance to public goods. This arises in two ways: (i) the maintenance of qualifi-

cation and of structures within firms which are appropriate for OLMs, and (ii) the maintenance of a sufficiently large pool of skilled labour on which firms can draw.

First, despite the advantages of ease of external recruitment, and the greater ease of lay offs brought by OLMs, there are some disadvantages, notably, the greater difficulty of adapting jobs to new production and organisational methods, because of the need for standardised jobs and training. Adaptation may also be slowed by the need to agree its precise forms with other interested parties, a complaint sometimes made by West German employers. It may always seem easier to adapt in a piecemeal fashion in individual firms, but this then undermines skill transferability.

In addition, it is difficult to create new occupational markets, again, because the ease of mobility requires a fair degree of standardisation of training norms, and in job design. Here there are distinct disadvantages for firms taking the initiative if they publicly provide skills which can be drawn on by other employers. Lack of standardised jobs among the poaching employers may prevent them from taking full advantage of those trained to the new occupational norm, but they may still profit sufficiently to make poaching worth while.

Secondly, it has been observed, in both West Germany (Noll *et al.*, 1983) and Britain (IMS, 1982), that employers bear a considerable part of the net cost of training for transferable apprenticeship skills, equivalent respectively to about one and a half and two years' gross earnings of an adult skilled worker. Because the skills in question are transferable, there is an incentive for some employers to avoid training, and to seek to poach trained workers from other employers, moreover, not having to bear these training costs, puts the poachers at a competitive advantage vis-à-vis employers providing training. Consequently, all employers reduce their training, and skill shortages develop. Indeed, the process is intensified by the emergence of skill shortages. This was the familiar problem encountered in Britain when the 1964 Industrial Training Act was introduced. One response then of employers providing training is to seek ways of cutting potential mobility by their skilled workers by rewarding stayers, and another is by tailoring training as closely as possible to their own needs, thus restricting its usefulness to other employers. Both responses will undermine an occupational market by eroding the supply of labour available on it.

The analogy with public goods clearly has limitations, otherwise

skill shortages would not be a problem. On the other hand, like public goods, basic provision of the facility entails quite high costs, and it is difficult to restrict access without at the same time reducing, and possibly destroying its main advantages, in this case, the opportunities for direct external recruitment of skilled labour, and for workers, of inter-firm mobility while retaining one's skill level.

The argument so far might seem to depend upon a historically contingent observation, that employers bear much of the net cost of training for transferable skills. In Becker's world of competitive equilibrium trainees should bear the cost, he suggested, in the form of a trainee rate below the value of the trainee's output.[7] Again, in a world in which wage differentials compensate fully for differences in working conditions and skill requirements, such pay rules would provide little threat to trained skilled workers, as the lower trainee rate plus the cost of training would absorb the full value of the trainee's output during this period. But suppose that, for some reason, the economy is characterised by widespread non-compensating wage differentials, and notably, that skilled workers, by virtue of their collective organisation, have been able to bid up their wages above the competitive level.[8] Then employers have an incentive to substitute less skilled labour, and in particular trainee labour, as trainees can take over an increasing number of skilled tasks as their training period nears completion. In the absence of controls over apprentice numbers, skilled workers can respond by bargaining up trainee pay to a level at which there is no incentive for substitution (Ryan, 1987). At this point, trainee wages are no longer low enough to compensate employers for training for transferable skills, and they begin to assume a share of the net costs. Equally, skilled workers know that their value to employers varies over the economic cycle, and over their own life cycle, and if there is a significant degree of distrust between skilled workers and their employers, again they might seek to push up trainee wages to discourage substitution.[9]

If all employers share the cost of training for transferable skills equally, then none is at a competitive disadvantage, but the equilibrium is now on a knife edge. A movement away from this ideal world sets in motion forces which are likely to drive the system further away from a competitive equilibrium, as individual employers take measures to restrict the transferability of the skills of those they train, and to bind them into their own enterprise ILMs. The competitive forces of the long-run, which in many cases bring markets back

into equilibrium, may never get a chance to prevail as poaching and shortages set in motion forces leading towards ILMs, and away from the more transparent inter-firm skilled labour markets.[10]

3.2 OLMs' Dependence on an Institutional Infrastructure

One clue to how institutions may prevent the slide towards ILMs lies in the ways of ensuring that the great majority of employers contribute to training costs. Another lies in the strategies workers may adopt in order to maintain the transferability of their skills, and to restrict potential substitution. In a word, the institutional framework has to contain the two forces of (a) poaching, and (b) substitution. Because both forces are important, it follows that some form of bipartite mechanism is likely to be the most effective in sustaining OLMs.

(a) Controlling poaching by other employers

On the employers' side, the slide towards ILMs may be prevented by the creation of a strong institutional or social infrastructure which holds the fragmenting forces at bay. Two major threats to the viability of occupational markets are the need, among employers, to ensure an adequate spread of training costs between employers, and to reduce the scope for poaching labour trained by other firms. Two possible solutions are considered.

The first is to introduce incentives to train, such as a system of levies on employers in order to supply a fund for training. This met with modest success in Britain. It was launched by the 1964 Industrial Training Act, which sought to reorganise the existing apprenticeship system, notably by setting up a levy, and giving supervisory and coordinating powers to the newly created industrial training boards to boost both apprentice numbers, and above all, to improve training standards. In the event, it aroused much opposition among employers, so that the levy was greatly reduced in the 1973 Employment and Training Act, and several of the training boards were abolished in 1980, putting much of the organisation of training back on to individual employers.

In the second, employer collective organisation can be of central importance, as in West Germany where the initiative for apprentice training and its organisation rests on the local chambers of industry, commerce, and the artisan chambers, which, on this issue, involve both employers and unions. In contrast to Britain, at a time of rising

unemployment and pressure on employers, the system was able almost to double the output of apprentices, without direct government intervention, and without the introduction of a levy. Great reliance was placed upon peer group pressures among employers, the channel for these being provided by the extensive collective organisation of West German employers (for an illustration of these changes in the construction industry in the mid-1970s, see Streeck, 1985).

There remains the problem posed by employers seeking to tie skilled labour to their firm, and thus divert skilled workers off an OLM into their own ILMs. In part, this is a response to a failure of the OLMs owing to shortages created by inadequate expenditure, and thus to difficulties in recruiting and retaining skilled labour. One can speculate whether the collective organisation of West German employers may make them more resistant to the temptation to divert workers on to their own ILMs, but a much more important force is likely to be the collective organisation of skilled workers.

(b) Controlling substitution

Turning to the strategies of workers, a key interest of skilled workers on an OLM is to defend the transferability of their skill, and to maintain the standardisation of their jobs so that they retain their ability to work at the same level in many different firms. In Britain, and particularly in West Germany, there is a considerable degree of institutional regulation of OLMs, extending from the regulation of apprentice training, through the administration of skilled work, by craft rules enforced by occupationally based union organisation in Britain, and by the close supervision of works councils in West Germany, on which skilled workers are usually very influential.

The insistence upon job demarcation rules around the work done by people on craft OLMs in Britain has been much commented on, including in comparative studies between Britain and France, for example, by Eyraud (1983), and Dubois (1980 and 1982), outside observers informed by their own comparative fieldwork. The boundaries established by these rules prevent not only semi-skilled workers from undertaking craft skilled work, but even former craftsmen who have been promoted to foreman. However, as Dubois observes, the ability to enforce such rules on management depends on the ability of work groups to mobilise wider union support from other work groups within the plant, or outside, and upon their ability to constrain

management to abide by them. The force of such rules may have been weakened somewhat in recent years by the fast rate of restructuring within British industry, and by the fear of job loss, but it is notable that in the negotiations over job flexibility, craft demarcation rules, and skill flexibility have proved to be the most difficult issues as union and work group power remain strong in established plants (Batstone and Gourlay, 1986; Marsden and Thompson, 1988).

The influence of job demarcation rules and of shop-floor custom and practice in West German industry appears to be more limited than in Britain. Some accounts of customary rules can be found (for example, Bosch and Lichte, 1981), but the limited number of such cases, and their limited coverage suggests that these are less of a force, and so are unlikely to sustain the position of skilled workers in West Germany. On the other hand, there is a high degree of regulation through industry collective agreements, and the activities of the works council. One study of the German chemical industry (Brossard, 1977, ch. 5; Maurice *et al.*, 1978, p. 707) showed that although West German foremen exercised considerable control over training and promotion of manual workers, the industry agreement specified the maximum period that should elapse between a worker's successful completion of training, and his or her upgrading to the next wage group, and it also specified the minimum level at which apprentice-trained skilled workers should be engaged. Management generally followed these rules, but it had to give satisfactory reàsons to the works council when people were not upgraded within the specified times. The top grades were also reserved for apprentice-trained workers, something again policed carefully by the works council. Thus the works council, in conjunction with the industry agreement, acted to control the extent to which workers could continue to be paid at their old rate once they had completed their training, an important check on substitution, but it also policed the boundary between those trained by apprenticeship, and those obtaining more limited training within the enterprise.

