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LESSONS OF THE GOLDEN AGE OF CAPITALISM

STEPHEN A. MARGLIN

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ECONOMICS RESEARCH
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Lal Jayawardena, *Director*

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Preface

The potential benefits that developing countries gain from participation in the world economy depend partly on the level of international trade and economic activity at any given time but also on the nature of the international monetary and trading system itself. Indeed, the two are closely linked: some systems are better at promoting growth and employment than others. Yet it is useful to retain the distinction: for there is often a tendency either to take the existing system for granted or to assume that, if it is unsatisfactory, nothing can be done about it because it was brought into being through “deep-seated” historical forces which cannot easily be changed. In fact, however, international economic and monetary systems appear to have a relatively brief expected life-span: the classic pre-1914 international gold standard lasted for only two generations and Bretton Woods only for one generation (1946–71), while the existing floating rate arrangements are already showing their age.

If such systems change more frequently than is often supposed, and if, while they last, they have a large influence on economic growth and cyclical fluctuations, then it is necessary to find out as much as possible not only about what distinguishes “good” systems from “bad” ones but also about the forces that bring them into being, and sustain or alternatively weaken them. Certainly the record of economic instability in the fifteen years since the collapse of the Bretton Woods system lends little support to those who believe that the world is better off without any system. Indeed, the repeated calls from both official spokesmen and economists for greater exchange rate stability and “a new Bretton Woods” clearly indicate a nostalgia for that post-World War II construction and the beginnings of a search for a successor to it.

Partly with a view to preparing the ground for a new system, which must surely come before the turn of the century, WIDER’s research has deliberately turned back to the historical antecedents and especially, in the project reported in this booklet, to the “golden age” of the 1950s and 1960s: we look back in order to learn what we can from the terrain already crossed and equip ourselves for traversing the uncharted territory ahead. While it would be foolish to imagine that we can somehow reproduce in the 1990s the conditions that gave rise to the rapid growth of the 1960s, it would be even more foolish to ignore the experience of those years. At least we have one advantage over the policy-makers and economists who struggled to understand the post World War II system at the

time, which is that we know what happened: we know the system broke down. But why did it collapse? That remains a highly controversial yet highly relevant question.

Was the fundamental cause of the breakdown the structure of the international economic order itself? Did it collapse through its “internal contradictions”, as some economists predicted at the time? Or was the international system itself made possible only by a unique set of conditions at the national level, the weakening of which undermined its foundations? Was the collapse of the 1970s the results of accidental nominal and real “shocks” (a concept that only entered the economic vocabulary during that decade), or was it rather the inevitable working-out of long-term, systemic, forces? The answer suggested by the research reported here is that both domestic and international conditions were required to sustain the “golden age”, and it weakened when these forces stopped reinforcing one another and began instead to undermine each other.

As the author, Prof. Stephen Marglin of Harvard University, states, “Major policy conclusions follow from this way of looking at things”. Some of the remedies proposed for contemporary problems, such as greater international policy coordination, are unlikely to succeed, since they do not address the root causes of present difficulties. Similarly, economic liberalization and austerity programmes, as implemented by most developing countries during the 1980s, are predicted not to succeed in restoring these countries to sustained levels of economic growth. The continuing uncertainties of the international economic order are predicted to have far too unsettling effects on world-wide business confidence and investment to permit such an optimistic prognosis. More basic remedies have to be sought, more adequate substitutes for the institutions that sustained the golden age.

A full description of WIDER’s research on this subject, which falls within its theme area “Money, Trade and Finance – Reform for World Development” is given in Appendix I. The contributors, whose work is used extensively in this summary booklet, are shown in Appendix II and the contents of the books embodying the full research results, to be published by Oxford University Press under its Clarendon Press imprint, are shown in Appendix III.

Lal Jayawardena
April 1988

Lessons of the Golden Age

1. Introduction

This paper is the distillation of the results from a research project at WIDER, Helsinki, aimed at understanding the causes of the persistent crises and problems in the global economy, which started around 1970 and continue to this day.¹ It draws upon the work of several participants of the WIDER project, particularly on “The Rise and Fall of the Golden Age,” by Glyn, Hughes, Lipietz and Singh.²

The purpose of the present paper is not to provide a comprehensive summary of all the research which this project has undertaken. It is rather to whet the reader’s appetite, and to convey the flavour and purpose of the larger body of work.

