OXFORD

THE GOLDEN AGE OF CAPITALISM

Reinterpreting the Postwar Experience

Edited by Stephen A. Marglin and Juliet B. Schor

UNU-WIDER STUDIES IN DEVELOPMENT ECONOMICS

UNU-WIDER and UNDP 1990

Profit Squeeze and Keynesian Theory

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THIS chapter explores one aspect of the relationship between the system of production and the macroeconomic structure, namely the role of profitability in determining investment demand and the level of economic activity. Within the system of production, wages are a cost: the lower are profits per unit of production, the lower the stimulus to investment. In a Keynesian view of the macroeconomic structure, however, wages are a source of demand, hence a stimulus to profits and investment. In this view, aggregate demand provides the way out of the dilemma that high wages pose for the system of production. If demand is high enough, the level of capacity utilization will in turn be high enough to provide for the needs of both workers and capitalists. The *rate* of profit can be high even if the profit margin and the share of profit in output are low and the wage rate correspondingly high.

I. INTRODUCTION: THE UNCOMFORTABLE FACTS OF PROFIT SQUEEZE

Profit squeeze presents a problem for this Keynesian solution. How do we reconcile the argument that profit squeeze was a major cause of the decline in growth rates that took place in the 1970s with Keynesian doctrine on the role of aggregate demand in reconciling the requirements of the system of production and those of the macroeconomic structure? That is the task of this chapter.

Our profit-squeeze story goes like this. First, profit squeeze is itself explained by a combination of downward pressure on productivity growth and an upward pressure on wages. As a result of a long period of high employment, productivity growth began to lag behind wage growth in the late 1960s, and this put pressure on profits. Pressure on profits in turn put a two-sided pressure on the growth rate of the capital stock. On the one hand, profits were an important source of saving, so the reduction on profits made less income available for accumulation. On the other hand, the reduction in realized profits led business to anticipate lower profits in the future, and the fall in expected profits led to a reduction in the demand for investment. In short, high employment encouraged the growth of wages and inhibited the growth of productivity; this put pressure on profits, and the resulting pressure on profits led to a crisis of accumulation.

Basically, the Keynesian objection to this view of profit squeeze is that a higher wage should increase aggregate demand, at least under the assumption that the propensity to save out of wages is less than the propensity to save out of profits.¹ Although higher wages may diminish the profit per unit of output, business will make up the difference by an increased volume of production and sales. If investment demand increases with the rate of capacity utilization, there will be even greater aggregate demand, and both aggregate profits and the profit *rate* will be higher even as the profit *share* is lower. In this view there is no trade-off between growth and distribution. High-wage policies promote income equality, output, and growth. Policies which increase the workers' share of the pie also increase the size of the pie.²

This argument was a cornerstone of the 'cooperative capitalism' incorporated to a greater or lesser extent in post-World War II regimes of all the industrialized countries, and articulated in left and centre-left politics and economics until the demise of the golden age. It is rightly thought of as Keynesian in nature since aggregate demand, or more precisely deficiencies of aggregate demand, are central ingredients of the story. But a co-operative vision of capitalism based upon stagnationist or under-consumptionist ideas long antedated Keynes, as this resolution of the Leicester framework knitters, put forward in 1817, indicates:

That in proportion as the Reduction of Wages makes the great Body of the People poor and wretched, in the same proportion must the consumption of our manufactures be lessened.

That if liberal Wages were given to the Mechanics in general throughout the Country, the Home Consumption of our Manufacturers would be immediately more than doubled, and consequently every hand would soon find full employment.

That to Reduce the Wage of the Mechanic of this Country so low that he cannot live by his labour, in order to undersell Foreign Manufacturers in a Foreign Market, is to gain one customer abroad, and lose two at home.... (Home Office Papers 42.160 quoted in Thompson (1963), p. 206)

At the turn of the century J. A. Hobson attempted to systematize the under-consumptionist view, as did various others in the late nineteenth and early twentieth centuries. But it took the combination of Depression and the talent of Keynes to make the stagnationist view politically and intellectually respectable. The central point of this chapter, however, is to draw a distinction between a *theory* of a capitalist economy in which aggregate demand plays a central role, and *models* built on particular assumptions about the components of aggregate demand. It is our position that while both the general theory and specific models may hold at certain times, the models are much more bound by time and place than is a theory based on the centrality of aggregate demand. In particular, we view the Keynesian insistence on aggregate demand as an important ingredient to understanding how modern capitalism works quite generally, but the stagnationist model as very much bound to particular places and times.

II. A SIMPLE MODEL

We can present the basic ideas of this chapter in terms of a reformulated aggregate demand-aggregate supply model. The reformulation consists primarily of giving a central place to income distribution in the modelling of aggregate demand. Income distribution is reflected in the sensitivity of both the demand for investment and the supply for saving to the profit share. In a second, relatively minor, modification of the usual model, we also introduce the rate of capacity utilization z as an additional state variable. The variables π and z replace the variables P and Y in the standard model. One advantage of the present model is that it is normalized in terms that permit it to be applied to the determination of equilibrium over a longer period than the conventional macro-model defined in terms of levels of prices and outputs. Here is the model in summary form:

Accounting Identity: $r = (R/K) = (R/Y)(Y/\overline{Y})(\overline{Y}/K) = \pi z \overline{a}^{-1}$. (1)

Aggregate Demand (Investment and Saving)

Saving Function:	$g^s = (S/K) = sr = s\pi z \overline{a}^{-1}$	(2)
Investment Function:	$g^{i} = (I/K) = i(r^{e}(\pi, z)).$	(3)
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Equilibrium Condition: $g^s = g^1$ (4)

Aggregate Supply (Producers' Equilibrium)

Flexible Mark-up	$\pi = \pi_0 + b(z).$	(5)
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In these equations, S, I, Y, and K have their usual meanings, R is total profits per annum, \overline{Y} is potential output, r is the actual rate of profit on the aggregate capital stock, r^e is the rate of profit anticipated on new investment, π is the *share* of profits in income, z is the rate of capacity utilization $(=Y/\overline{Y})$, \overline{a} is the capital/output ratio at full capacity output, and g^s and g^i are the growth rates of the capital stock desired by savers and investors respectively.

A few remarks are in order. As has been mentioned, the distinguishing feature of our model is the centrality of income distribution in the determination of aggregate demand. The saving function reflects the Classical (or Income Shares) Hypothesis, which assumes that all profit income is saved and all wage income is consumed.³

The investment function introduced here is somewhat unorthodox, and will be discussed and defended in some detail below. Suffice it to say here that our formulation is designed to emphasize a central element of the Keynesian view of the economy: the connection between profit expectations and the existing distribution of income between wages and profits.

Although the same class is assumed to save as well as to invest, saving and investment remain separate and distinct actions. It is *not* assumed that agents, be they households, pension funds, or corporations, necessarily save in order to invest or invest only what they individually save. Passive, or endogenous, money may be assumed to bridge the gap between desired investment and effective investment demand when the economy is in a situation of excess demand.

Lastly, we should make it clear that nothing of substance hinges on our assumptions about the supply function. As in many Keynesian analyses, we assume that firms use a mark-up over wage costs to set prices, and that the mark-up varies positively with the rate of capacity utilization (b'(z) > 0). The alternative of competitive profit maximization also yields a positive relationship of the mark-up (and hence the profit share) with the rate of capacity utilization, at least on fairly common assumptions about the production function and the organization of markets, specifically, an elasticity of substitution of less than one coupled with competitive product markets.⁴

Before we analyse this model, it may be useful to present its geometry. This is done in Fig. 4.1, where we use the profit share and the rate of capacity utilization z as the two state variables. The schedule IS represents goods-market equilibrium as reflected in Equation (4), in which planned expenditure equals output available

π

π



FIG. 4.1 Macroeconomic outcome jointly determined by aggregate demand (IS) and aggregate supply (PE)

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and there are no unanticipated changes in inventories. PE represents the supply-side equilibrium, Equation (5), where producers are satisfied with the level of wages and prices. The upward slope of the PE schedule is evident from Equation (5). The slope of the IS schedule, however, depends on the relative magnitudes of various parameters which it is the purpose of this chapter to investigate.