In the area of apprenticeship training also, West German skilled workers have a good deal of influence, through joint administration of apprentice training questions through their unions in the chambers of industry and commerce, the powers of the works councils to supervise training and to deal with grievances within the plant, and through the unions' powers to influence training allowances which are set in collective agreements (Noll *et al.*, 1983, p. 25). Indeed, Marsden and Ryan (1988) argue that without the institutional

framework of apprenticeship, even the partial discount of apprentice employment, which enables employers to share the net cost of training with apprentices, would be likely to prove unacceptable to adult skilled workers. This framework helps to ensure that apprentices get training and so do not simply provide a source of cheap labour. Even so, historically, apprenticeship systems have not always been effective in controlling the use of apprentices (Ryan, 1986).

Thus in both Britain and West Germany, one can identify a number of institutional mechanisms capable of controlling any tendencies towards substitution of less skilled workers and trainees for skilled ones, within the enterprise at least. This still leaves the question of substitution taking place in enterprises in which such rules cannot so easily be enforced, and from which, in a competitive economy, such enterprises should be able to derive a competitive advantage, and which continue to provide a source of instability in OLMs.

The requirement for bipartite regulation stems from the greater effectiveness of institutional rules when they are 'owned' by those who have to abide by them, in other words, if they have some control over their formation and their adaptation and enforcement then those bound by them feel that the rules have been developed in their own interests.[11] Moreover, as self-enforcement, and enforcement by informal pressures from one's peers are usually both cheaper and more effective than enforcement by outside agencies, this suggests that some kind of bipartite or tripartite control would be the ideal.

3.3 OLMs are Historically Contingent

The discussion of OLMs for skilled workers in Britain and FR Germany suggests that there may be nothing 'necessary' or automatic about the emergence of such markets, but that their appearance and survival are historically contingent. A network of such markets in Britain and Germany survived industrialisation and for a long time has been the preferred method of organisation of skilled work. After the French Revolution had abolished the craft culture in France by abolishing the old corporations, French industrialisation did not have a system of OLMs on which to rely, and had to develop a system of ILMs. Much of this requires further investigation, but some evidence can be found in Lorenz's (1987) study of labour markets in British and French shipbuilding from the late nineteenth century. In particular, his study noted the absence of OLMs for skilled labour in

France, and the adoption of ILMs by employers. Later attempts to establish a German-style apprenticeship system in France failed (Maurice *et al.*, 1978), one reason being the lack of job opportunities for those who would undertake such training, the best skilled jobs being on ILMs. History is important because of the difficulty of establishing new OLMs from scratch, and in an environment in which skill is already organised on different lines.

4 POLICY IMPLICATIONS

Perhaps the most important areas of labour market policy which are likely to be affected by the balance between OLMs and ILMs in a particular economy are in training, and in special measures to help for example young workers achieve the transition into long-term jobs, and to help other displaced workers. There is also an important question concerning the regulation of group action in the wider public interest.

First, a successful apprenticeship system involves a much more extensive and complex institutional structure than might at first be imagined. It is not enough to provide some basic theoretical training in state schools, and then to link it with some work experience. Training needs a structure of jobs into which it can be inserted, and workers need potential rewards if they are to be persuaded to undertake the effort, if not the foregone earnings, and expense, of training. The problems of 'downgrading' of qualified labour market entrants in France arise partly from this process, as firms do not want to assume the expense of providing work experience, and adult workers established on internal labour markets do not wish to be displaced from skilled jobs by more qualified youngsters.

In Britain, which is in danger of seeing a complete collapse of apprenticeships, there is the further and longer term danger of a collapse of the occupational markets for skilled labour. At times, it would seem that the government and some influential employers see British OLMs as a source of rigid job demarcation rules and of multi-unionism, so that a greater spread of ILMs would not be regretted. This sentiment might equally be shared by employers seeking greater freedom to adopt pay structures designed to promote greater employee commitment, again something which is not fostered by OLMs. However, ILMs leave workers, and especially skilled workers much more dependent upon their current employer,

so that job security becomes a much more serious issue. One striking feature of the major employment reduction in Britain in the early 1980s was that, apart from the miners' strike, there was remarkably little resistance to redundancies, something which may have been facilitated by greater skill transferability, and perhaps a mistaken confidence among workers laid off in the speed with which they would find another job.

Secondly, concerning youth entry, the critical point in an economy where ILMs predominate is to gain access to the right firms, and to ensure that any downgrading involves taking unskilled jobs in firms with good prospects, rather than jobs in low paid industries. Given the concentration of young workers in industries which are low paid for adults (Marsden and Ryan, 1986 and 1988), this may not be as easy as it seems. In an economy with OLMs, the critical choice is that of which occupation to enter. Although the West German evidence showed that there is some movement between skilled occupations, it tends to be between those which are quite closely related. The problems of apprentice-trained bakers in Germany obliged to take unskilled or semi-skilled work in other branches are well known.

A good deal of the argument has stressed the threat of substitution, and the measures workers may adopt to restrict this, as a source of institutional dynamics in labour markets. This suggests that union misgivings about special employment measures which subsidise jobs may be fairly deep rooted, and that union activists who oppose such measures are giving voice to the intuitive feeling of their members, whatever may be their concern also for the employment difficulties of their children or other colleagues. Of course, this is in part a consequence of the assumption of widespread non-compensating wage differentials, which many will not accept, although there is a good deal of evidence for their existence from enterprise and establishment level studies even in OLMs. The expectation of their prevalence in economies with a predominance of ILMs must surely be even stronger.

Finally, it is appropriate to echo Clark Kerr's (1950) warnings that institutionally based labour markets, which are shaped by power relations between groups should not be assumed always to work in the public interest, nor always to the mutual benefit of the parties involved. Thus, it becomes important, for example, in the case of OLMs to ensure that the benefits of flexible inter-firm labour mobility are not outweighed by monopolistic exploitation, and in the case of ILMs, that dependency on one's current employer arising

from a high investment in non-transferable skills equally does not give rise to exploitation.

Notes

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1. The effect of such factors is amply illustrated in the comparison of French and German manufacturing plants by Maurice *et al.*, (1982), and its extension to Britain, by Maurice *et al.*, (1979).

2. It might be asked whether some kind of 'principal-agent' interpretation is possible (Lazear, 1981) on the lines that employers offer deferred wages in order to select those who are likely to remain with the firm. This is indeed feasible in the ILM case, but less so in the OLM case, given the strong element of deferred pay implied by the trainee discount. In addition, if transferability is one of the attractions of OLMs to workers, and it offers workers a degree of risk-spreading as their skill is not tied too much to one firm, then additional deferred pay is unlikely to be attractive. In practice also, the collective bargaining coverage of skilled industrial workers is such that management has relatively little scope for experimentation.

3. The French figures nevertheless reveal a high percentage of skilled workers who apparently succeed in finding skilled jobs after changing firm. The statistic gives a false impression because skill categories are not so sharply defined as in OLMs, and although a person may well find another skilled job, it is common for this to be at a lower grade within the skilled category. This is possible because French job classification systems provide for several grades within the skilled category, commonly running from P1 to P4, whereas job grading systems widely used in Britain and West Germany usually provide only a single grade or wage group for apprentice-trained skilled workers (Eyraud, 1981).

4. Hofbauer and Nagel's (1987) figure of 17 per cent related to all newly graduating apprentices. If we assume that only those who changed firm were downgraded, the 17/70=24 per cent provides an upper limit on the extent of downgrading. Against this we have to offset the longer time period, five years instead of one, the greater sectoral coverage of the West German data, and hence the greater likelihood of downgrading of groups like baker apprentices, and the inclusion of women, for whom maternity breaks are likely to increase the extent of downgrading.

5. The influence of these classification systems may lie behind the different

behaviour of skill differentials in pay during the 1970s, as there was a steady reduction in both France and Italy from the early 1970s, and no indication of any sensitivity to unemployment pressures, whereas in Britain there was, by comparison, a small amount of fluctuation of skill differentials with fluctuations in unemployment, at least for part of the period, and in West Germany, the skill differential remained stable. During these turbulent years, the special status of British and West German skilled workers in the classification system, and within their unions may well have protected them from the egalitarian pressures to which the French, and especially the Italian, skilled workers succumbed (see Marsden, 1988).

6. The elasticities are derived from a Brechling-type employment function,

$$LogE_t = a + bLogQ_t + cLogE_{t-1} + dt$$

where E is employment, Q output, and t, time (for example, Brechling and O'Brian, 1967). The estimates were based on annual data for manufacturing between 1960 and 1979.

7. Other forms of private finance are possible, for example, loans to trainees, or family support, and direct support by the state of vocational training. The inability of state financed training to resolve these problems is discussed in Marsden (1986, ch. 8).

8. The assumption of non-compensating wage differentials may seem arbitrary, but it has a strong empirical basis in the evidence from Mackay *et al.* (1971), and Robinson (1970) for Britain, where persistent wage differences were documented for the same skill in the same local labour market. Similar observations were also made by many of the earlier generation of US labour economists from their own company and plant based studies (for example, Lester, 1952; Reynolds, 1951, and Reynolds and Taft, 1956) and in France by Daubigney *et al.* (1971) which they presented at the time as an 'enterprise effect'. What is the idea of competitive forces leaving a 'margin of indeterminacy', or that the enterprise in which a person works affects their pay, except to say that there are non-compensating wage differences? Such non-compensating differences can be accentuated by the prevalence of rate-for-the-job pay rules which do not respect quality differences between individual workers.