The premise of the first phase of research in this project has been that any attempt to restore economic performance in the OECD countries to the levels achieved in the 1950s and 1960s must be based on an understanding of the key economic arrangements of those years: How did these arrangements mutually interact to produce consistently high rates of growth – averaging over four per cent annually in the 1950s and nearly five per cent in the 1960s? Equally important is an understanding of how these arrangements disintegrated: were the problems essentially domestic ones, internal to the functioning of each national economy, or were the problems rather in the international sphere, in the political and economic relationships that linked national economies with one another? Only after answering such basic questions can one proceed to think constructively about economic reform and restructuring.

None of this is to be read as a suggestion that policy should be directed to reproducing the economic arrangements of the 1960s in the 1990s. Such an attempt runs counter to another premise of this research, namely, that economic arrangements are changed over time by their very functioning, by the conscious and unconscious actions of economic agents who modify the framework within which they operate, with the result that this framework continually evolves and to that extent is beyond the control of policy makers. Policy makers’ freedom, to paraphrase Hegel, presupposes insight into the necessities which constrain their choices. To apply the lessons of the golden age, we must understand not only what allowed capitalism to deliver the goods for a reasonably long period of time, and

¹ For a description of the project and a list of participants and papers, see the Appendix.

² Andrew Glyn, Alan Hughes, Alain Lipietz and Ajit Singh, *The Rise and Fall of the Golden Age*, Helsinki: WIDER Working Paper, 1988.

where things went wrong, but also the ways in which the very success of the system in the 1950s and 1960s undermined it and eventually led to the drift of the 1970s and the stagnation of the 1980s. We must understand in what ways the givens of today's arrangements are different from those of yesterday's.

It is not necessarily for the worse that policy makers do not have as free a hand as is sometimes imagined – especially given the present political mood and climate. It is all too easy to lose sight of the positive side of the changes which were instrumental in undoing the golden age. For instance, it will be argued that increasing labour militancy contributed importantly to the profit squeeze which in the late 1960s altered the economic climate to the detriment of capital accumulation and growth. But the other side of the coin to the profit squeeze was a real and substantial gain with respect to the conditions of work and its remuneration. The growth of the welfare state and the persistence of low unemployment may have made workers less responsive to pressures from their employers to increase productivity and maintain profits, but these features of the golden age also gave a new security and confidence to people whose lives had previously been characterized by all too little of both.

On the international side, it will be argued that the decline of American hegemony not only contributed to the profit squeeze by making imported raw materials – chiefly oil – more expensive. but, more important, ultimately crippled the use of fiscal and monetary policies to manage aggregate demand by the major players. But the end of American hegemony also reflected both the economic and political recovery of those belligerents – winners as well as losers – which had emerged from World War II with severely damaged economies and polities, and the emergence of new forces out of the wreck of the colonial empires that fell in the aftermath of war. Prosperity at the price of the dignity of individuals or nations would not be much of a bargain even if it were on the policy menu.

This WIDER research project, then, seeks to understand the making and the unmaking of capitalism's golden age (roughly. the quarter century that followed World War II) in terms of the arrangements which fostered sustained growth and high unemployment after World War II and the forces which undermined the effectiveness of these arrangements in the 1960s and, increasingly, in the 1970s. These arrangements can be divided into four parts. First are the arrangements which shaped the macroeconomic climate internally, what we term the "macroeconomic structure." Second are the arrangements which framed the international economy, the "international order." Third are the institutions within which capital-labour relations evolved, here termed the "system of production." And finally the mechanisms for eliciting the requisite behaviour on the part of individual agents, the "rules of coordination." This four part schema is in the first instance simply a

classificatory device, a beginning of theory, and these four components appear one way or another in many descriptions of capitalist development. But more than mere classification is at issue: our analysis focusses on the interactions between the macroeconomic structure, the international order, the system of production, and the rules of coordination.