The stagnationist-cooperative version of Keynesian theory turns on the IS schedule having the shape it has in Fig. 4.1. The essence of stagnationist co-operation can be seen through the simple comparative-statics exercise of changing the profit share at each point on PE, that is, by displacing this schedule. Imagine the consequences of a reduction in the mark-up, that is, an increase in the real wage, associated with each level of output. The PE schedule shifts downwards, as indicated in Fig. 4.2. As the picture shows, a higher real wage leads to a lower equilibrium profit share π' but to a higher rate of capacity utilization z'.

So far the argument says nothing about the effect on the *rate* of profit, or on the rate of growth, for that matter. The essence of stagnationist co-operation is that while π' is less than π^* , r' exceeds r^* and g' exceeds g^* , where g' and g^* both refer to goods-market equilibria at which $g^d = g^s$, that is, both are points on the IS schedule. Since

 $g^{s} = sr = s\pi z \overline{a}^{-1},$

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FIG. 4.2 Displacement of equilibrium by an increase in real wages

isoprofit and isogrowth contours are both rectangular hyperbolas, as indicated by the dashed lines in Fig. 4.2; they differ only by the constant factor s. Thus, the analytical essence of the argument is that the IS schedule is flatter than the dashed isoquants: in this case, movement down the IS schedule increases rates of profit and growth at the same time as it increases real wages.

Evidently this theoretical argument does not square very well with the argument that profit squeeze was implicated in the demise of the golden age, and it is difficult to reject the view that wage pressure was heavily implicated in the profit squeeze that set in during the 1960s. This appears to leave us with three choices.

First, we can throw out Keynes, that is, eliminate aggregate demand from the analysis altogether, in the fashion of the neoclassical revival that goes under various names according to time and place rational expectations, equilibrium business cycles, monetarism, and supply-side economics. It should surprise no one that we do not take this route.

A second possibility is to follow the conventional distinction between the long and the short run and to argue that the writ of Keynes runs for the second but not for the first. In the neoclassical analysis of the long run, as in Fig. 4.3, the IS schedule simply disappears from the analysis. Equilibrium is determined by *two* supply-side considerations: one is a cleared market (CM) condition, which reflects the assumption that in the long run all markets, and in particular labour and capital markets, clear; since workers must be



FIG. 4.3 Long-run neoclassical equilibrium

on their supply schedules for the labour market to clear, we may identify the CM schedule with a labour-*supply* schedule. The second consideration, represented by the schedule labelled R-max, is profit maximization. In equilibrium, price (or more generally, marginal revenue) and marginal cost must be equal; R-max is thus a labourdemand schedule. In this analysis, the wage and mark-up settle at levels consistent with full employment, which must be understood as a level of employment at which the marginal disutility of labour is equal to the marginal utility of the goods the worker can buy with his or her wages.

In the neoclassical long run, unemployment can exist only if the real wage is too high, 'too high' here having two meanings. On the one hand, the wage will be too high to make it worthwhile for capitalists to hire the number of individuals corresponding to equilibrium employment: z_1 , which corresponds to π_1 on the R-max schedule (at point A), falls short of z^* . On the other hand, high wages induce a greater supply of labour than is available at a profitmaximizing, market-clearing equilibrium: z_2 , which corresponds to π_1 along the market-clearing schedule (at point B), exceeds z^* .

We reject the notion that fundamentally different theories apply to the short and the long period. In our opinion, despite the short-run preoccupations of Keynes and others who worked the same street (like Michal Kalecki), Keynesian theory does far more than to offer a theory of the short run. It offers a distinctive way of viewing the capitalist economy in the long run as well. The essential novelty of this approach is precisely the central role attached to aggregate demand and particularly to investment demand as a driving force of the economy. Whatever the shortcomings of this theoretical perspective, the insistence on the centrality of demand remains an enduring contribution to understanding capitalism.⁵

A third possibility for dealing with the apparent contradiction between profit squeeze and Keynesian theory is to accept the framework of the model outlined in Equations (1)–(5), and to argue that profit squeeze is the result of outward shifts of the IS schedule against a fixed, but downward-sloping, PE schedule. Essentially this is the view of Michal Kalecki (1971) and Wesley Clair Mitchell (1913), though neither couched their arguments in terms of a model like the present one. This view is developed in the following chapter, albeit in a model that has a sufficiently different focus from that of the present one to obscure the basic similarity of the framework of analysis: both the Bowles–Boyer model and the present one are hybrids of Keynes and Kalecki or, in their terminology, Keynes and Marx. The difference is that our analysis emphasizes the role of investment, whereas the Bowles–Boyer model emphasizes the dynamics of labour extraction.

A fourth possibility is developed here. We utilize the framework summarized in Equations (1)–(5), but we do not rely on a *cyclical* squeeze of profits of the type that would be produced by an outward shift of the IS schedule against a fixed, but downward-sloping, PE schedule. Our argument is more long-run in nature, appealing to the evolution of both the IS schedule and the PE schedule in the quarter century of unprecedented prosperity that followed World War II. The focus of our analysis is on the determinants of investment demand.

III. THE THEORY OF INVESTMENT DEMAND

We begin with a formulation that does no violence to views as diverse as those of Jorgenson (1965), Tobin (1969), and Malinvaud (1980), with investment depending on expected profits and the cost of capital:

$$I = I(r^{\rm e}, \, \sigma), \tag{6}$$

where I and r^{c} are defined as before and σ represents the real (inflation corrected) rate of interest. This formulation however raises

more questions than it answers. First, there is the problem of normalization: if Equation (6) is supposed to hold over a period longer than the Keynesian short period, in which the capital stock is fixed, it must be normalized to reflect growth in the scale of the economy: assuming the basic structural relations remain the same, given values of r^{e} and σ can be expected to induce twice as much investment demand when business has doubled in size.

But how do you measure the 'size' of business? By the capital stock, or by output, or by profits? This, of course, is an unimportant issue as long as the economy is on a balanced growth path, for by definition all economic magnitudes then expand proportionately. But what if the capital/output ratio or the profit share change? In this case the choice of one normalization or another implies a theoretical assertion about the investment function, namely that for given levels of its arguments, the level of aggregate investment demand is more likely to be stable as a ratio to one magnitude rather than another.

Despite its theoretical interest, we shall elide this issue, choosing a normalization on the basis of simplicity and convention. On this basis, the capital stock is the obvious choice, and accordingly we shall assume that investment demand per unit of the capital stock is a stable function of r^{e} and σ . Thus in place of Equation (6) we have

$$\frac{I}{K} = i (r^{e}, \sigma),$$

or writing $g^i = I/K$ as the rate of growth of the capital stock desired by investors,

$$g^{i} = i(r^{e}, \sigma). \tag{7}$$

We shall simplify even more, by eliminating σ from the investment demand function, so that Equation (7) becomes

$$g^{i} = i(r^{e}). \tag{8}$$

We make this simplification not because we believe there is good theoretical reason for investment demand to be totally insensitive to the cost of capital, but because our focus lies elsewhere. Besides, it is a fact that over most of the period with which we are concerned, from 1945 to 1980, real interest rates exhibited very little trend, and indeed hovered near zero, despite the pronounced movement in nominal rates. Over the same period, actual profit rates, and presumably expected profit rates, showed considerable movement. Thus, in trying to understand the behaviour of investment during the golden age and its demise, it makes empirical as well as theoretical sense to focus the analysis of investment demand on profit expectations.

The very notion of an expected rate of profit raises important conceptual problems. Although the adjective 'expected' suggests the mean of a probability distribution, the terminology of probabilities must be used very cautiously. For it is of the essence of the Keynesian view of investment that the future is *uncertain*, which is to say not only that it cannot be known precisely but that it lies beyond the grasp of a probabilistic calculus; the outcomes of investment decisions are fundamentally unlike the outcomes of roulette, to a calculus of which (following Knight 1921) the term *risk* applies.

From a Keynesian point of view, the neoclassical blurring of this distinction by means of the device of subjective probabilities is problematic, for it obscures an essential difference between investment decisions and other kinds of economic behaviour. There are of course serious problems with the very idea of subjective probability. As Ellsberg (1961) and more recently Kahneman *et al.* (1979) have demonstrated, untutored individuals stubbornly refuse to obey the axioms of probabilistic decision-making as laid down by de Finetti (1937) or Savage (1954). But with due caution the idea of subjective probability provides a useful heuristic for describing the investment-decision process. It has the great merit of emphasizing the state of mind of the investor as a crucial determinant of investment demand.