Some other papers in this volume argue that the 'efficiency wage hypothesis' might explain these persistent wage differences between firms, and within occupations, and thus challenge the assumption of non-compensating differentials. There are a number of serious objections to this hypothesis as a general explanation of such differences. First, the underlying theory is not at all clear for a unionised environment, such as prevails in the four west European countries of this paper. Agreed dismissal procedures make it hard to dismiss people except on grounds of redundancy (reduced labour demand) or of ill-discipline. These are very blunt instruments, and at best would only

remove the lower tail of bad performers. Secondly, as bargaining determines a large fraction of wages, it leaves a correspondingly small one for management to manipulate for greater motivation. A more likely explanation, in a unionised environment, if empirical studies do show that apparently non-compensating pay differences correspond to productivity differences, would seem to be that they produce queues for the best paying jobs from which employers can often select the most promising looking candidates.

9. The fear of substitution need not be confined to skilled workers. Indeed, when the number of jobs is limited, as in periods of high unemployment, the slowness with which wage structures adapt to demand pressures means that many other groups may also seek policies to restrict possible substitution.

10. The existence of a general qualification used by many different workers is not however a sufficient condition for the development of an OLM. It can be shown that such a qualification exists for engineers in Britain, yet the Finniston report's conclusion was that engineers were poorly utilised because there was not a clear OLM for them. Indeed, once engaged by a firm, they soon became integrated in the firm's ILM (Mace, 1979). This and other examples are discussed more fully in Marsden (1986, chapter 7).

11. Terry (1977) developed his argument to explain the growth of informal shop floor rules despite attempts to formalise industrial relations procedures at a high level between local full-time union officials and employers. Informal bargaining continued between line managers and shop stewards who still had the power to bargain informally, and who did not identify with the new set of written workplace rules.

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18 Labour Flexibility and Insecurity: Towards an Alternative Strategy*

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1 WELFARE CAPITALISM: THE POST-1945 SOCIAL CONSENSUS

In essence, the post-war European economy developed on the basis of a social concensus, which institutionalised five 'labour rights' in the context of an essentially corporatist model involving state regulation of social and economic affairs. These labour rights were:

(i) Labour market security – state-guaranteed full employment.
(ii) Income security – earnings protected by minimum wage machinery, wage indexation, independent unions and employer organisations incorporated politically and economically into the state, insurance-based social security and taxes to reduce (or check the growth of) income inequality.
(iii) Employment security – with regulations on hiring and firing, pre-notification of redundancy, the imposition of costs on employers for 'unfair dismissal', and so on.
(iv) Work security – through health and safety regulations, limits on working times, unsociable hours, and so on.
(v) Job security – through the tolerance of demarcation practices and barriers to skill dilution, craft boundaries and job qualifications.

Entrenched in 'middle-class' professions and among technically skilled workers, this last right preserved socio-economic status and institutionalised a labour hierarchy that was functional for what some call 'system stability'.[1]

These rights always represented potential costs to enterprises.

Their acceptable continuation depended not only on fairly stable economic growth, but on what was, in effect, a 'closed international economy', whereby the bulk of trade in goods and services was between countries with similar labour rights. They also depended on *quid pro quos* between employers, unions and workers, including the employers' right to manage and to profit. For social stability, there had to be something close to a consensus on income (and wealth) distribution and limited exercise of group-specific, or class, power. The countries that flourished most were those in which the social consensus on labour rights and distribution was institutionalised over a prolonged period, as in the Scandinavian countries, Austria and, for a time, West Germany.[2]

While labour rights characterised the production process, the redistributive and reproductive functions were left to fiscal policy and the web of social services provided by the welfare state. In that, as even its fiercest critics acknowledge, it had impressive achievements (see, for example, Lindbeck, 1988). In the 1950s, 1960s and 1970s poverty was reduced in most of Europe, as was income and wealth inequality, and the marginalisation of disadvantaged groups was ameliorated. Women, in particular, were enabled to enter the economic mainstream, albeit partially and inequitably. Social and economic insecurities were reduced, and lifetime consumption was evened out, reducing the incidence of life-cycle poverty. Finally, the welfare state surely contributed to productivity growth, primarily through the provision of education, training and health services.

The twin hallmarks of that post-war era were a sense of social solidarity, based on growing socio-economic security, and a full-employment rate (of unemployment) that Keynes himself had thought too optimistic to expect – 1–2 per cent in most European countries. How long ago that seems.

2 POST-CONSENSUS STYLISED FACTS: THE CRUMBLING OF WELFARE CAPITALISM?

Since the early 1970s, the labour market has been transformed in ways that suggest that we will not see the return of the era of full employment – in the old sense of the term – or the social consensus associated with it. The major factors behind its demise have been:

(i)   A rapidly changing international division of labour, with the NICs following Japan in gaining a growing share of world

exports. Those countries have not had the same labour rights (and therefore costs) as had been accepted in much of Europe. 'Deindustrialisation' in Europe accelerated, whether defined in terms of shares of manufacturing trade or of national production or employment associated with manufacturing;[3] the international changes turned the perception of many labour rights into costs and also undermined the old industrial, unionised proletariat.

(ii) Something akin to a technological revolution has been occurring, a new upswing phase of a long wave, with new technologies more internationally mobile and conducive to new forms of business and managerial organisation, facilitating decentralisation of employment and changes in the nature of jobs, to which we will return.

(iii) The crumbling of a distributional consensus, with pressures for a *reversal* of the modest trend towards income equality; this stemmed in part from the economic slowdown, and the rise in the gross and net delivery costs of welfare and social security transfers, which for many no longer seemed to represent a socially just system or one from which their own benefits matched the social and personal costs.

(iv) Inflationary pressures – due in part to prolonged Keynesian demand expansion and the oil price hikes, associated with the 'fiscal crisis of the state' – and pressures for cuts in the public sector and in public expenditure generally.

These developments undermined the post-war consensus and led to the orthodoxy of the 1980s that has shaped policy almost everywhere – *supply-side economics*. Alternative proposals must be based on a critique of that approach, with its underlying ideology captured by such terms as 'deregulation', 'privatisation', 'structural adjustment' (as used by the IMF and World Bank, for instance) and 'enterprise culture'. Its adoption was fuelled by the belief that slow growth, unemployment and other adverse labour market developments were due to structural rigidities, excessive public expenditure and restrictive regulations.

What have been the major labour market developments of the era of 'supply-sideism'? It may be useful to recall fairly widespread trends:

(i) Income distribution has worsened, with widening wage differentials and growing household income inequality, as in the

UK; this has been associated with mass unemployment, the erosion of union bargaining power, a weakening of social security provision, and a shift away from taxation as a redistributive device. In many countries, such as France, the share of wages in GDP, which had risen slowly in the preceding era, shrank in the 1980s.

(ii)   Poverty has grown considerably; in Italy, between 1978 and 1983 the number of poor families increased by about 10 per cent; in the Netherlands, the percentage of households falling below the official poverty line rose from 8.4 per cent in 1977 to 10.6 per cent in 1982; in the UK, the number of low-income families increased by over one-third between 1979 and 1983; meanwhile, in most EC countries the number of people dependent on social assistance has risen rapidly since the early 1970s (Room, 1987); there is also strong evidence of a growing *risk* of poverty across society.

(iii) Unemployment in Europe has more than quadrupled since 1970, almost doubling between 1980 and 1985.[4] In the EC the overall rate of open unemployment was projected to stabilise at 11.8 per cent in 1988, the same level as in 1987 (Commission of the European Communities, 1988). Even taking official figures at face value, by the mid-1980s about 20 million people were openly unemployed in Western Europe, compared with about 8.6 million in 1979 (ILO, 1987). Worse still, unemployment has become chronically high, sometimes *rising* in economic upturns.[5] For the first time since the 1930s several governments have renounced the commitment to full employment, claiming that they cannot determine the level of employment or unemployment.