2. The Legacy of Depression and War

As background to how these institutions functioned during the golden age, the historical background of Depression and War is essential. The first legacy of the Depression was the commitment to the welfare state. The trauma of unemployment on a scale too wide to be plausibly blamed on the shortcomings and failures of the individual worker permanently changed the way people throughout Europe and North America would think about the role of the government. What conservatives – except for the fringe of the New Right – and liberals argue about today are the margins of the welfare state, not its principles.

Another legacy of the Depression, particularly in the United States, were changes in both law and customs that enhanced the power of organized labour. In other countries, the position of the trade unions improved in the aftermath of World War II rather than during the Great Depression. However, except in the UK and the Scandinavian countries, organised labour did not achieve the power it won in the United States. An initial eruption of grass-roots radicalism, which for a time threatened to convulse Europe and Japan, was repulsed soon after the war ended; by and large, trade union leaders worked to contain more radical workers.³ Nowhere did the trade unions mount a coherent and sustained challenge to capitalists' prerogative to organize work, control production or determine investment. Trade-union leaders, for the most part, accepted a bargain in which managing was left to the bosses. Insofar as union demands went beyond the division of the pie, the focus was one or another issue of employment security, such as respect for seniority in deciding who would be promoted or laid off.

The institutionalization of aggregate demand management is generally thought to date from the publication of Keynes's *General Theory*⁴ in 1936. But whereas the *General Theory* was important in

³ See Philip Armstrong, Andrew Glyn, and John Harrison, *Capitalism Since World War II: The Making and Break-up of the Great Boom*, London: Fontana Paperback, 1984, Chapter 2.

⁴ John Maynard Keynes, *The General Theory of Employment, Interest, and Money*, London: Macmillan, 1936.

providing a justification for aggregate demand management, the commitment came only in the wake of war. That was no accident. The Soviet Union, along with Germany, was generally conceded to have abolished unemployment while the capitalist democracies were wallowing in depression. Germany's economic success was widely attributed to the militarism and rearmament that culminated in World War II. Early military successes may have enhanced the prestige that Germany enjoyed in circles in the West that had earlier chosen to ignore or downplay political concomitants of Nazi economic successes. But with the turning of the tables came a growing prestige for the Soviet Union; one aspect of this was the contrast between the dismal employment record of pre-war capitalism with the performance of Soviet socialism. In consequence, the Western democracies were put under considerable political pressure to prevent output and employment from being regulated by swings in private confidence. This political demand took on special urgency as victory approached: it seemed unfair to the larger part of the population of the Western allies, even to people otherwise little sympathetic to the Left, that young men should be asked to give up their lives for their country while their country was willing to consign their livelihoods to the vicissitudes of the market.

Another important legacy of war was the emergence of the United States as the dominant power internationally, both politically and economically. On the political side, the United States assumed the role of international policeman from the British after the interregnum of the inter-war years, and regularly intervened covertly and occasionally overtly to prevent hostile elements from coming to power. Iran in 1953, Guatemala in 1954 are well known instances of covert intervention. In Lebanon in 1957 and in the Dominican Republic in 1965, the marines actually landed.

The war also made the United States the dominant power economically, as the only belligerent to emerge with its productive power enhanced. For many years after the cessation of hostilities, there was a wide range of goods which only the United States could produce competitively at any reasonable exchange rate, and in the case of some goods, only the United States could produce at all.

In short, as the dominant power both politically and economically, the United States faced little opposition to its attempts to carve out a new international order, one responsive to its interests and its perceptions of the larger interests of the world economy – America was not the first hegemonic power in world history to confuse the two.

It was, then, in the context of the welfare state, a trade-union movement that was tame even where it was powerful, the commitment to demand management and American hegemony that the regime of post-war capitalism had to operate. Let us see how these circumstances conditioned the functioning of each.

3. The Arrangements Sustaining Growth

The Macroeconomic Structure

A macroeconomic structure is a set of mechanisms for managing the overall level of economic performance – output, employment, and growth. To be successful, macroeconomic management must meet two requirements. On the one hand, the level of aggregate demand must be set at a level adequate to utilize fully the available productive resources, both capital and labour. On the other hand, the share of output devoted to capital formation must be high, and over time the demand for investment and the supply of saving must grow in balance with one another.