Indeed the problem with using subjective probabilities lies less in the concept itself than in its customary neoclassical bedfellow, namely the assumption that the world works as if the markets required to extend neoclassical general equilibrium theory to an uncertain world—the 'contingent commodity markets' introduced by Arrow (1953) and developed by Arrow and Debreu (1954) and Debreu (1959)—actually exist. For the existence of such markets would have the effect of eliminating the investor's state of mind from the investment-decision process. Indeed with complete markets for contingent commodities over the investment horizon, there would never be any need for an investor to hold physical capital to back his or her hunches about the future.

In fact, the inherent uncertainty that surrounds the outcome of any investment together with the absence of contingent commodity markets makes capital markets and capital accumulation fundament-

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ally different from other economic processes. Many writers, both outside and within the mainstream of the economics profession (for example, Keynes 1936, pp. 144–5; Minsky 1986, pp. 190–2; Stiglitz and Weiss 1981) have recognized this fundamental truth and at least some of its implications, for instance in the area of adverse selection and moral hazard. But it is much less widely accepted that the imperfections inherent in capital markets require more than marginal changes in neoclassical theory, indeed, require a significantly different theory of how a capitalist economy functions in the long run as well as in the short (Marglin 1984; Gintis forthcoming).

In the Keynesian view, or at least in our 'neo-Keynesian' variant, the argument of the investment-demand function, r^{e} , is heavily influenced by the subjective probabilities, or state of confidence (to use an older terminology), of the capitalist class. So is the investmentdemand function $i(r^{e})$ itself. In the absence of contingent commodity markets, capitalists play out their intuitions about the future prospects of the economy through their willingness to add to the stock of productive capital. This assumption is key to the unique role and power that businessmen have, in the neo-Keynesian scheme of things, to shape the course of capitalist development.

In our model, the expected rate of profit depends upon the actual profit share and the rate of capacity utilization, as in Equation (3)

$$g^{i} = i(r^{e}(\pi, z)).$$
 (3)

The first of these variables measures the return to capitalists on condition that goods can be sold; the second, an 'accelerator' variable, reflects the impact of demand conditions. The partial derivatives of expected profit with respect to each variable can plausibly be argued to be positive: a higher profit share and a higher rate of capacity utilization can each be argued to induce higher profit expectations, the first because the unit return goes up, the second because the likelihood of selling extra units of output increases.

IV. THE IS SCHEDULE

It should be noted at once that the shape of the IS schedule in Figs. 4.1 and 4.2 is *not* guaranteed by the formulation of investment demand summarized in Equation (3). With the saving function defined by

$$g^{\rm s} = s\pi z \overline{a}^{-1} \tag{2}$$

and the IS schedule defined by Equation (4)

$$g^{1} = g^{s}, \tag{4}$$

we have

$$i(r^{e}(\pi,z)) = s\pi z \overline{a}^{-1} \tag{9}$$

and

$$\frac{\mathrm{d}\pi}{\mathrm{d}z} = \frac{s\pi\bar{a}^{-1} - i_z}{sz\bar{a}^{-1} - i_\pi},\tag{10}$$

where

$$i_{\pi} = \frac{\mathrm{d}i}{\mathrm{d}r^{\mathrm{e}}} \frac{\partial r^{\mathrm{e}}}{\partial \pi}$$
 and $i_{\mathrm{z}} = \frac{\mathrm{d}i}{\mathrm{d}r^{\mathrm{e}}} \frac{\partial r^{\mathrm{e}}}{\partial z}$.

The shape of the IS schedule depends on the sign and magnitude of both the numerator and the denominator of Equation (10), but the qualitative structure of the model, which tells us only that i_{π} and i_{z} are positive, provides insufficient information to determine even the sign, not to mention the magnitude, of either expression. At issue is the relative responsiveness of desired investment and desired saving to π and z.

A stagnationist regime, one in which (by definition) a lower profit share is associated with a higher level of economic activity, is characterized by a downward-sloping IS schedule: in this case, the expressions $s\pi \overline{a}^{-1} - i_z$ and $sz\overline{a}^{-1} - i_\pi$ have the same sign. In 'exhilarationist' regimes, a higher profit share goes along with a higher level of activity: the IS curve has a positive slope, which is to say the numerator and denominator on the right-hand side of Equation (10) are of opposite signs.

Under what conditions can we specify these signs? In much conventional macroeconomics the numerator is assumed to be positive for reasons of stability. The condition

$$s\pi \overline{a}^{-1} - i_z > 0$$
 [Keynesian Stability] (11)

says that at the margin saving is more sensitive than investment to capacity utilization, and this is the standard guarantee of the stability of equilibrium in elementary versions of Keynesian theory. It is tantamount to the condition that the saving schedule be steeper than the investment schedule in a textbook diagram like Fig. 4.4. If Condition (11), which we shall refer to as the 'Keynesian Stability Profit Squeeze and Keynesian Theory



FIG. 4.4 A stable equilibrium assured by saving (S) being more responsive than investment (I) to change in output

Condition', were not to hold, changes in capacity utilization would induce more investment than saving, and any disturbance to equilibrium would set off a cumulative movement away from the initial equilibrium—the multiplier would magnify the initial excess or deficiency of aggregate demand and the process would end only at full capacity utilization or the zero output.

But the Keynesian Stability Condition, though standard in the texts, is necessary for stability only in a model which abstracts from all determinants of equilibrium but the level of output, and in particular, one which abstracts from the impact of the distribution of income between wages and profits on investment and saving.

Once the variable π enters into investment and saving functions, the Keynesian Stability Condition is not logically required to ensure that displacements from equilibrium are self-correcting. Moreover it is empirically plausible that over some portion of $z \times \pi$ space investment will be more sensitive than saving to capacity utilization, in violation of the Keynesian Stability Condition.

However even if there were adequate grounds for assuming the Keynesian Stability Condition, this would hardly clinch the issue. The slope of the IS schedule depends on the sign of the denominator of Equation (10) as well as on the numerator. If the Keynesian Stability Condition holds, then the inequality

$$sz\bar{a}^{-1} - i_{\pi} > 0$$
 [Robinsonian Stability] (12)



FIG. 4.5 Robinsonian equilibrium assured by saving being more responsive than investment to changes in profitability

makes $d\pi/dz$ negative and the IS schedule is stagnationist. If the inequality in (12) is reversed, the IS schedule is exhilarationist.

We shall refer to Condition (12) as the 'Robinsonian Stability Condition' because of the role this inequality, or something very much like it, plays in certain long-period formulations of Keynesian theory that drew inspiration from Joan Robinson's work (1956, 1962), particularly Harris (1978), Roemer (1980), and Marglin (1984). In these models, as in the present model, prospective profits are supposed to drive investment, but the expected rate of profit is assumed to depend on the current rate of profit alone. The model is closed by appealing to a form of rational expectations justified by the long-run context of the theory: in equilibrium the expected rate of profit r^{e} and the actual rate r are assumed to be equal. Robinsonian equilibrium is pictured in Fig. 4.5; in the diagram, stability of equilibrium is assured by the assumption that saving is more responsive than investment to changes in profitability (Marglin 1984, ch. 4, where the model is called 'neo-Keynesian').6 In effect, the Robinsonian Stability Condition plays the same role in the long-run model that the Keynesian Stability Condition plays in the short-run model.

However, this line of argument is also problematic. The present

model describes a longer run than the textbook short run in which capacity utilization is the sole adjusting variable, but its time frame is shorter than the Robinsonian long run in which rational expectations can be invoked to identify the expected rate of profit with the actual rate of profit. In our model there is no assumption that the rate of profit on new investment is equal to the actual rate of profit overall. Quite the contrary: in our time frame, the two rates will normally diverge. In this context, π and z play separate roles, and the single-variable Robinsonian Stability Condition cannot simply be assumed on the grounds that otherwise centrifugal forces would dominate the dynamics of the model.