(iv)   Employment has changed in ways that have made open unemployment a more misleading index of surplus labour. Figure 18.1 shows 'labour slack' rates for EC countries compared with their unemployment rates, where labour slack is full-time equivalent rate of unemployment that besides open unemployment takes account of 'involuntary' and 'voluntary' part-time employment, discouraged workers, short-term visible underemployment and those 'with jobs without work' (for economic reasons). That refers to one year, but since then the relative extent of concealed unemployment (that is, omitted by official statistics) may have increased. For instance, in West Germany employment peaked in 1979–80, never returning to
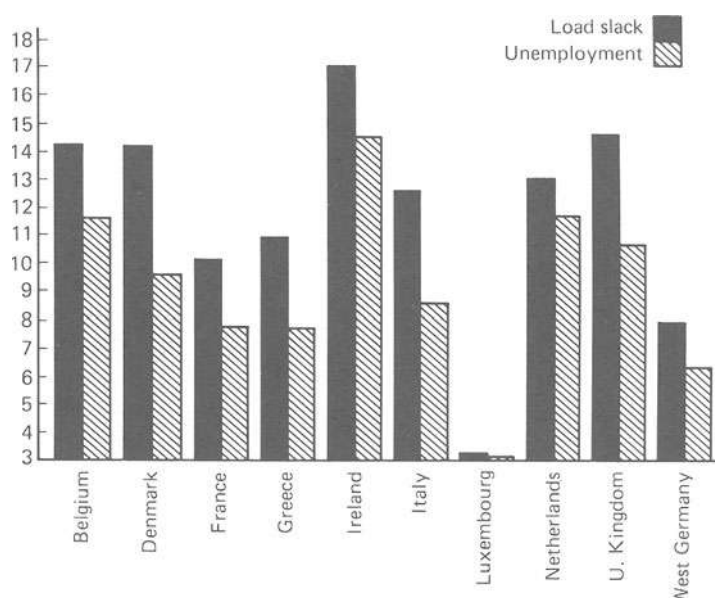
Figure 18.1   Unemployment and labour slack rates, EC, 1983

Source: Economic Commission for Europe.

that level, while concealed unemployment as a share of total unemployment remained well above what it had been in the 1960s or early 1970s.

(v)   By the mid-1980s, in various European countries, there were as many people recorded as having been out of work for over a year as the total number of unemployed in the late 1970s. Many long-term unemployed are cut off from the labour force, with little chance of reintegration into regular employment.

(vi)   Manufacturing employment has shrunk, accelerating the shift to services. In various countries, the number of manufacturing jobs that disappeared in the late 1970s and early 1980s far outweighed the number of jobs created in services. In the UK employment in manufacturing shrank by 3.4 per cent per annum between 1973 and 1983 whereas employment in private sector services only grew by 0.2 per cent per annum. In other countries, such as Belgium and West Germany, the disparity was similar.

(vii)   Precarious, irregular and part-time forms of employment have spread. Between 1979 and 1985 part-time employment in

Western Europe grew by 3.1 per cent a year, while full-time employment fell by 0.1 per cent a year (Büchtemann and Schupp, 1987). In West Germany, by 1984 about 16 per cent of all employees were in part-time jobs, and between 1976 and 1984 the number of part-time employees increased by 16.4 per cent, whereas full-time employment stagnated. There and elsewhere, temporary jobs have grown, apparently at the expense of regular employment. Their spread has been promoted by a loosening of regulations, subsidies and 'emergency' employment schemes. 'Homeworking' has re-emerged as a major phenomenon, much of it undeclared, with low and variable earnings. Globally, the 'informal economy' has become a major phenomenon (Portes *et al.*, 1988).

(viii) These trends have influenced, and been influenced by, the long-term rise in female labour force participation. In some countries, such as Austria and the UK, the male unemployment rate has risen to equal or exceed the female (Walterskirchen, forthcoming). The female employment rate has risen while male employment has slumped. The latter trend partly reflects the erosion of manufacturing jobs and the shift to part-time 'service' jobs.[6]

(ix) Because the nature of employment has been changing, the so-called Verdoorn effects of growth have to be interpreted with caution. Some estimates suggest that the employment effect of a change in the rate of economic growth has increased compared with the 1960s and 1970s (Commission of the European Communities, 1987). However, this may be explained by two factors, that governments have resorted far more to 'emergency' employment schemes and that the full-time equivalent employment is much less because more of the new jobs are part-time, casual, and so on. For instance, in West Germany 'marginal' part-time employment has increased faster than other forms of employment in the past 15 years (Büchtemann and Schupp, 1987). A third possible factor is that the relatively rapid growth in the potential labour force in the 1980s in itself had a positive effect on employment. A fourth factor may be that, at very high levels of unemployment, the impact of an increase in aggregate demand may be greater because the effect on wages will be less, so that the extra demand for labour would translate more into quantity changes in employment rather than wage rises. At lower

unemployment the relative effects could be reversed. Finally, in comparison with earlier years, economic growth rates may have been underestimated in the 1980s, because of the shift to services, where productivity growth may be underestimated. In sum, there is little reason to be sanguine about the sustained employment impact of higher growth rates, should those materialise.

(x) Associated with worsening income inequality, high unemployment and the restructuring of employment, 'core' groups of workers have been gaining in terms of income, employment security, fringe benefits, skill and so on, while the industrial proletariat has not only been shrinking, but losing in most of those respects. Meanwhile, a heterogeneous 'peripheral' category has multiplied, consisting of a growing number in low-status, low-paid, insecure and mainly 'service' jobs alongside a large 'detached' stratum, rarely in jobs and often consigned to long-term unemployment and discouragement from legitimate labour force activity.

(xi) There has been a proliferation of schemes to remove the unemployed from the labour market to conceal part of the unemployment. The original idea of active labour market policy as a counter-cyclical device (as in the so-called Swedish model) and as a means of accelerating structural adjustment has tended to give way to policies that have had little effect other than that of taking people out of recorded unemployment, as with the 'travaux d'utilité collective' (TUC) scheme in France, designed to provide temporary community labour for young unemployed. In some countries, the number in labour market measures is almost as large as the number recorded as unemployed. And in some countries, statistical changes have artificially lowered unemployment. In the UK, there have been about 19 such changes since 1979; in July 1988 it was announced that henceforth those without jobs but in government training schemes would be counted as employed, thereby lowering the unemployment rate by increasing the employment count by about 334,000; at the same time, jobless school-leavers under the age of 18 would no longer be counted as unemployed because they would no longer qualify for unemployment benefits under new regulations, so cutting unemployment by over 100,000.

(xii) Flexible employment within enterprises has grown. With

workers expected to change jobs more often, and a growing emphasis on 'functional flexibility', the nature of 'skilled' work may be changing. Some observers claim there has been an upgrading of skills, others that 'deskilling' has accompanied technological change, and others that a polarisation is taking place, with a small core of highly skilled people coexisting with a growing mass with partial skills that preclude their becoming technically proficient. There is more evidence to support the polarisation thesis than the other two views.[7] There may also have been a growth in the proportion of jobs exposed to the external labour market, jobs for which workers are inter-changeable and for which employers have less need of low turnover. Indeed, with non-wage and wage labour costs being a positive function of employment tenure, incentives to substi-tute temporary for 'permanent' workers have grown.

(xiii) Older workers have been marginalised in many European labour markets (Standing, 1986). These will be *the* major disadvantaged group in the next decade. Their marginalisation has been understated by unemployment rates, concealed by 'early retirement' schemes, enforced low activity rates and low-paid partial employment. For instance, by the mid-1980s two-thirds of all men in France aged 60 to 65 had officially 'retired', even though the official retirement age was still 65.

(xiv) There has been a shift from large-scale establishment employ-ment to small units. Some have interpreted this as a new wave of entrepreneurial enterprise. Others have seen it as largely a reflection of the shrinkage of large-scale concerns, the growth of new forms of organisation, sectoral shifts and, not least, survival reactions of laid-off workers resorting to 'self-employment', often on a part-time or irregular basis. What-ever the causes, incomes and employment security tend to be lower in small-scale firms, while job turnover is much higher. Thus, the trend points to a growth in labour market insecurity.

(xv) A stagnation occurred in the hitherto rapid growth of public sector employment, which had absorbed labour displaced in the shrinking industrial sectors; the slowdown was particularly marked in France, the Netherlands and the UK. As public sector jobs have been relatively well-paid, full-time and regu-lated, the combination of privatisation and cut-backs in public service employment has probably lowered average conditions of employment.

(xvi) Earnings have become more 'flexible', or variable, partly
because opportunities have become more irregular for some,
partly because of an expansion of piece-rate payment systems,
as with 'homeworking', 'networking' and some forms of tem-
porary job, and partly because profit-related payment systems
have grown, benefiting those in flourishing enterprises in
secure high-status jobs, but worsening the relative income and
increasing the earnings insecurity of the rest.

3 'EUROSCLEROSIS' AND LABOUR FLEXIBILITY

According to supply-side economists, mass unemployment has arisen
and persisted because European labour markets are 'sclerotic'. Their
prescription is familiar – decentralise wage bargaining, weaken
'union power', dismantle minimum wage machinery, remove em-
ployment protection and other labour regulations, widen wage differ-
entials, cut non-wage labour costs and cut income taxes.

For many critics, it is enough to note the fact, usually uncontested,
that the package is inequitable. Essentially it says that the poor
should receive less (in benefits or wages) to make them work harder
while the rich should receive more (via lower taxes) to encourage
them to do so. Its proponents prefer to put it in another way, that if
the strategy works the 'economic pie' will grow faster, so allowing all
to have more.

It is essential to make a careful assessment of the Eurosclerosis
school of thought, and in that regard the ILO is engaged in a research
programme devoted to the relationships between unemployment and
labour flexibility. The following puts out a few markers of current
tendencies:

(i)   On any reasonable definition, labour market flexibility has
grown enormously in Europe in the past decade. So has
unemployment. It therefore becomes a trifle hard (not im-
possible, no doubt) to blame labour market rigidities for rising
unemployment.