A critical element of the post-war macroeconomic structure was investment demand. In line with what we shall term neo-Keynesian views of investment demand⁵ we take the expected rate of profit relative to the cost of capital as the crucial determinant. The expected rate of profit, in turn, can be broken down into three components – the output per unit of capital at some standard rate of capacity utilization, the expected rate of capacity utilization relative to that standard rate, and the expected share of profit in value added. The first of these components, which we may identify with the ratio of potential GNP to the capital stock, need not detain us until much later in the story, when it begins to decline markedly. Nor was the expected profit share problematic, at least at the outset of the golden age. As we shall see, one consequence of the war was to temper wage demands for a long time. Profits in the early post-war period reflected the substantial decline in real wages (Continental Europe) and a substantial growth in productivity (United States). In the United States, even the intense wave of strike activity in the immediate aftermath of the war did not significantly undermine profit margins. Japan, where war damage was most extensive and production in total disarray, was an exception to this general pattern.⁶

The problem for investment demand, in short, lay in the pros-

⁵ This perspective is developed in the writings of Michal Kalecki and Joan Robinson. See Michal Kalecki, "Class Struggle and Distribution of National Income," in *Selected Essays on the Dynamics of the Capitalist Economy*, Cambridge: Cambridge University Press, 1971; Joan Robinson *The Accumulation of Capital*, 2nd ed., London: Macmillan, 1956, and *Essays in the Theory of Economic Growth*, London: Macmillan, 1962.

⁶ See Armstrong, Glyn, and Harrison, *op.cit.*, 1984, Chart 6.4.

pects for selling the additional goods that new capacity would generate. Here is where the new power of trade unions and the commitment to government intervention to maintain aggregate demand proved essential to fostering a successful macroeconomic structure. The gospel of “co-operative capitalism” was that high and growing wages and high and growing government expenditure would guarantee a stable expansion of demand and utilization of newly installed capacity. This gospel may have initially been received with considerable scepticism, clashing as it did with vivid memories of the dismal demand performance of the Great Depression. But investor confidence responded in time to the evidence that demand expansion could and would be maintained, so that low capacity utilization would not undermine profitability.

On the saving side of the problem of business capital accumulation, the post-war macroeconomic structure depended heavily on corporate profits. In the United States, for example, household savings were directed in large part to investment in owner-occupied housing, and business relied primarily on earnings and depreciation allowances and, increasingly, on the saving of pension funds.⁷

Thus profits played a double role in the post-war regime. On the one hand, profits today increased investor confidence in profits tomorrow and thereby spurred investment demand. On the other hand, profits provided part of the savings required for investment.

The International Order

It has been noted that the United States emerged from the war politically and economically dominant, with the ability to shape the international order to its liking. American political dominance enters the story at several points. First, the “Pax Americana” facilitated an orderly flow of goods between the so-called less developed and the advanced countries. An orderly flow of goods at “reasonable” prices: those were the days when oil sold for two dollars a barrel. Second, American political dominance played an important role in the political dominance of the Centre-Right in Western Europe. The splintering and isolation of the trade-union movement virtually everywhere in Europe but the United Kingdom, at once cause and consequence of the ascendance of conservative parties, played a significant role in maintaining and enhancing profit margins. The containment of trade-union militancy postponed for a considerable period of time the threat that high employment inherently poses to profitability under capitalism, about which we shall have more to say presently. Third, political dominance gave the

⁷ See Stephen A. Marglin, *Growth, Distribution, and Prices*, Cambridge, MA: Harvard University Press, 1984, Chapter 17.

United States a stake in the economic well-being of Western Europe and Japan that allowed the traditional isolationism of important segments of the American polity to be overcome. The first fruit of the new internationalism was the Marshall Plan, which contributed greatly to the recovery of Western Europe, and perhaps was an essential economic and political foundation of that recovery.

Finally, American political dominance provided the context in which the post-war regime of international trade and finance, the Bretton Woods system, came into being. Bretton Woods was to provide the institutional underpinning for a new international system, one in which restrictions on the flow of goods would gradually be eliminated, and trade would invigorate the world economy as a whole. The founders of the Bretton Woods system envisioned an international order that would contrast sharply with both the pre-war tendency to autarky and the post-war reality, outside the United States at least, of a world economy largely in shambles. The linchpin of the Bretton Woods agreement was a system of fixed parities among the currencies of the major economic powers, parities which were to be adjusted only periodically and with the consent of the international body set up under Bretton Woods, the International Monetary Fund. The idea was to steer a middle course between the excessive rigidity of a gold and gold-exchange standard and the excessive uncertainty of a floating-rate regime.