We can however *derive* rather than assume the Robinsonian Stability Condition, provided we are willing to assume both the Keynesian Stability Condition and a condition we shall refer to as the 'Strong Accelerator Condition'. This last appears to be innocuous enough, requiring us to assume only that an increase in the rate of capacity utilization will, at a given *rate* of profit (as distinct from a given profit *share*), increase the expected rate of profit r^e . Write the investment demand function as

$$g^{i} = i(r^{e}(\pi, z)) = h(r^{e}(r, z))$$
 (13)

with the functions i and h connected by the accounting identity

$$r = \pi z \overline{a}^{-1}.$$
 (1)

It is then straightforward to show that if the inequality

$$h_z = -i_\pi \frac{\pi}{z} + i_z > 0$$
 [Strong Accelerator] (14)

holds along with the Keynesian Stability Condition, the Robinsonian Stability Condition holds as well.⁷

Indeed, we can prove a stronger result, namely that the IS schedule is flatter than the iso-profit curves, so that, as in Figs. 4.1 and 4.2, the regime is *co-operative* as well as stagnationist. That is to say, a decreasing profit share goes along with a higher profit *rate* (and growth rate) as well as with a higher wage bill. The essence of a stagnationist-cooperative regime is that

$$0 > \frac{\mathrm{d}\pi}{\mathrm{d}z} > -\frac{\pi}{z},\tag{15}$$

which follows from Conditions (11) and (14).8

The problem with this line of argument is that it rests on a very weak premiss. It has already been noted that the Keynesian and Robinsonian Stability Conditions cannot be carried over to the present model from the single-variable models in which only capacity utilization or the profit share vary. With respect to the Strong Accelerator Condition, the issue is more complicated. Despite its incorporation into many neo-Keynesian formulations of investment demand (e.g. Rowthorn 1982; Taylor 1985), it is by no means certain or even especially likely to be the case that an increase in the rate of capacity utilization will induce additional investment when the profit rate is held constant. The reason is a simple one: if the rate of capacity utilization increases while the rate of profit remains constant, it must be the case that the profit margin and share fall. So the effect on investment is the resultant of two forces: the positive impact of higher capacity utilization and the negative impact of lower unit profits. Mathematically h_z is the difference between i_z and $i_{\pi}(\pi/z)$, and the qualitative structure of the model gives us no grounds for asserting anything about the relative magnitude of the two terms. This is to say that in a linear approximation of the form

$$g' = \alpha r + \beta z = \alpha \pi z \overline{a}^{-1} + \beta z \tag{16}$$

the sign of β , where $\beta = h_z$, is indeterminate. It requires a belief in rather strong capacity utilization effects to argue that β is positive.

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This belief would be justified if the prime concern of capitalists is whether or not they can sell additional output. In this case the capacity utilization effect may be expected to dominate, and the partial derivative h_z will be positive. If, however, capitalists are confident of their ability to sell extra output, and are concerned rather with their profit margin, the negative, profit share, effect will dominate, and h_z will be negative. One might 'rationally' except the capacity utilization effect to be stronger at low levels of capacity utilization, but the subjective aspect of expectations makes it possible that some or even a large number of capitalists will be confident about their ability to sell their output even when the overall rate of capacity utilization is relatively low. In short, the sign of h_z is an empirical matter about which we are not in a position to make *any* categorical assertion.

As a consequence of the lack of conditions which allow us to attach definite signs to the numerator and denominator of Equation (10), both stagnationist and exhilarationist regimes—downward and up-

FIG. 4.6 A 'C'-shaped IS schedule with stagnationist and exhilarationist branches

ward sloping IS schedules—are possible. Indeed the slope of the IS schedule can change signs in various ways. For instance, it is possible that the IS schedule will have the shape of a 'C', as in Fig. 4.6. Observe that in such a case there are two routes to high capacity utilization: one follows the stagnationist logic of higher wage shares, while the other follows the exhilarationist logic of higher profit shares. As Fig. 4.6 is drawn, neither stagnationist nor exhilarationist policy is 'wrong'. Either a policy of a high wage share or one of a high profit share, pursued consistently and aggressively, will provide sufficient aggregate demand for high employment and high capacity utilization. In this situation the fatal error is moderation: a compromise of middling wages and profits will provide the worst of possible worlds, in which low capacity utilization and low growth become the order of the day.

However, if high wage and high profit shares are each consistent with high capacity utilization, the implications for growth and distribution of the two strategies are very different. An exhilarationist outcome like A, representing the pair $\langle z_1, \pi_2 \rangle$ is more favourable for capitalists and less favourable for workers (at least in its immediate consequences) than a stagnationist outcome like B, which repre-

sents $\langle z_1, \pi_1 \rangle$: the point is that π_2 exceeds π_1 . And not only does a higher profit share map to a higher profit rate for a given z; since investment and saving are both positive functions of the profit share, the exhilarationist outcome is more favourable for growth as well as for profit. (Thus the long-term consequences for workers are more favourable than the short-term ones.)

The coexistence of exhilarationist and stagnationist branches sharpens the point made at the outset of this chapter, that to reject the policies inspired by a stagnationist reading of Keynes does not require one to reject the Keynesian framework of analysis. One need not reject the theory, as critics from Viner (1936, see especially pp. 162-3) to modern monetarists, supply-siders, and enthusiasts of rational expectations and equilibrium business cycles have done, or limit its applicability to the short period, as the mainstream has done, in order to reach neoclassical conclusions about the relationship between wages, profitability growth, and the level of economic activity. The programme of a Margaret Thatcher, which is usually justified in terms of one version or another of neoclassical theory, also makes logical sense as an attempt to move the British economy from a stagnationist regime to an exhilarationist one. One may agree or disagree with the implicit assumptions about the energy of the British capitalist class, but this justification of Thatcherism is more plausible than one based on the presuppositions of monetarism and supply-side economics.

An alternative to Fig. 4.6 is the 'U'-shaped IS schedule presented in Fig. 4.7, in which stagnationist logic governs at low levels of 171

capacity utilization and exhilarationist logic at high levels of capacity utilization. In the situation described by Fig. 4.7, high wages would be appropriate to combat a severe depression, for in this case it is plausible that private investment demand would be weak. But continuation of high-wage policies may be inappropriate at higher levels of capacity utilization, as profit prospects stimulate capitalists to high levels of investment demand. Economists whose imaginations were formed and limited by the background of depression from which Keynesian theory emerged might easily fail to see that the theory transcends its background. Temperamentally, economists as well as generals are better equipped to fight the last war than the next one.

V. CO-OPERATION AND CONFLICT

So far we have emphasized the distinction between stagnationist and exhilarationist regimes, but we have also had occasion to distinguish between co-operative and conflictual regimes, regimes in which workers and capitalists have a common interest in expansion and regimes in which one class or the other loses from an increase in the level of capacity utilization. If the class interest of workers is identified with the size of the wage bill and the class interest of capitalists with the profit rate (or equivalently—since the capital stock is fixed in the short run—with aggregate profits),⁹ then the exhilarationist as well as the stagnationist regime is a co-operative one provided the IS schedule is sufficiently flat. That is, a flat IS schedule, whether upward or downward sloping, will exhibit a positive relationship between capacity utilization and *both* the wage bill and the profit rate.

For the stagnationist regime, this result has already been demonstrated: the wage rate and employment, as well as the profit rate, increase as capacity utilization increases—provided the IS schedule is flatter than the isoprofit curve described by rectangular hyperbolae of the general form $r = s\pi z \overline{a}^{-1}$, in other words, provided the elasticity restriction described by Condition (15) is met. Condition (15), we have seen, is guaranteed by Keynesian and Robinsonian Stability Conditions, or by the first of these conditions along with the Strong Accelerator Condition. In other words, sufficient conditions for a co-operative *and* stagnationist regime are the 'standard' stability condition that saving responds more strongly to changes in capacity utilization than does investment and the 'innocuous' assumption that the response of investment to capacity utilization, holding the rate of profits constant, is positive. A similar elasticity restriction applies to the exhilarationist regime. By the very definition of exhilaration, the profit share increases with capacity utilization, so it only remains to establish the conditions under which the wage bill does too. Denote the wage bill by Ω and write

$$\Omega = (1 - \pi) z \overline{a}^{-1} K.$$

Then we have

$$\frac{\partial\Omega}{\partial z} = \left[-z\bar{a}^{-1} \frac{\mathrm{d}\pi}{\mathrm{d}z} + (1-\pi) \bar{a}^{-1} \right] K$$
$$= \left(1 - \pi - z \frac{\mathrm{d}\pi}{\mathrm{d}z} \right) \bar{a}^{-1} K.$$

For positive $d\pi/dz$, $\partial\Omega/\partial z$ is also positive provided

$$\frac{1-\pi}{z} > \frac{d\pi}{dz}.$$
(17)

In short, the distinction between co-operative and conflictual regimes refers to the *elasticity* of the IS schedule. By contrast, the distinction between stagnationist and exhilarationist regimes refers to the *slope* of the IS schedule.