(ii) There is little evidence that employment protection regu-
lations have been a major deterrent to employment, and some
evidence from business surveys that they have not been a
deterrent. They *may*, however, have influenced the compo-
sition of employment, encouraging the use of temporary

labour, part-timers and sub-contracting rather than regular, full-time workers, as for example in the Netherlands.[8] Moreover, the bypassing of labour regulations – 'implicit deregulation' – has been growing, as in France, where in the wake of the Auraux laws of 1982 firms resorted far more to indefinite layoffs rather than redundancies, thereby weakening employment security.

(iii) The alleged decline in labour mobility in Europe may be partly illusory, since some types of mobility may substitute for others in the course of organisational and industrial change, and is partly a reflection of high unemployment, not a cause of it.

(iv) Nominal and real wage flexibility are not positively correlated with decentralised, market-oriented wage determination systems.

(v) There is no compelling evidence to show that a widening of wage differentials is a necessary condition for an efficient labour market; interestingly, the country with the narrowest wage differentials, Sweden, has also had one of the lowest unemployment rates.

(vi) The claims made for more and more 'training' and 'retraining', and that lack of training is a major cause of 'structural' unemployment, are just that. Everybody can agree that vocational training for technical and professional competence is desirable. But as a 'solution' to unemployment, one should be sceptical. Many 'training' policies have been mainly mechanisms for easing the unemployed off the registers or on to work 'orientation' courses; labour market training may improve the employment prospects of the unemployed *vis-à-vis* others, leading to substitution effects, but if training 'pays' them, employers would surely find ways of paying for it; yet many enterprises cut down on training in the 1980s.[9]

(vii) The view that unions' 'restrictive practices' and atavistic behaviour have contributed to unemployment is often dressed up in respectable economic language. Some unions may have been very defensive in the wake of rising unemployment, but union 'power' has been on the wane in much of Europe for a long time. 'De-unionisation' has proceeded very far, particularly in Italy and the UK, reflecting industrial change, a growth of small-scale unstable establishments, management strategies and the effect of higher unemployment.[10] In any

case, countries in which unionisation has been highest have maintained higher employment and achieved more rapid 'structural adjustment' than elsewhere.

(viii) Finally, as noted earlier, flexible forms of employment have been growing, involving insecure employment and incomes. This means, *inter alia*, that many – an estimated 50 per cent of all British workers, for example – have no rights to enterprise-level social security, such as unfair-dismissal compensation, redundancy pay and maternity leave or pay. This means that not only are such workers more dependent on state assistance in times of need, but that firms have more 'power' in that they can determine which workers have access to *both* enterprise-level and state social security support, since in many countries those not in regular employment risk losing entitlement to state benefits.

4 THE WELFARE STATE CRISIS

The welfare state was created on the basis of two assumptions about the labour market and employment. The first was that usually there would be full employment, so that the state had to provide income security primarily to cover 'temporary interruptions' of earning power. The second was that the labour force would consist predominantly of men in regular, full-time jobs, each with an economically inactive wife and dependent children. Based on those two premises, a social-insurance system could provide what the state was expected to provide, basic security from deprivation, or a subsistence level of income security. Critical to that part of the social consensus was the view that, except for a tiny minority of disadvantaged citizens, the labour market could satisfy the income needs of the population.

What has happened in the past 40 years is that the delicate balance between the social security system and the labour market has been undermined. Indeed, it is scarcely an exaggeration to state that the two are now in conflict. There is a fivefold crisis:

(i) A *fiscal crisis*: Gradually, in the post-war era of full employment anomalies in the Beveridge-type national insurance model resulted in the addition of selective, means-tested benefits for those left out of the mainstream of economic growth through prolonged unemployment, disability, family status,

and so on. For many years financing the spreading social security network was feasible as a result of productivity growth. The growing demand for transfers was not excessive in the era of full employment, when most jobs were regular, full-time and protected. However, when unemployment mushroomed the demands and needs grew while contributions fell. At the same time, dependence on social assistance from outside national insurance intensified. With high youth and long-term unemployment, the contribution base shrunk while the need for income support grew, leading to higher contribution rates needed to finance the insurance system. And the spread of more 'flexible' payment systems led to widespread 'avoidance' of national insurance contributions. Although the story differs from country to country, the essence is the same: an incipient fiscal crisis.

(ii) A *demographic crisis*: The aging of the European population is creating a growing gross dependency problem. In 1975 there were three persons aged 20–59 for every one over 60; in the 1990s it will be less than two; in the UK, there are now about 2.6 persons out of employment per one full-time equivalent person in employment, a rise having occurred that requires a higher rate of contributions to provide a constant level of per capita benefits; in Italy, the number of people aged over 70 doubled in the quarter of a century up to 1986, while the number aged 14 to 70 rose by less than a fifth (Bruni and Brunetta, forthcoming). Resort to early retirement schemes in response to unemployment has compounded the problem; in the Netherlands reductions in the qualifying age for pensions in the 1980s may have created a situation in which the social security system will be financially unviable by the end of the century (*European Industrial Relations Review*, 1987). Statutory early retirement pensions financed by old-age insurance rather than unemployment insurance has led to 'a *de facto* diminution of the income guarantee' introduced in the 1970s when the labour market recession was expected to be temporary (Dumont, 1987). Such 'temporary' measures will be hard to reverse.

(iii) A *social equity crisis*: There has always been a conflict between the 'equity' and 'efficiency' objectives of social security. In recent years, because of incentive arguments the minimum income support has been set at very low levels, often too low to

support a decent standard of living. Moreover, with the growing complexity and resort to selective transfers, the non-discriminatory nature of social security upon which Beveridge and others so insisted has been weakened. Many observers believe that social security has not protected the weakest groups in society. People are intimidated by complex procedures or by the stigma of having to plead for state assistance; in West Germany, surveys suggest that nearly half of the eligible unemployed do not apply for assistance, through shame (Room, 1987). But of growing importance have been those who have not qualified for transfers because of the nature of their labour market involvement. Unemployment insurance has become increasingly 'selective', failing to protect a majority of the unemployed. For example, in the UK most have become dependent on 'Supplementary' Benefits; the proportion of unemployed men receiving ordinary *insurance* benefits fell from 55 per cent in 1971 to a mere 26 per cent in 1985. In Spain, in 1987 only 29 per cent of the registered unemployed received state benefits. In West Germany the proportion of the unemployed entitled to unemployment compensation *or* unemployment assistance fell from 86 per cent in 1975 to 67 per cent in 1985; there and in countries such as France, Denmark and the Netherlands, reliance of the unemployed on social assistance rather than insurance benefits has increased dramatically. Workers in flexible forms of employment – temporaries, part-timers, and so on – have often not qualified.[11] This is particularly true of part-timers or 'homeworkers', for whom piece-rate pay is often coupled with exclusion from social security benefits in slack periods (see Varesi and Villa, 1988). Thus the social security system may exclude growing numbers who deserve and need to be covered.

(iv) An *'unemployment trap' crisis*: Jobs disappearing most have been reasonably well-paid, full-time, industrial work; those growing have been part-time, service jobs. So, even though the income replacement ratio for recipients of unemployment benefits may be much less than previous full-time earnings, many unemployed may be discouraged from taking available jobs because they would receive a smaller net income. How widespread this anomaly has become is hard to say; one suspects it is growing. One implication would be that many *male* unemployed cannot take part-time job vacancies without an income

cut, unlike women from outside the labour force. To call the resultant unemployment 'voluntary' would be absurd.

(v)   *A moral-political crisis*: Due partly to the fiscal crisis and unemployment trap pressures, governments have set out to make the system more selective and 'target oriented', with tighter 'conditionality'.[12] This raises questions about the regulatory function of social security, with arbitrary criteria for separating the deserving from the undeserving poor. In many countries, the 'poverty trap' affects many families and individuals, whereby those in jobs gain little extra or receive less if they work more, because of loss of benefits. Increasing selectivity strengthens that tendency, and as a cost-cutting measure is unlikely to be very equitable.

(vi) An *efficiency crisis*: Rather than encourage flexible employment, the social security system makes it hard for many workers to be flexible and penalises others who are. Because of qualification rules about past work, those who wish to work intermittently are excluded or receive minimal benefits. In some cases labour mobility is discouraged by restrictions of access to benefits by those who 'quit' jobs.[13] For older workers, there is often a 'retirement trap'; if they do a part-time job, they lose part or all of their pension income. The 'unemployment trap' also makes job experimentation impractical or potentially costly for many of the jobless, while the 'poverty trap' penalises others who wish to increase their work or skill.

In sum, one cannot address the problems of the European labour market without contemplating a fairly radical reform of the social security system.

5   OPTIONS FOR THE 1990s

Considering the trends in the labour market and social security system, it may be useful to contrast the likely outcome of more assiduous supply-sideism with an alternative that could be described as a social dividend strategy.