American political dominance was necessary but hardly sufficient to make the Bretton Woods system function smoothly. For any fixed-rate system has inherent economic problems. In a celebrated argument Robert Triffin⁸ outlined the internal contradiction of a fixed-rate system. In Triffin's view, the main problem is that the steady expansion of international liquidity in line with the volume of trade requires chronic deficits on the part of the key currency country or countries, but these very deficits can only undermine confidence in the key currency and force its devaluation. Accordingly, he predicted the demise of the fixed-rate system.

Triffin was better as a prophet of the end result than of the mechanism. Current account deficits turned out to be less necessary than he, working out his position in the 1950s, could have imagined. The introduction of eurodollars made US current account deficits unnecessary for system liquidity. With eurodollars, the international banking system had a way to meet liquidity requirements by money created out of whole cloth. Even as American surpluses decreased in the 1960s, or rather despite the decrease in the American surpluses, credit money came to play an ever more

⁸ See Robert Triffin, *Gold and the Dollar Crisis*, New Haven: Yale University Press, 1960. Triffin had made this argument much earlier in a governmental report and in Congressional testimony.

important role in providing liquidity through the eurodollar market.

In actual fact, a fixed-rate regime requires the opposite of what Triffin supposed, namely, an excess demand for the reserve currency. Without persistent excess demand, the vagaries of supply and demand will result in periodic pressure on the whole structure of exchange rate parities; when the key currency is in excess supply, it is obviously difficult to maintain the fixed-rate system.

For some period of time, political dominance may be sufficient to create and maintain an excess demand for the hegemon's currency. To the extent military might and political power made the United States a safe haven for *rentiers* grown fearful for the prospects for private wealth in their own countries, the result would be a strong demand for dollars irrespective of the economic position of the United States. But an excess demand is unlikely to persist for a long time unless the hegemon is economically dominant as well, so that its *goods* are in short supply in world markets.

In the event, World War II made the United States the dominant power economically as well as politically. It has been observed that for many years after the cessation of hostilities, there was a wide range of goods which only the United States could produce competitively. In consequence of the importance of these goods to production and particularly to capital formation, the dollar was in effect undervalued in economic terms, as well as in demand for political reasons.

The contribution of the Bretton Woods arrangements to the success of the post-war capitalist regime is controversial, but there were undoubted advantages. Indeed, one of the supposed disadvantages of the fixed-rate system, the lack of a mechanism for correcting surpluses and deficits, was probably a positive factor in the growth of the capitalist world economy in the early post-war period. As has been noted, the United States enjoyed considerable surpluses during this period. Not only would a floating rate system have failed to eliminate these surpluses "automatically", as recent experience has shown, but the quality of capital flows would likely have been much less beneficial if a floating-rate system had been in operation. Exchange rate uncertainty puts a greater premium on liquidity, so that the foreign investment which is the necessary concomitant of a trade surplus, would very likely have taken the form of accumulation of financial assets. The assurance (or illusion) of stability that a fixed-rate system provided undoubtedly facilitated the recycling of United States surpluses into fixed capital formation. Direct foreign investment, concentrated in Western Europe, was doubtless a boon to American profits, but it also contributed to capital formation and productivity growth abroad, particularly as it was a vehicle for other countries to plug into more advanced American technologies.

A second advantage that a fixed-rate system affords, at least so long as the reserve currency is undervalued, is the possibility for the

reserve-currency country to expand aggregate demand without too much heed to a balance-of-payments constraint. Pursuing expansionary policies, a country with the economic weight of the United States would not only stimulate its own economy, but would through its imports stimulate production and income abroad. All countries would benefit from such “international Keynesianism.”

The United States did not in fact play its Keynesian card internationally until the mid-1960s, and then more in response to the exigencies of President Johnson’s policy of guns and butter than in response to a sense of responsibility for the international economy. And, ironically, by this time the days of American economic and political hegemony were numbered. The late 1960s were the time when the trade surpluses shrunk, and American political power came increasingly under attack. But, partly because of the expansionary stance of the United States at this time, the 1960s were a period of general prosperity, the most golden years of the golden age.