Together these two characteristics of the IS schedule characterize wage-led and profit-led growth regimes. A flat and downwardsloping schedule-the intersection of co-operative and stagnationist regimes-describes a wage-led growth regime, a result which follows immediately from the definition of wage-led growth as one in which a higher wage share is associated with a higher rate of accumulation. In a world where accumulation depends on profits, this requires a higher rate of profit. Such a conjuncture is at once stagnationist (since under present assumptions the only way a higher wage share can induce a higher rate of profit is by increasing the rate of capacity utilization) and co-operative (since the wage share and the profit rate move together). Every other combination of elasticity and slope corresponds to profit-led growth. The stagnationist-conflictual regime is exceptional in that higher growth and profit rates are achieved at lower rates of capacity utilization. The other two profitled regimes, which correspond to an exhilarationist IS schedule, are like the stagnationist-cooperative regime in that higher profit and growth rates go along with higher capacity utilization rates.

Enough of taxonomy: it must be recognized that all discussion of the shape of the IS schedule is necessarily hypothetical. The truth is that we know relatively little about its shape even in the neighbourhood in which the economy has actually been operating and even less about its global shape; it is a matter of pure conjecture what investment and saving propensities would be at levels of profit and capacity utilization far removed from those that have obtained in recent history. Nevertheless, we believe that the historical experience of the golden age suggests some general conclusions about the shape of the investment function at least during the 1960s and early 1970s. The key is that wage pressure squeezed profit rates as well as profit margins, a fact inconsistent with a wage-led growth regime. To explain profit squeeze within our framework compels the conclusion that the IS schedule was highly inelastic or upward sloping (or both), that is, either that the economy was in a conflictual-stagnationist regime, as in Fig. 4.8a, or in an exhilarationist regime, as in Fig. 4.8b. The first possibility seems the more likely if we assume that the immediate post-war period was a time in which the assumptions of wage-led growth held, for the IS schedule need only have shifted from being relatively flat to being relatively steep in order to bring about the conditions of profit squeeze.

VI. PROFIT SQUEEZE IN A KEYNESIAN PERSPECTIVE: FROM CO-OPERATION TO CONFLICT

Here, we believe, is how investment demand evolved over the period 1945-80. In our formulation of $i(r^e(\pi, z))$, there are two steps in the mapping from $\langle z, \pi \rangle$ to I/K; investment demand depends on r^e , and r^e depends on z and π . To recapitulate, the step from $\langle z, \pi \rangle$ to r^e reflects the idea that expected profitability depends both on the likelihood of additional capacity being justified by demand conditions, and, assuming the output can be sold, on the profit margin. The step from r^e to I/K reflects pure 'animal spirits', which according to Keynes, 'urge to action rather than inaction' (see Keynes 1936, ch. 12).

It is difficult if not impossible to make a strict separation between the factors which influence one component or the other of the overall mapping from $\langle \pi, z \rangle$ to $I^{\rm d}/K$. Some variables, like the cost of capital, the fiscal structure (particularly profit taxes and depreciation 174

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FIG. 4.8 High-employment profit squeeze: (a) a steep, downward-sloping IS schedule; (b) an upward-sloping IS schedule

allowances), and perhaps the full capacity capital/output ratio, may be analysed more in terms of their effect on the mapping from $<\pi$, z> to r^{e} than in terms of their effect on the mapping from r^{e} to I^d/K. But factors of a more political, social, and cultural character, like the state of class relations or the state of confidence in the international financial system, cannot be neatly compartmentalized. . All these and other considerations were important to the evolution of investment demand over the post-war period. As has been oberved, those who embraced Keynes and saw aggregate demand as the key to prosperity were deeply influenced by the depression of the 1930s. Many Keynesians saw the Great Depression as the direct consequence of the unevenness of prosperity in the 1920s. In the United States, for example, profits grew much more rapidly than wages over the 1920s, and even Keynesians not completely given over to the gospel of wage-led growth believed that the decline in the wage share had led to a shortfall of demand, which in turn led to the pre-war crisis.

In general Keynesians thought it extremely unlikely that private investment demand would play a very active role in the post-war economy. Even if prosperity were 'artificially' maintained by deficit spending, as Keynesians urged, the memory of the Depression and the fear of another would inhibit business from responding to a high profit share with heavy spending on plant and equipment, at least in the short run. Once burned, twice shy. The remedy for the post-war period was seen as lying in a distributional balance tilted towards

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Profit Squeeze and Keynesian Theory

wages. In short, stagnationist and co-operative logic were coupled to produce a policy of wage-led growth, particularly in the United States.

This may have been a correct diagnosis of the situation immediatelv after World War II. Profit margins were high practically everywhere in the capitalist world, higher than before the war broke out (Japan being an exception). In the United States the productivity gains of the better part of a decade had yet to be translated into higher real wages, and in war-torn Europe and Japan real wages had declined by more than had productivity. Profit margins improved well into the 1950s.

But lacking confidence in the future, fearing that depression, which was widely predicted as the 'natural' aftermath of war, would make additonal capacity redundant, capitalists were initially reluctant to commit themselves to new plant and equipment. Investment, in short, was not very responsive to the current profit margin; in our terminology pre-war history had an adverse impact on the mapping from the *current* level of the profit share to the anticipated profitability of investment. Under these circumstances, the IS schedule may well have sloped downwards and been relatively flat; the strategy of wage-led growth may have been the best-indeed, the only-game in town.

Wage-led growth would have benefited capital as well as labour. The same history that made the prospective rate of profit and hence investment demand unresponsive to π would increase responsiveness to z, the more so if a high level of capacity utilization could be maintained for a substantial period of time. At the very least, increasing wages would allow capitalists to earn the same rate of profit-if the increase in volume only made up for the reduction in unit profits.

It is a plausible conjecture that the gospel of co-operative capitalism was a sensible one for the particular circumstances of the immediate post-war period. But as time passed, profit margins remained high and even improved; more important, the anticipated depression never materialized. The consequence was that prospective profits increased even more than actual profits: the mapping from $\langle z, \pi \rangle$ to r^e shifted outwards. And the derivative i_{π} increased more than did the derivative iz. Finally, even if the Strong Accelerator Condition held initially, it need not have continued to hold. And once the prospective rate of profit became sufficiently responsive to

the profit share to reverse the inequality of the Strong Accelerator Condition, that is, once

$$i_{\pi}\pi > i_{z}z,$$

the IS schedule no longer was consistent with a co-operative regime, even if stagnation remained the order of the day.¹⁰

That is what we believe happened over the first phase of the golden age, over the 1950s and into the early 1960s. The shift in the IS schedule is pictured in Fig. 4.9. The 1960s were by and large a period of great prosperity, but beginning in the late 1960s, when the productivity-growth slow-down and wage acceleration began to displace the PE schedule downwards, the equilibrium moved down the new, conflictual IS schedule, as in Fig. 4.10. The result was a modest increase in the rate of a capacity utilization, but a fall rather than a rise in the rate of profit. Table 4.1 documents this fall in profits.

If this were all that happened, the rate of growth of the capital stock should have fallen as well; given our formulation of saving, capital-stock growth is directly proportional to the profit rate. In fact, the growth rate continued high well into the 1970s, as Table 4.2 shows. Apparently the share of profit devoted to saving rose after the golden age began to tarnish (see below, Section VII). This in turn suggests that investment demand continued to increase, because the IS schedule appears to have moved relatively little at this time.

π

FIG. 4.10 A crisis in two parts: movement of the PE schedule in the late 1960s and early 1970s

(If investment demand had not increased, the IS curve would have shifted downwards and to the left.)