5.1   Popular Capitalism, or 'The Social Market'

If supply side economic policies are pursued, one can predict that income inequality will continue to grow, and that payment systems

will continue to become more 'flexible', involving more use of bonuses, fringe benefits, share options, profit-related pay and so on for 'core' workers and management.[14] Such 'insiders' will co-exist with 'outsiders' picking up the crumbs of economic growth. Employment security for a minority will grow, with some concessions on job or 'task' flexibility. But for many more, precarious employment will be more usual, even if they stay in specific jobs for some time. Besides using more part-time and casual labour, firms may contract out the employment function to 'labour contracting agencies'. This is already happening, but the scope for it is far greater than so far practised.

The drift to 'workfare' – receipt of benefits only if the unemployed accepts a stipulated job or training place – is likely to be one response to chronic unemployment.[15] It would not be surprising if workfare schemes slashed the level of open unemployment in the near future. Critics will see this as a modern form of the workhouse, stigmatising and coercive, and as a way of undercutting other workers;[16] proponents will stress the benefits of 'training' and the possible reduction in welfare costs. One fear is that Governments will use public sector jobs and training schemes as a means, not only of reducing open employment, but of regulating the labour force, in the process further eroding the legitimacy of the public sector. If workers in public service jobs are only there as 'failures', they will be alienated and under-productive, while the 'demand' for such services will be hit by association with low quality. Thus from both supply and demand sides, the status of the public sector will be further undermined.

The scope for 'perverse flexibility' is also greater in a 'post-industrial' society than in one based on mass-production manufacturing. Illegal or clandestine economic activity seems to be growing in many European countries, though estimates understandably vary wildly. In Italy, for example, one estimate put the 'underground economy' as 30 per cent of GDP. The incentives and opportunities for informal employment are growing, and the potential is held back in some countries more successfully than in others only because of institutional obstacles and the policing and regulatory powers of the state. As policy-makers weaken regulations and broaden the 'tax base' (to offset cuts in direct tax rates), the tendency for informal, small-scale and tax-avoiding activities to spread will intensify. An irony is that whereas tax-cutting and the growth of small-scale enterprises are popular objectives of supply-siders, the more the informal economy spreads the smaller the effective tax base, so that tax rates would have to rise *if* public expenditure were to be maintained and

budgets 'balanced'. Moreover, a central tenet of supply-side economics is that taxation should not be used as a means of reducing inequality. Supply-side economists believe in 'tax neutrality', defined essentially as a tax structure designed to maximise incentives and savings and to preserve the degree of inequality produced by the labour market.

Trades unions in this evolving scenario will continue to have a hard time. More middle-ranking workers will be co-opted by their corporations, while those in precarious jobs will be harder to organise or retain. Business unionism ('Hammondism' as one strain of this is depicted in the UK) may spread – taking over functions previously seen as the responsibility of Government or employers, and giving up the traditional function of representing labour against capital. Increasingly, insecure workers moving from job to job, and in and out of the labour force, could be forced to be non-union to obtain work, particularly if employment agencies become more predominant, as predicted.

Will 'popular capitalism' reverse deindustrialisation, in the sense of arresting the international redivision of labour and creating a high-tech economy giving secure jobs with decent incomes to the millions of Europeans currently excluded from them? For reasons stressed earlier, that seems unlikely despite some predictions of technological 'roll-back', through multinationals shifting production back from low-cost labour countries to European sites. Indeed, the labour market 'deregulation', implicit and explicit, of recent years may be accentuated by the shift to the 'internal market' in the EC in 1992. The hype attached to this project may herald much less in reality once the implications are digested by governments. But if it does occur, enterprises will surely move more production and employment to those countries where deregulation is greatest. This will strengthen the employer's bargaining position and increase insecurity of employment and income of many groups of workers.

Much has been promised from 'small businesses'. It is as well to put the facts into perspective (Storey and Johnson, 1987). Their employment share has increased in some European countries, but that is due to the shrinkage of large enterprises, to high and chronic unemployment, to statistical disguising of medium-sized firms as small-scale (if an enterprise changes the status of some employees to self-employed, for example), to the huge subsidies provided, and thus only partly to industrial restructuring. The high 'mortality' rate of small businesses and the social costliness of the high turnover indicate the precarious-

ness of this process. There is also little evidence to support the belief that today's small businesses will grow into large employers tomorrow. Of course, a few do so, but most remain small scale. And economies with high shares of total employment in small firms do not have notably lower unemployment.

Finally, the likelihood is that if the social market philosophy prevails, what Richard Titmus called the 'institutional redistribution model' of the welfare state in Western Europe will give way to the 'residual model' associated with the USA. As such, it will be increasingly selective and the share of GNP devoted to public spending will be cut from above 50 per cent to about a third. Welfare spending will be targeted to provide 'poverty relief', not poverty prevention, let alone redistribution in favour of poorer groups in society. If so, not only will many more people find themselves in various poverty traps, but the poor will be forced to rely on informal networks of social support, most notably the 'family', in an era when such solidaristic units are at best fragile, or on charity from relations, friends and local authorities, all of which are likely to be badly placed to give such aid.

5.2 A Social Dividend Strategy

The supply-side strategy seems bleak and harsh. A return to 'labourism', or corporatism, is not really on the political or economic agenda, since it seems to many to be inflexible, excessively bureaucratic and ultimately ineffectual. Is there an alternative?

Let us assume the following objectives. First, we need to ensure more rapid economic growth. The twin requirements for that are higher profits than prevailed at the end of the era of corporatism and a high level of productive investment, which requires a high level of domestic savings and few leakages of profits abroad in one form or another. In any case, for profitability, a reasonably flexible labour market is desirable, to encourage investment and rising productivity. The trouble is that a flexible labour market has adverse consequences for many workers and those left out of high-tech growth sectors.

A second objective is a reduction in inequality, or at the very least the prevention of growing inequality. The trouble here is that with recent market-led growth, the high profits have had adverse distributional consequences while the growth has not been notably jobgenerating. And the role of taxation has been shown to be limited or socially unacceptable.

A third objective is income security for everybody. Affluent European

societies surely have an obligation to ensure that all have enough to survive in reasonable decency. The trouble is that if the labour market is to be 'flexible', if profit rates are to be high, and if the social security system is floundering because it is ill-adapted to the labour market, then this objective is seriously threatened.

Many would advocate a fourth objective, full employment. Without going into the issues here, it will be assumed that this is not feasible in its traditional sense of regular, full-time jobs for the great majority of the adult population.[17] One could argue that it is not desirable either. What is desirable is that as many people as possible who wish to do so should be enabled to contribute to social and personal welfare. As such, policies that boost employment deserve support, but full employment should not be an end in itself, leading as it would to a proliferation of 'unreal jobs', 'workfare' and a distortion of active labour market policies. It is very likely that more rapid economic growth will not only leave a large residue outside employment but will accentuate inequality and labour force fragmentation. This is ultimately why an alternative strategy is required.

One can depict national income (Y) in terms of three components:

$$Y = s + w + P$$

The knack is setting the level of the three components at an optimum, where s is the basic income level that all civilised societies should set for subsistence, where w is the total wage bill and p is profits. If w is too high relative to p, investment will be hit; if w is too low relative to p then labour productivity will be hit and income distribution will become socially unacceptable. Representatives of w (trades unions) wish to raise w relative to p, but are also likely to want to reduce s relative to w (and possibly p) because deductions needed to pay s seem to reduce the amount available for w.[18] Meanwhile, representatives of p (capital) want to lower not only w but s, because if s is high, the deductions for p will be increased and there will be an upward pressure on w (higher reservation wages, and so on). But the p-representatives also have an ambivalence about s, since not only do they have a social conscience but a minimum level is required for social stability and to cover the 'reproduction costs' of the work-force; in any case s-recipients are also consumers.

The dilemma now is that popular capitalism, with the erosion of collective defensive organisations, has allowed the balance to shift strongly in favour of p and against w and s, with growing numbers

dependent on *s* (or in need of *s*). Moreover, many more people are continuously or intermittently dependent on both *w* and *s* for survival, the reality of labour surplus and flexible labour markets. The most promising route out of this impasse is what might be called a social dividend strategy. In what follows, we briefly consider three institutional changes that could promote more equitable growth and flexibility.

Collective profit-sharing

Supply-siders believe profits must rise as a share of national income, presumably to motivate the high-risk investment required in the increasingly competitive international economy. Even accepting that premise, there is no need for surplus to be distributed increasingly unequally. But that seems an outcome of deregulation and market-led growth. How should that trend be reversed? In one form or another, *collective* profit-sharing must be part of the answer. That could have the virtue of stimulating wealth creation through mobilising and reinvesting surpluses, without the distributional and other negative properties of individualistic revenue-sharing pay systems. Community or regional 'wage-earner' funds, as tentatively tried in Sweden (for a review see Standing 1988a), would have the added virtue of enabling the surplus generated by profitable enterprises to be channeled into projects benefiting local communities. Above all, unless there is social sharing of surplus many more will be left out and be dependent on low-wage employment, which will impose more strains on the delivery capacity of the social security system.

Traditionally, 'nationalisation' has been depicted as the means of capturing the surplus value, or profits, in the interest of society. Yet, if redistribution were the overriding objective, it would be better to socialise the surplus while leaving the management function in the hands of those directly involved. Although it would not rule out alternative forms of managerial control, depending on political preference, collective profit-sharing would check imbalances growing between *w*, *s* and *p*.