For a long time, the United States willingly accepted the costs as well as the benefits of its political and economic hegemony. For instance, the United States was prepared to incur short-run costs to promote European recovery and, beyond recovery, development and integration. The long-run interests of the world capitalist economy as a whole were served by improved productivity in Europe and Japan even though the relative position of American exports suffered as European countries looked increasingly to each other.

There were of course substantial benefits to leadership. In the first place, prosperity is a non-zero-sum game, and America, as the biggest player in the game, stood to profit the most. There were also more immediate and tangible benefits. Because of the widespread use of the dollar as an international means of payment, the United States could earn a banker’s profit in exchanging short term liabilities for long term assets. In the extreme version the reserve currency country can finance direct foreign investment by merely printing banknotes, an accusation levelled at the United States, particularly by the French, in the late 1960s, when the US current account was more or less in balance, but its foreign direct investment continued as if it were the 1950s, when the US current account was in large surplus.

The System of Production

Capital-labour relations, summarized in the “system of production,” exhibited much more continuity with the past than did the macroeconomic structure and the international order. The organization of work in factories, the use of machinery, the organization

of firms as large corporations – all this had a long history. While these forms of production developed after World War II, it could hardly be said that they represented a new departure.

More dramatic was the extension of what Richard Edwards⁹ has called “technocratic” and “bureaucratic” systems of control, machine-paced and rule-directed systems which share a common aim of replacing the direct and personal knowledge, authority, and responsibility of the worker by their impersonal counterparts in the machine and the rule book. Andrew Glyn *et.al.*¹⁰ use the term “Taylorization” to describe this process, after the father of “scientific management,” Frederick W. Taylor. Even here innovation in the system of production was largely confined to Europe. The United States had been experimenting with Taylorism since before World War I, although it must be said that Taylorism had always been more of a capitalist project than an achievement: workers consistently resisted being Taylorized. And Japan never took the road to Taylorization, and indeed never had to. The knowledge system of Japanese workers, as Masahiko Aoki¹¹ shows, was never used to thwart the aims of management, and consequently there was not the same felt need on the part of Japanese capitalists to undermine workers’ knowledge, authority and responsibility in Japan as in the West.¹²

The Rules of Coordination

The term “rules of coordination” describes the methods by which the actions of agents, individuals, firms, and states are brought into line with each other as well as into line with the exigencies of the macro structure and the system of production. Capitalist economies have always relied to a great extent on the price mechanism as a mode of coordination, profits guiding the allocation of capital as well as stimulating its accumulation, and wages guiding the alloca-

⁹ Richard Edwards, *Contested Terrain: The Transformation of the Workplace in the Twentieth Century*, New York: Basic Books, 1979.

¹⁰ Glyn, Hughes, Lipietz Singh, *op.cit.*, 1988.

¹¹ Masahiko Aoki, *A New Paradigm For Work Organisation: The Japanese Experience*, Helsinki: WIDER Working Paper, 1988.

¹² It was not a coincidence that the expansion of Taylorist production in Europe picked up momentum after the second World War. The dislocation of war, and the sense that the torch had passed from the Old World to the New, made Europe more open to American methods and system. Productivity missions, under Marshall Plan aegis, spread the word.

tion of labour as well as stimulating effort. But the price system never functioned in the moral, cultural, and political vacuum which mainstream economic theory assumes. Political compulsion and cultural values have always played an important role in every set of rules for coordinating economic activity.

In particular, capitalists have never been entirely comfortable with the price mechanism as a means of extracting labour from workers, or to use the Marxian terminology (which is only reasonable since Karl Marx pioneered the analysis of the problem), as a means of converting labour power into labour. Typically what the worker sells is not a definite amount of corn delivered to the capitalist's barn but a quantity of time spent in the capitalist's field. The capitalist is left with the problem of transforming the worker's labour power into corn. Nor is the capitalist in general free to make the most productive use possible of the time he has purchased. The length of the working day, its intensity, the organization of work – which is to say, the system of production – remain objects of struggle.