This characterizes the situation into the 1970s. But then new elements enter the picture. First, the cost of energy increases dramatically and the full capacity capital/output ratio increases. Second, aggregate demand management is pursued less aggressively. Finally, towards the end of the 1970s, the very integrity of the international financial system begins to play an increasingly important role. The shift in the position of the PE schedule against a steep IS schedule no longer summarizes the demise of the golden age; the part of the story that deals with the capital/output ratio, demand management, and the international financial system must be told in terms of a downward shift in the IS schedule and a decline in the rate of growth associated with a given equilibrium. This is the part of the story represented in Fig. 4.11.

VII. PROFIT SQUEEZE AND INVESTMENT RESILIENCE

Observe that the share of investment in *output* fell very little over the period we have been considering, except in Japan, as Table 4.3 demonstrates. Indeed given that the profit share fell markedly (see Table 4.4), the propensity to *save* out of profits must have risen—if we assume capitalist economies were operating on or near their IS

	17	78 S. A. Marglin and A. Bhaduri				I	Profit	Squeeze d	and Keyr	ıesian	Theor	y		17	9
	SN	20.2 17.0 15.9 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5		SU	0.4 0.8 8.8 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	. 0. v v. v	2.4	2.9 3.0 3.1	5.1 5.1	0.4 4.2	3.7 1.4 8.8	4.4 3.0	8.1 9.6 1.3	4.4 3.9 4.0	3.2
	UK	12.9 13.6 13.6 13.6 13.6 13.6 13.6 13.6 11.2 11.2 11.2 11.2 11.2 11.2 11.2 11		UK	2.1 2.3 2.8 2.8	2.2 4.2 7 C	2.7	3.7 3.1 3.2	, 4444 9.1.9.4	9.6 9.6	0.00 0.00 0.00	0.0	2 0 0 0	5.0 2.6	2.7
a	Japan	15.2 14.2 18.9 18.3 18.3 18.3 22.5 20.3 22.5 20.4 25.7 25.7 26.4 26.4 26.4 26.4 25.7 26.3 31.6 31.6 32.0 23.3 25.0 26.3 31.6 121.4 121.4 121.4 121.4 13.5 13.5 13.5 13.5 13.5 13.5 13.7 13.5 13.7 13.5 13.7 13.5 13.7 13.5 13.7 13.5 13.7 13.5 13.5 13.5 13.5 13.5 13.5 13.5 13.5		Japan	0.4 4.4 6.6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	8.2 8.0	6.4	9.8 12.4 11.6 10.3	9.1 8.9 11.0	13.7 14.4	13.1 12.6 11.6	7.4	6.0	0.0 6.7 6.6	0.8
	Italy	15.0 13.7 14.3 14.3 14.3 14.3 15.5 16.6 10.4 11.9 11.9 11.0 11.0 11.0 11.0 11.0 11.0	·	Italy	4.4 6.4 9 0 9 0	6.2 6.2	6.0 6.3	7.1 8.4 8.6 8.6	2.4.4.2.2 2.8.6.2	5.7 5.4	5.2 4.8 5.1	3.6	0. V. U. V.	 	C.4
Cormon.	ocumany	21.7 24.8 24.9 24.9 25.8 22.9 22.9 22.9 22.9 15.0 15.0 15.1 15.1 15.3 15.3 15.3 15.3 15.3 15.3	b growth rates)	Germany	4.1 5.5 6.1	8.0	7.0 7.4	7.3 7.1 6.5 6.7	6.5 5.9 4.7 6.5	5.3 6.0	6.1 5.6 8 8	3.3	. 8. 8 9.6	,	<i>C</i> .C
France		10.3 9.6 9.6 9.6 9.5 9.5 9.5 11.2 11.2 11.2 11.2 11.4 11.6 11.4 11.6 11.4 11.6 11.6 11.6	83 (annual %	rrance	1.6 1.5 2.2 2.3	2.7 3.1	8.8 8.9	8.4 8.4 7.0 0.0	4.8 5.1 5.2	5.9 6.1	6.1 5.7 6.5	4.7	4.5 4.5 8 4	. 4 4 4 v. v. o	
Canada	, cr	12.4 12.4 9.4 9.1 9.1 9.3 9.3 9.5 9.6 9.6 9.6 9.7 9.6 8.3 8.1 8.3 8.3 8.3 8.3 8.3 8.4 8.3 8.4 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5	ck, 1952–19	Printing	4.3 6.9 6.9 .6 .6	6.4 6.3	5.4 4.9	4.4 4.2 7.7 7.4	5.8 5.6 3.3	5.1 5.2	5.2 5.4 5.7	5.6 5.4	4.4 7.8	5.3 5.2 5.2	1
Europe ^c	14.8	15.0 15.0 15.1 15.3 15.3 15.4 15.4 15.4 15.4 15.5 15.4 15.5 15.4 15.5 15.5	ed capital sto	dome	2.8 9.9 9.9 9.9 9.9	4.7	5.0	6 8 9 9 9 9 8 9 9 9 9 9	5.2 5.1 4.7	5.1 5.3	6.5 8.4 8.5	3.6 3.7	3.6 3.5 3.6	3.7 3.3 3.2	
ACC-US	14.6	14.8 14.9 15.0 15.0 15.0 15.6 15.6 15.2 15.2 15.2 14.1 14.1 14.1 14.1 14.1 13.5 15.2 13.5 13.5 13.5 13.4 13.5 15.6 15.6 15.6 15.6 15.6 15.6 15.6 15	tess gross fixe ACC-IIS		0.8 8.8 8.0 8.4	5.2	5.2	6.2 6.0 6.1	8.5.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.5 8.	6.3 6.6 6.6	6.2 6.1 5.5	4.6 4.3	4.2 1.4 4.4	4.5 4.3 4.0	i Glyn (1986).
ACC ^b	17.5	15.9 15.4 15.4 14.7 14.7 15.6 14.7 15.6 14.7 15.6 15.6 16.7 15.1 15.2 15.4 15.4 15.4 15.5 15.4 15.5 15.4 15.5 15.4 15.5 15.5	4.2. Busir ACC	26	3.5 3.7 5.6 1.1	440 ww	0.0	4.4.4.4 4.5.4.4 9.9	5.2 5.3 5.3 1 5.3	5.5 5.5	5.5 5.5 5.0	3.9 3.8	4.0 4.2 4.4	4.3 3.6	rmstrong and
Ycar	1951	1952 1953 1954 1955 1955 1955 1956 1966 1966 1966 1966	Table	1057	1952 1953 1955 1956	1957	1961	1961 1962 1963 1964	1966 1967 1968	1970 1971	1973 1974 1975	1976 1977	1978 1979 1980	1981 1982 1983	Source: A
	9														

Table 4.1. Corporate business net profit rate, 1951-1983 %^a

FIG. 4.11 Crisis, part two: both the IS schedule and the growth isoquants shift adversely

schedules. But this resilience of the investment share to the fall in profitability should not suggest that profits are irrelevant for accumulation. If the profit margins of the 1950s and early 1960s had been maintained in the 1970s and 1980s, then investment demand might have continued to increase, perhaps by enough to offset the decline in the full-capacity capital/output ratio caused by the increase in the price of energy. Moreover, to the extent that restrictive demandmanagement policies were themselves a response to profit squeeze and an attempt to restore profit margins, the case for restrictive policies would have been weakened considerably. In short, no accumulation crisis need have occurred.