Community unionism

While profit rates have risen, the collective strength of labour has been eroded, with widespread deunionisation. Economists have spent far more effort on the alleged effects of unions on average wages and the level of *w* relative to *p*. But their declining strength has

been associated with growing wage differentials and the fall of incomes at the lower end, which has spilt over into lower s and tighter conditionality for receipt of state benefits.

If this growing inequality within the labour process is to be checked, new forms of collective organisation must emerge. The key to union revival is acceptance of the flexible labour market as an economic reality. As such, traditional unions representing specific crafts or industries will have only a limited and weakly committed constituency. This is because the emerging pattern is one of much weaker allegiances to specific occupations or jobs than in the industrial era. With flexible labour markets, workers can expect and be expected to shift more across occupations, sectors and work statuses. In those circumstances unions will have to evolve into community unions, organising local communities of different types of worker.[19] Who is going to bargain with employment (labour contract) agencies that supply workers to a variety of industries? Who will represent the interests of workers who are at one moment self-employed and at the next casual wage labour? If unions only represent core workers, they will further encourage employers to resort to the 'periphery'. In a labour surplus, flexible labour system unions will either have to represent whole communities of workers or they will be unable to represent anybody very effectively for very long. If they do evolve as community unions, a brake will be placed on the growth of p relative to w, on wage differentials and on the incomes of those on the margins of the labour market. But even so, that would not be enough.

Citizenship income security

As for the need for income security, a new debate is emerging. Most West European States long ago institutionalised the conditional right to income security, legislating to enable the low-paid, those unprotected by national insurance and those with socio-physical handicaps to obtain subsistence benefits. But means tests and arbitrary eligibility rules undermine the objectives of removing poverty or providing income security equitably.[20] In some countries the State provides all the funds for such schemes, as in the UK and Germany; in others it provides part while local communes provide the remainder or part of it, as in France, Belgium and the Netherlands. The minimum income varies from high levels in Sweden, West Germany and the Netherlands to lower ones in the UK, Belgium and France. In almost

all countries, the number of beneficiaries of basic support has grown enormously in the past decade, more than doubling in countries such as West Germany, Belgium and the Netherlands.

The drawbacks with most existing approaches are:

(i) The minimum income is too low. This typically reflects the belief that a large amount would act as a disincentive to work, so that the level is tied to earnings in low-paid jobs and/or the method of estimating the cost of a basket of goods deemed to constitute subsistence. In countries such as West Germany and the UK, the state provides the unemployed with lower benefits than other groups.

(ii) Means-tested and work-tested benefits invariably have low take up, for reasons mentioned earlier and extensively documented. It is also apparent that more people are becoming dependent on means-tested benefits for all or part of their income and that this has tended to induce a dependency syndrome.

All of this leads to a critical proposal: a basic income provided as a *right of citizenship*. This is no longer a pipedream, and in one sense is already accepted as a principle in most European countries. But if the current employment-oriented conditionality has become less justifiable, either the state can retreat from the right to income security or it must reject such conditions for what they are, arbitrary, inequitable and inefficient. The latter seems the better course to take. The only way to ensure income security, equity and flexibility is to reform social security so that all or most existing benefits (including indirect benefits granted in the form of tax relief) are gradually replaced by a single transfer income, with supplements to cover specific needs, such as disability, that imply a higher cost of living. A citizenship income would be paid to all *individuals*, regardless of age (though lower for children below 16), sex, marital status, worker status, and duration of past work or tax paying.[21] For most income earners the basic income would comprise a deductible tax credit; for non-earners or low earners it would amount to a non-withdrawable payment. All earned income above the citizenship income would be taxable, perhaps with a comprehensive income tax replacing the existing income tax and national insurance contributions.

Such a scheme would recognise that the labour market in its emerging flexible form is incapable of generating income security for a sizable part of the population. As such, given a government

commitment to basic income security – long an obligation in affluent societies – it is necessary to break the link between the labour market and income if the problems of 'underprovision' and 'exclusion' are to be overcome. A citizenship income scheme could be introduced in stages,[22] or introduced for certain disadvantaged groups and gradually spread to the whole population.[23] In either way, such a reform is fast becoming economically *feasible*, because: (i) national incomes in European economies are sufficiently large to allow a decent minimum income for all citizens; (ii) social security and tax relief already account for about a third of GNP in some countries, so almost allowing a fiscally neutral shift to a citizenship income guarantee at a safety net level; and (iii) the costs of administering the existing system have grown enormously.

The *objections* traditionally levelled at a universal income guarantee have tended to block an objective assessment of the advantages. In particular:

(i)   The *cost* has been cited as implying either a basic income insufficient to meet subsistence needs or a level requiring 'excessive' tax rates. For reasons just cited, this argument is weakening, a view that would be strengthened if one accepted that current levels of taxation are not 'optimal' in any sense, and that the advantages of a social dividend noted later (particularly (vi) to (xi)) would raise public revenue or reduce other public expenditure. It should also be borne in mind that partial selectivity in the provision of welfare benefits would be retained, through benefits based on special needs, not means or work tests.

(ii) *Reduce wage rates.* It is claimed that employers would be under less pressure to pay decent wages. This is dubious, since a minimum income guarantee would enable low-paid, vulnerable groups to have a stronger bargaining position in the labour market. In any case, unions and wage protection machinery would presumably remain to defend wage levels.[24]

(iii) *Disincentive to work.* Critics claim an unconditional income guarantee would discourage work or saving. This too is dubious. First, a citizenship income guarantee has to be compared with the existing system with its unemployment traps, poverty traps and retirement traps, in which many face marginal 'tax' rates near or even over 100 per cent. With a basic income scheme, nobody would face such high rates. Second, the citizenship income would not cover all social needs. Most

people respond to relative status aspirations, and it is hard to believe that large numbers would respond to basic income security by idleness. A civilised affluent society should surely not rely on the economic stick of income insecurity to motivate people to work.

(iv) *A citizenship income scheme leaves open its level and rate of change.* That is true of any benefits system and it is correct that both the political right and political left could interpret a citizenship income scheme in their own ideological terms. There would have to be checks on the abuse of a 'social dividend'; for instance, the guaranteed income level could change with the rate of economic growth.

(v) It would *weaken the resolve to reduce unemployment.* In most of Western Europe the cynical retort to that is: What resolve?

(vi) It does not deal with the perennial problem of *special groups* with special needs and is thus *inequitable.* All systems have to make allowances for the disadvantaged, but whereas current insurance-based systems base entitlement on means tests or work tests, with a citizenship income system such entitlements would be based on actual physical and social needs. Thus, there would have to be supplements for contingency needs involving higher costs of living.

(vii) It is *politically impracticable*, because there is not a large enough political constituency to support it. That is a prescription for intellectual and political inertia. Of course, it will take time to elicit understanding of what is involved in a move towards a social dividend economy, but that would scarcely justify intellectual neglect.

(viii) It would be *unnecessarily universal.* It is sometimes argued that it would be absurd to provide income support for millions of people when only a few hundred thousand need support. The counterpoint is that increasing numbers have a fluctuating status, with periods of full-time work interspersed with part-time work, unemployment, withdrawal from the labour force, low earnings, and so on. At the latest count, there were about 145 million people in the EC alone dependent on state benefits for all or part of their normal income. Universality would also have the benefit of simplicity and be much cheaper to administer.

A citizenship income scheme would be no panacea for poverty and could only be introduced as part of a general strategy for reducing

inequality and promoting growth. Yet it could have critical labour market advantages:

(i)   It would facilitate employment flexibility, making it easier to combine part-time work with other activities. By removing the unemployment trap it would enable some unemployed men (particularly) to take part-time jobs; by reducing the risk of penury in the result of failure, it would encourage 'self-employment'.

(ii) It would weaken the sexual division of labour, and reduce labour market inequality, by improving women's bargaining position (notably those in low-wage, insecure jobs) and by encouraging men to share more in domestic work by enabling them to take part-time jobs more easily. Correspondingly, it would reduce 'household dualism', since at present in some countries if a man becomes unemployed, his wife has little incentive to earn, since any income results in an equal loss in benefits.

(iii) It would weaken the arbitrary, inflexible notion of retirement age, and enable older workers to avoid the unfair penalisation of 'earnings rules' that in some countries determines receipt of state pensions while reducing the economic contribution of older citizens. It would also encourage worklife 'interruptions', rather than late life retirement, enabling people in mid-life to drop out of the labour force (without total loss of income) to learn new skills.[25]

(iv) It would provide people with greater choice of life-styles between higher work/higher income and lower income/lower work options.

(v)   By providing basic income security as a right of citizenship, it would reduce the stigma of unemployment while dispensing with the current situation in which many receive benefits *only* if they remain idle (unemployed).

(vi) Greater income security would encourage an atmosphere in which workers threatened by job loss would accept workplace changes more readily, thereby boosting productivity, economic growth and taxable income.

(vii) Although it could reduce 'exploitation' of vulnerable groups, enabling them to resist being paid less than warranted by their productivity and forcing inefficient, low-productivity firms to improve productivity rather than pursue a cheap labour ap-

proach, an income guarantee could reduce pressure by higher-income workers ('insiders') to push up wages to cover risks of future income loss.