Piece-rate wages represent one attempt to induce the worker to become the agent of the extraction of labour from his own labour power, but piece-rates have historically been at best a partial success. For one thing, piece-rates can be used only when the individual worker produces an identifiable product which can be directly attributed to his or her efforts. Equally important, even where there is an identifiable and attributable product, piece-rates themselves are the object of dispute and struggle, particularly in an environment in which technology and effort are rapidly and continuously changing. How the gains of productivity growth are to be shared in the revision of piece rates is the dynamic counterpart of the original problem: how to extract labour from labour power. In the struggle over piece rates it is evidently in the interest of the worker to minimize effort and apparent productive capacity: his best effort has a way of becoming the norm by which he and his mates are subsequently calibrated. Management is obviously at a disadvantage in monitoring a worker's performance if the workers possess the greater part of knowledge about the production process.

Taylorism may be seen as an attempt to solve this problem. By recombining and reconstituting workers' knowledge into a new system in which the capitalist or his agents – engineers, planners, and time-and-motion specialists – monopolize the knowledge of production, management intends to circumvent a major obstacle to the extraction of labour.¹³ Here the system of production joins up with

¹³ For more details on this argument, see Stephen A. Marglin, *Losing Touch: The Cultural Conditions of Worker Accommodation and Resistance*, Helsinki: WIDER Working Paper, forthcoming.

the rules of coordination – or rather the solution to inherent problems of coordination is sought in the system of production.

But Taylorism has proved only a partially effective solution to the labour: labour power problem. Workers consistently resist Taylorization. No wonder that the capitalist rules for coordinating production have, before and since Taylor, provided other solutions to this problem. One is the use of the wage mechanism itself, what has come in the economic literature to be called “efficiency wages”. The basic idea is an old one. Over a century and a half ago, the early apologist for the factory system and later *bete-noire* of Marx, Andrew Ure,¹⁴ asked “how with... surplus hands the wages of fine spinners can be maintained at their present high pitch,” in other words why the wage rate failed to respond to demand-supply conditions and to clear the labour market. His answer contained the central idea behind efficiency wages: “one of the best informed manufacturers made me this reply: ‘We find a moderate saving in the wages to be of little consequence in comparison of contentment and we therefore keep them as high as we can possibly afford, in order to be entitled to the best quality of work. A spinner reckons the charge of a pair of mules in our factory a fortune for life, he will therefore do his utmost to retain his situation, and to uphold the high character of our yarn’. ” Long before economists invented the term efficiency wages, capitalists were using the wage mechanism to purchase the commitment, loyalty, and effort of their workers along with their labour power.

But for at least an equally long period the carrot of efficiency wages has been complemented by the stick of direct supervision and control of the production process. Indeed, supervision and control are arguably the key to the emergence of the factory as a central feature of the capitalist system of production in the late 18th and early 19th century.¹⁵ Supervision and control – monitoring of the production process – have been key elements of the rules of coordination ever since.

How effective efficiency wages and supervision are in extracting labour from labour power depends critically on the economic arrangements in force, for these arrangements determine the cost of job loss to the worker if he or she fails to respond to the carrot or the stick – and is found out. The chief determinants of the cost

¹⁴ Andrew Ure, *The Philosophy of Manufactures*, London: Charles Knight, 1835, p.336.

¹⁵ See Stephen A. Marglin, “What Do Bosses Do? The Origins and Functions of Hierarchy in Capitalist Production,” Part one, *Review of Radical Political Economy*, 6:60-112.

of job loss are the rate and duration of unemployment and the level of unemployment insurance.¹⁶

The essential point about the role of unemployment was made by Michal Kalecki,¹⁷ who argued that high employment would eventually undermine worker discipline and adversely affect productivity and ultimately profits (even though the impact on profits would be disguised for a time by the positive effects of high capacity utilization that generally goes along with high employment). Kalecki drew the conclusion that sustained full employment was not in the interest of capitalists and would therefore be unlikely under capitalism. In short, when alternative jobs are plentiful, the cost of job loss is relatively low. When alternative jobs become scarce, the cost of job loss rises.

4. Evolution Of The Institutions

Innovations with respect to the welfare state and the management of aggregate demand after World War II had a significant impact on the rules of coordination. Over time, as we shall see, the cost of job loss fell dramatically, which reduced the effectiveness of efficiency wages and supervision as coordinating rules. In due course, this had important repercussions on both the supply of saving and the demand for investment, that is, on the macroeconomic structure.