This argument does not however imply that a restoration of profit margins would, in the current business climate, produce immediate benefits in terms of growth. It is one thing to maintain the momentum of a long period of high profits and high growth. It is quite another to *restore* that momentum after a long interlude of desultory performance. If the relatively robust performance of investment over the post-war period is traceable ultimately to a gradual diminution of depressionary fears, then the resurgence of such fears—at present focusing on the weakness of the international financial system—may inhibit the responsiveness of prospective profitability to actual pro-

									1	Pro	ofit	S	qı	lee	eze	2 0	na	1 .	K	eyn	ies	ia	n	T	hec	ory	l.						1	81
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	UK	c 2	0 r	1.7	1.0	61	0.0	0.0	10	9.7	10.5	6.6	9.5	6.6	10.1	9 8	2.6	6.6	9.8	10.4	10.6	10.4	10.8	11.11	10.7	10.8	11.3	12.0	12.3	12.0	11 4	11.5	10.9	UK for exa
	Japan	12.2	12.7	12.7	12.7	16.4	19.0	17.3	18.0	21.2	24.0	23.3	21.9	21.7	19.5	19.8	21.5	22.3	23.4	24.1	22.4	21.2	22.4	21.8	19.5	18.3	17.4	17.2	18.3	18.9	18.6	18.0	17.4	lbstantial in
ices) ^a	Italy	13.1	12.1	12 4	12.5	12.6	13.7	12.3	12.6	13.9	14.3	14.3	14.4	11.9	10.2	10.2	11.2	11.4	11.5	11.8	11.9	11.4	12.5	13.3	11.5	11.5	11.1	10.5	10.7	1.11	10.9	9.7	8.6	by extent (su
ent market pri	Germany	11 9	12.2	12.8	14.6	14.9	13.9	14.0	14.1	14.2	14.6	14.7	14.1	14.2	14.3	13.7	12.2	11.8	13.0	14.3	14.5	13.5	12.5	11.2	10.9	11.1	11.3	11.6	12.2	12.5	12.1	11.7	11.9	fore understated
f GDP, curr	France	12.1	11.3	10.9	11.6	12.0	12.7	12.6	12.2	12.2	13.4	I3.3	13.5	12.9	12.6	13.1	13.2	12.4	12.8	12.8	13.1	13.1	13.3	13.3	12.2	13.0	12.6	12.3	12.1	12.7	12.3	12.0	11.4	ding. It is there
2-1983 (% 0	Canada	13.8	14.7	14.1	14.4	16.7	17.8	15.5	14.7	14.3	12.2	11.8	12.1	13.5	14.5	15.8	14.6	12.9	12.8	13.1	12.8	12.5	13.0	13.4	14.7	13.5	13.4	13.3	14.4	15.3	16.1	15.0	12.6	t less housebuil
estment, 1952	Europe	9.9	9.7	10.1	11.3	11.7	12.0	12.0	12.0	12.4	13.1	13.0	12.8	12.3	12.0	11.9	11.6	11.4	11.9	12.5	12.7	12.3	12.3	12.1	11.3	11.6	11.6	11.7	11.9	12.2	11.8	11.3	10.9	iment investment
tess fixed inv	ACC-US	10.8	10.8	11.0	11.8	12.9	13.6	13.2	13.3	14.2	15.2	14.9	14.6	14.4	13.9	14.0	14.2	14.3	15.0	15.8	15.4	14.8	15.3	15.0	14.0	13.7	13.5	13.5	14.1	14.5	14.3	13.8	13.2	ment less govern ilding.
4.3. Busir	ACC	10.0	10.3	10.4	10.8	11.8	12.2	11.2	11.3	12.1	12.6	12.5	12.3	12.4	12.6	12.9	12.8	12.8	13.3	13.7	13.2	13.1	13.6	13.6	12.7	12.5	12.6	13.0	13.6	13.7	13.6	13.0	12.3	fixed invest nt house-bui
Table	Year	1952	1953	1954	1955	1956	(957	1958	959	1960	1961	2961	505	1964	(96)	1966	1967	8963	696)	0/61	1/6)	1972	1973	574	C/61	1976	116	8/8	6/61	1980	1861	1982	1983	^a Total șovernme

Source: Armstrong and Glyn (1986)

1983 (%) ^a
ire, 1951–1
profit sha
business net
Corporate
Table 4.4.

Year	ACC	ACC TTC	٤							
	2001	0-000	rurope	Canada	France	Germany	Italv	Tanan	THE	TTC
1951	24.7	26.0	25.5	72 7	3 26			and the f	110	20
1952	23.0	25.8	25.5	1.01	C. 17	6.07	27.3	30.6	22.2	23.8
1953	21.9	1 56	1.40	1.02	4.07	29.7	24.5	28.6	777	010
1954	215	2 4 5	0.44	C.77	6.77	28.2	22.4	31.3	27.0	10.6
1955	22.0	2.00	24.42	5.61	22.5	27.8	9 22	2 26	1 20	0.01
	0.04	C.C2	24.9	25.7	21.8	29.6	217	20.2	1.04	7.61
1956	22.2	25.3	24.0	2 76 2	0.00			7.07	4.47	4.77
1957	27.7	76.1		C.02	20.9	29.2	21.6	30.4	2 66	10.0
1958	0 00	1.04	1.14	7.57	22.2	29.6	C 1 C	25.7		C.CT
1050	0.07	0.02	23.6	22.3	21.0	28 5	1.10		C-77	18.9
6761	0.77	0.02	24.3	22.9	1 02	202	1.14	1.00	71.7	17.4
1960	22.8	27.6	25.2	27 4	21.72	1.67	4.77	35.0	22.9	20.1
1961	275	2 76		i	1.1.4	47.4	23.1	40.0	24.5	18.4
1062		0.02	23.3	23.0	20.9	27 3	2 66	3 08		
70/1	4.77	24.9	21.9	24.0	19.4	25 25	0.44	10.0	C.12	18.6
C0/1	1.22	24.6	21.3	25.0	10.01		7.07	50.5	20.6	20.0
1964	23.3	24.9	21.7	26.2	0.00	1.10	17.0	35.8	22.5	21.0
1965	23.6	24.7	21 0		0.02	1.07	14.8	34.5	23.7	213
1011		1	0.12	24.2	20.1	25.2	17.3	31.8	20 2	0.14
0061	23.3	24.0	21.1	24.0	20.6	0 00		2.42	C.77	0.62
1967	22.9	24.9	213	C	0.04	45.8	18.4	32.9	20.2	22.5
1968	23.5	26.6	0.00	1.17	5.12	23.8	18.4	35.2	20.5	010
1969	N CC	C 7C	0.22	8.07	21.4	24.6	2 61	28.0	0.00	0.14
1070	1.11	7.07	7.77	25.0	22.4	27.6	1 00		0.02	C.U2
0/41	20.8	25.6	20.4	23.5	216	0.11	1.07	50.4	20.6	18.4
1971	20.4	23.8	10.6				1.01	58.4	17.5	15.5
1977	1.00	0.77	17.0	25.1	21.6	21.5	15.8	22 K	1 0 1	;
1072	1.02	0.47	19.9	24.7	21.8	21.0	16.4	0.00	1.01	9.01
5/61	0.02	23.0	18.9	27.4	1 10	0.12	1.01	27.8	19.0	17.0
19/4	17.3	20.0	16.1	27.8	10 0	0.71	14.8	30.4	18.8	16.7
1975	17.0	17.2	127	0.00	0.01	0.11	14.3	26.2	12.6	14.3
1076				0.04	1.01	16.5	6.5	25.0	9.3	16.7
0/01	1.11	1.81	13.9	23.0	13.7	18 3	0.01	7 20	;	
11/1	18.0	1.61	15.4	27 4	15.2	101	0.01	0.02	C.11	17.3
1978	19.0	20.2	16.0	VVC		0.01	õ.5	25.6	17.3	18.0
1979	18.4	20.7	16.7	1.14	7.01	8.61	8.7	27.7	17.8	17.5
1980	18.0	1 10	1.01	7.67	c.cl	20.8	13.2	26.6	15.2	1. 21
	0.01	1.12	10.0	30.4	14.3	18.7	15.6	28.6		1.01
1981	18.0	20.0	14.9	767	1 11	0		0.04	14.0	14.4
1982	17.0	19.7	15.5		4.21	11.9	12.0	27.6	16.5	15.7
1983	18.7	1 02		7-77	8.11	18.4	11.4	26.7	19.7	12 7
	2.01	1.02	C.01	24.3	12.4	20.3	7.1	25.8	22 5	1.01
" Net	profits divide	d by net value	added of private	sector and pu	blic enterprises.	Series for Canada.	Germany	and Italy are	C.1.4	0.01
	TI-TIOTI CIMININ	uaucial pushess 1	nclucing imputed I	profits of self-en	nployed. Series f	or UK includes Nor	th See Oil	and sump and	TITYOTAA	
Source: A	umstrong and	Glyn (1986).				and a statement of the second s				

fit margins. Even a substantial improvement in actual profitability might fail to stimulate an investment boom because of fears that the improvement is only temporary. As at the beginning of the golden age, the stagnationist game of wage-led growth could turn out to be the only game in town!