(viii) It would encourage some black economy work to shift into the tax-paying mainstream, since there would be lower marginal tax rates at low earnings levels and no poverty trap phenomenon.[26]

(ix) There would be less pressure on governments to provide costly 'unreal jobs' for some of the unemployed. It would thus offer an alternative to workfare.

(x) It might encourage not only a combination of work activities but, by reducing the income risk, experimentation with jobs for which individuals might have an aptitude; this is particularly appealing given the existing trend towards barring from benefits those who 'quit' their jobs to search for something better.

(xi) It would reduce the essentially artificial economic distinction between labour force work and do-it-yourself productive activities; and would give a stimulus to social community services.

(xii) It would encourage 'worksharing', for which there seems to be a widespread desire.

In sum, a citizenship income guarantee could facilitate labour flexibility through albeit-basic income security. It would, above all, provide a means of legitimising the evolving labour process. The public revenue for its provision could come in part from a collective share in the surplus or profits generated by what is, increasingly, a 'high-technology' core of the economy. Unless we move in the direction of a basic income as a citizenship right, the current trend towards 'workfare' and 'targeting' will surely prevail. A certain type of politician will devote more rhetoric and policy to 'reducing dependency', which is a euphemism for reducing benefits, tightening rules for eligibility to state benefits and for devoting more public resources to intimidatory policing of social security 'fraud'. Those who take exception to this euphemism could advocate a universal income scheme as a means of *reducing dependency* in various ways – reducing dependence of the poor on a malfunctioning labour market; of those not in recognised employment on the earnings of those who are; and of the unemployed on a welfare service that at present regulates, monitors and stigmatises them.

6 CONCLUDING POINTS

Welfare policy should not be separated from economic and redistribution policy. A citizenship income guarantee coupled with community unionism and collective profit-sharing (on a regionalised or community basis, as initially envisaged in Sweden) offers a coherent package. It offers the prospect of enhancing individual autonomy, reducing sectoral and individual inequality and combating the most insidious trend of the 1980s, the centralisation of power and control. It is not a populist package, for it would represent an attempt to alter relations of production *and* distribution by building on existing trends. Most importantly, reform must be built on the recognition that as the new more 'flexible' labour market cannot provide income security for a large proportion of the population, it is essential to relax the link between labour force work and entitlement to benefits. Admittedly, there is a danger that a citizenship income could be used as a poverty income for those left out of the growth process, leaving a segment of the population to enjoy a 'bread and circuses' existence. That is why it is critical to see a citizenship income scheme as an integral part of a social dividend strategy based on the promotion of economic growth and the reduction of inequalities. It could be linked to the provision for disadvantaged groups of publically-supported training and work opportunities, but for a genuine social consensus access to those must be based on freedom of choice rather than on state regulation of conditionality. With that proviso, the concept of a social dividend society, in which individual income security is integrally linked to collective motivation to accumulation and the redistribution of surplus, offers the nucleus of a new social consensus. The political challenge is the creation of a broadly-based coalition who could identify with the type of society it implies. In the last decade of the twentieth century, that could come.

Notes

*   Views expressed in this chapter should not be attributed to the International Labour Office.

1.   Some observers classify the post-war consensus as 'Fordism', whereby the benefits of growing productivity were shared by wage-earners and capital, based on the spread of mass consumption, and a method of

market regulation by wage adjustment rather than competitive adjustments (redundancies, bankruptcies, price cuts, and so on).

2. Recently, comparisons of economic performance of corporatist and non-corporatist countries have postulated a 'hump-shaped' relationship, based on the hypothesis that the most and the least corporatist performed better than the intermediate cases (see Calmfors and Driffill, 1988). In such exercises there are enormous problems of identification, spurious correlations and crude and mixed indices of corporatism, consensus, centralisation, and so on. Simple pop-charts ranking countries in order of corporatism and used in time-series analysis ignore the fact that some countries changed quite dramatically during the 30 years or so covered by such studies.

3. In the preceding period, among European countries the degree of openness to international trade was not correlated with economic growth or other indices of macroeconomic performance; this changed in the 1970s.

4. See the longer paper on which this is based, Standing (1988a).

5. Without apparent irony, the OECD in 1985 wrote of the UK, 'The unemployment rate has risen by 2.5 percentage points during the current recovery'. During the post-war era such a contradiction in terms would have been unimaginable.

6. What has happened to women's relative wages is less clear. The earnings of employed men may have improved relatively in some countries, such as the UK, but women's 'opportunity income' may have risen, in so far as women's job opportunities have improved relatively, while the lost 'male' jobs have been concentrated among the low-income strata of male employment.

7. See, for example, Wiedemeyer (1988), and on the USA, Rumberger (1987).

8. Several official surveys have documented the rise and forecast that 'flexi-contracts' will continue to spread. By 1986, perhaps 12 per cent of all workers were in temporary jobs, see Ministry of Social Affairs and Employment (1986).

9. The argument in this paragraph is elaborated in an article in the *Oxford Review of Economic Policy*, Autumn 1988.

10. Effective unionisation has probably fallen much more than membership figures suggest. For instance, between 1977 and 1986 unionisation fell in Italy by nine percentage points to 39.7 per cent, but a growing proportion of remaining members have been pensioners (see Santi, 1987).

11. Social security coverage is weak for the self-employed, whose share of the non-agricultural labour force has grown.

12. In Italy those refusing jobs could lose the right to assistance; in the UK those leaving jobs 'voluntarily' are not entitled to unemployment benefits for six months, compared with six weeks in 1979. It has been estimated that nearly half a million unemployed lost their benefits in 1987 as a result of the former change from six to 13 weeks.

13. In the UK, for instance, official unemployment has been lowered by changing the entitlement rules, and by changing the unemployment

count to include only those receiving unemployment benefits. A cost of tightening the entitlement has been discouragement of labour mobility. In the 1970s someone who quit a job was not entitled to unemployment for the first six weeks; this was raised to 13 weeks and in 1988 was up to 26 weeks.

14. A survey of senior management pay in Britain showed there had been a considerable 'decompression of earnings differentials'. And, while salary growth rates rose with rank, the additional amount attributable to bonuses and fringe benefits had risen at a faster rate and by more the higher up the income scale. On top of that, share options for executive chairmen on average were equivalent to 70 per cent of salary and other bonuses. *Salary is a less reliable gauge of earnings the higher up the income scale*, and with the spread of 'flexible' payment systems, that discrepancy will widen.

15. Recently the US Senate passed a Welfare Reform Bill introducing federally-funded workfare. States accepting federal funds must stipulate that at least one parent in a two-parent family on welfare will have to work a minimum of 16 hours a week in workfare or community work projects.

16. The new 'Training for Employment' programme in the UK will pay unemployed trainees a small bonus on top of their benefit but *not* the rate for the job, so further boosting 'two-tier' work forces (see Department of Employment, 1988).

17. One might argue that full employment is still possible, as shown in such countries as Sweden and Switzerland. However, the latter has exported its unemployment. The former has relied on a secular growth in the number taken out of the active labour force via labour market schemes, *inter alia*, while a growing proportion of the employed are at any time absent from work (see Standing, 1988b).

18. The ambivalent relation between trades unions and claimant unions is striking testimony to this.

19. One relevant initiative is the 'citizens' trade union set up by the UIL in Italy; a computerised network provides workers with social assistance services, including an employment service for youths, a procedure for completing income tax returns and another for dealing with housing rents.

20. For instance, the age of eligibility varies enormously, being as high as 30 in Luxembourg, 25 in France and 23 in the Netherlands.

21. Note that a citizenship income guarantee is not the same as a negative income tax. The latter would retain means tests, the household (not individual) as the tax unit, and would be levied by reference to the previous year's income, which would often not correspond to current income or needs.

22. Proposals for a partial universal allowance, as in the Netherlands, would push the 'social labour market' in the appropriate direction (that is, (i) a modest guaranteed minimum coupled with (ii) compulsory 'loss of income' insurance for wage earners; (iii) a flat-rate supplement for those in poverty despite (i) and (ii); and (iv) voluntary social insurance

to cover other income loss) (see Netherlands Scientific Council for Government Policy, 1985).

23. The Belgian Government in 1987 costed a proposal to provide every school leaver with a three-year basic income guarantee, without work-availability or means tests. The additional cost compared with the current benefits system were modest.

24. Wages have a multiple function in a market economy, covering repro-duction costs and providing incentives to accept jobs and to work with optimal intensity and productivity. The provision of a citizenship income guarantee would, in effect, take out at least part of the repro-duction costs.

25. Relevant to this are the proposals of Gösta Rehn, on flexible life funds, and Rudolph Meidner on 'sabbatical years'. Less attractive is André Gorz's idea (derived from Rehn) of lifetime labour accounts by which everybody would have an obligatory work quota to fulfil or lose their right to a basic income (see Gorz, 1986, p. 60).

26. Using available data to estimate the impact on labour supply of alternating marginal tax rates at either end of the earnings spectrum is surely dubious, since lowering marginal rates at the lower end would create a different context in which initially marginal work could be attempted.

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