VIII. BY WAY OF SUMMARY

The primary purpose of this chapter has been to release the Keynesian theory of the capitalist economy both from the stagnationistcooperative straitjacket that has dominated Left Keynesian thought and from the marginal role that the mainstream has accorded Keynesian theory as a theory of no relevance to understanding the functioning of the capitalist economy apart from the short period. In our view neo-Keynesians at Oxford and Cambridge like Roy Harrod and Joan Robinson were developing an important insight of Keynes and Kalecki when they argued that aggregate demand plays a central role in the capitalist economy, in the long run as well as in the short. Furthermore, at least for a large country like the United States or for a large unit like the European Economic Community, for which the small open economy model is of little relevance, investment demand is the centrepiece of the story, both because it is likely to be the most variable and elusive element of aggregate demand, and because of its direct role in the accumulation of capital.

More specifically, this chapter has focused on the dual role of profits in a capitalist economy. Today's profits are, on the one hand, a primary source of saving for the accumulation of business capital. Tomorrow's profits, on the other hand, are the lure which attracts the investor. Under existing institutions, capital accumulation requires high profits, and a squeeze on profits generally leads to a squeeze on capital-stock growth.

Wages also have a dual character under capitalism. On the one hand, wages are costs to the capitalist. On the other hand, wages, or more precisely, the wages of the employees of *other* businesses, are a source of demand. High wages are bad for the capitalist as *producer* but good for the capitalist as *seller*, especially when demand from other sources is weak.

The social democrats and their academic allies, the Left Keynesians, put forward the political and intellectual case for the view that high capacity utilization would resolve the contradiction between high wages and high profits. Emphasizing the demand side, neglecting the cost side, they believed that high wages would contribute not only to high levels of output and employment but also to high levels of profits and accumulation. Capitalists would make up in larger volume what they lost on each unit because of higher wage costs.

The illusion that a new era of 'co-operative capitalism' had replaced the antagonistic class relations of an earlier period persisted until a profit squeeze developed in the late 1960s. At this point, the co-operative interpretation of Keynes became increasingly inconsistent with the facts. One could of course deny the facts. Or deny the theory. Or, as a compromise, relegate the theory to the short period, perhaps a period in which economic agents are surprised by government actions.

Our approach has been different. We believe that the problem has been the way a basically sensible *conception* of the economy was cast into a misleading *model* of the economy. Our purpose here has been to recast the model so that it retains the sense and the insight of Keynesian theory—particularly its insight on profit as the engine of capitalist accumulation.

But the present malaise is not a problem of profits alone. Restoration of profit margins would probably not, at least not very quickly, restore the high levels of investment demand that obtained throughout the golden age and even after its demise. As Schumpeter is reputed to have remarked, one no more restores economic health by simply reversing bad economic policies than one restores the health of someone who has been run over by a truck by simply backing the truck off. A healthy capitalism requires profitability, but in circumstances like the present profitability may follow from wage-led rather than from profit-led growth policies. Over the longer run profit-led growth may once again be feasible, but the transition will surely require active demand management, presumably a possibility only after a successful reform of the international financial system.

The alternative is a much more radical break with the past, a new institutional structure that would decouple accumulation from profitability altogether, as was presumably the ultimate intention of the Meidner plan (Meidner 1978) of a decade ago. We question the timeliness of such a radical rupture, but we would hasten to add that the two alternatives, restoring profitability and freeing accumulation from dependence on profitability, need not be altogether disjoint. In fact, in our view the essential elements of any left alternative to mainstream policies for restoring growth are (a) to recognize the present need for profitability, (b) to recognize the ultimate desirability of making accumulation independent of profitability, and (c) to provide a bridge from here to there.

NOTES

- Proponents of life-cycle and permanent income hypotheses will object at once. And it is the case that the available empirical evidence does not suggest important differences between the propensities to save out of wage and property income across households, at least not for the United States. This is partly due to shortcomings of the data, but more due to the unimportance of household saving, properly defined, in the accumulation of plant and equipment. The bulk of saving for the business sector is done by corporations and pension funds. A contemporary specification of the Kaldor–Robinson–Pasinetti two-class model would distinguish corporations, pension funds, and households, rather than capitalists and workers. See Chapter 1 above, and Marglin (1984, chs. 17–18).
- 2. A positive relationship between wages and profits can hold only up to full capacity utilization, at which point higher wages will induce higher prices rather than higher output. In the full capacity case, there can be no squeeze on profit margins at all.
- 3. The assumption that capital formation is financial entirely out of profits is not necessary to the argument of this chapter, but it simplifies the exposition. It is necessary to assume that the propensity to save out of profits exceeds the propensity to save out of wages. If the propensity to save is assumed to be uniform across income classes, as is standard in elementary texts, it is difficult to produce the downward-sloping IS schedule on which the stagnationist model relies.
- 4. It is by no means necessary to assume the PE schedule slopes upwards. A labour extraction model of the kind developed in ch. 5, for example, will generally lead to the conclusion that the PE schedule turns downwards at high levels of capacity utilization. Within limits, nothing in our argument hinges on the slope of the PE schedule, and in any case our attention here will focus elsewhere.

For the record, we note that competitive profit maximization was Keynes's own way of modelling the supply side in the *General Theory*. Realism apart, the difficulty with this approach for present purposes is that it makes the real wage depend exclusively on the level of capacity utilization. Within the strict confines of the *General Theory*, one simply cannot examine the consequences of a change in the distribution of income. Distribution is itself a consequence of demand and output rather than a cause, a thermometer rather than a thermostat.

- Marglin (1984, ch. 4) presents a long-run version of Keynesian theory in a comparative framework. Ch. 19 suggests some problems with the theory (pp. 473-9), and ch. 20 attempts to synthesize Keynesian and Marxian perspectives.
- 6. One aspect of the Robinsonian model which has gone generally unnoticed is that it implies a stagnationist-cooperative view of capitalism. Since investment

demand is a function of r alone, the derivative h_z vanishes and the IS schedule in $\pi \times z$ space is a rectangular hyperbola. Since in this model it is the *rate* of profit that is determined by saving and investment, the profit share and the volume of output are inversely proportional.

7. By assumption, we have

$$h_z = -i_\pi \frac{\pi}{z} + i_z > 0$$
 and $s\pi \overline{a}^{-1} - i_z > 0$.

Combining these two inequalities gives $s\pi \overline{a}^{-1} - i_{\pi} \frac{\pi}{z} > 0$, from which

the Robinsonian Stability Condition follows directly. 8. From Condition (14), we have

$$-i_{\pi}\frac{\pi}{z}+i_{z}>0$$

and from Conditions (11) and (12)

$$0 > \frac{\mathrm{d}\pi}{\mathrm{d}z} = -\frac{s\pi\bar{a}^{-1} - i_z}{sz\bar{a}^{-1} - i_\pi}$$

Hence, combining these two inequalities give us

$$0 > \frac{\mathrm{d}\pi}{\mathrm{d}z} > -\frac{s\pi\overline{a}^{-1} - i_{\pi}\frac{\pi}{z}}{sz\overline{a}^{-1} - i_{\pi}} = -\left(\frac{sz\overline{a}^{-1} - i_{\pi}}{sz\overline{a}^{-1} - i_{\pi}}\right)\left(\frac{\pi}{z}\right) = -\frac{\pi}{z}.$$

9. There is an element of arbitrariness in identifying the class interest of workers with the wage *bill*, as against the wage *rate*. In effect, we are attaching no social utility to the involuntary unemployment that accompanies excess capacity. But there is, or may be, an important 'insider' vs. 'outsider' problem here: the gains of expansion accrue to the newly employed workers, the losses to the already-employed.

The case for identifying the interests of the capitalist class with the profit rate rather than the profit share is less problematic: we need only assume that idle capacity depreciates as rapidly as utilized capacity.

10. Diminution of the fear of depression could produce not only a shift in the IS schedule, but a change in the sign of its slope as well. If anticipated profitability becomes sufficiently responsive either to the actual profit margin or to the actual rate of capacity utilization, the regime can change from stagnationist to exhilar-ationist.

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