These developments played themselves out in the relationship between productivity growth and wage growth. Over the 1950s, the OECD countries in general maintained a neat balance between productivity and wage growth, so that profits remained a roughly constant share of output. Japan was able to contain wage growth more successfully, so that the Japanese profit share actually grew substantially during the 1950s. The overall stability of the profit share reflected the stability of the growth process, and this, it has been suggested, would in the circumstances of the times translate into improved profit rate expectations: the actual performance of demand did much to dispel the fears of depression and excess capacity. At the same time, high rates of growth probably added to the resources which corporate retentions of earnings and deprecia-

¹⁶ See Juliet Schor, "Wage Flexibility, Social Welfare Expenditures and Monetary Restrictiveness," in Marc Jaruslic, ed., *Money in Macropolicy*, Hingham, MA:Kluwer-Nijhoff, 1985.

¹⁷ See Michal Kalecki, "Costs and Prices," in *Selected Essays on the Dynamics of the Capitalist Economy*, *op.cit.*, 1971.

tion allowances made available for accumulation; households found themselves with incomes rising more or less continuously and consequently found it relatively easy to save while learning how to spend their new riches. Thus both the demand for investment and the supply of saving grew at an even faster rate than output, and by the end of the 1950s the share of GDP devoted to gross business fixed investment in the OECD countries as a whole was 20 per cent higher than at the beginning. (In Japan and Europe the increase was even more striking; it was the United States, where the growth process was less smooth, which held the average down.) During this period, the rules of coordination and the macroeconomic structure reinforced each other, both resting on a system of production that generated a high rate of productivity growth and continued wage growth.

Thus the new economic arrangements of the post-war period initially worked smoothly. Internally, the welfare state, the power of trade unions to raise wages, and demand management combined to maintain high capacity utilization and stable profits. Internationally, American hegemony maintained a smooth flow of raw materials from the less developed countries at stable and low prices (the commodity price shocks of the Korean War years were a flash in the pan). Within the OECD countries, the excess demand for the dollar and the disposition of the United States to recycle trade surpluses initially allowed growth to proceed unconstrained by problems of external balance.

To be sure, there were clouds on the horizon. The cost of job loss fell, in line with the new arrangements for demand management (which kept unemployment low) and with the growth of the welfare state (which increased both the coverage and levels of unemployment insurance). But the memories of the Depression made workers and trade-union leaders alike hesitate to act in terms of the new realities, that is, in ways that would threaten the steady march of productivity and profits. On the international side, although the difference in rates of productivity growth – the United States consistently lagged Europe and Japan – undermined the dollar, the initial undervaluation perpetuated excess demand for the dollar for a considerable period of time, and even allowed the international order to survive for a time with the key currency country clearly headed for deficit.

Things began to unravel in the 1960s, especially in the second half of the decade, even though the underlying trends would not become evident for some time. Productivity growth began to slacken in the 1960s and real wage increases which were unproblematic when productivity was growing at as fast, became highly problematic as productivity growth fell behind.

There are many reasons why productivity growth fell. Some favour the mature economy thesis which explains the slowdown in terms of the exhaustion of the possibilities of technology and the

saturation of markets. Others lean towards an explanation in terms of the limits to Taylorisation, in which the key problem is that capitalists ran out of workers to Taylorise. Glyn, Hughes *et.al.*¹⁸ attempt to sort these reasons out as far as the data permit, which turns out not to be very far. Here I shall emphasize the impact of the fall in the cost of job loss, both because of its intrinsic importance and because it illustrates the basic approach of our research group to understanding the possibilities and the limitations of economic policy. The essential point, as has been suggested earlier, is that a fall in the cost of job loss reduces the responsiveness of workers to the carrot of efficiency wages and the stick of supervision.

Although memories of the Depression and fears of another kept workers in line for a time, the threat of being fired gradually lost its sting as low levels of unemployment persisted through the 1950s and into the 1960s. Memories faded, and if Ford was hiring down the street, a GM worker did not need to be so concerned about losing her job. At the same time the welfare state increasingly cushioned the blow and reinforced the effects of low rates of unemployment. The result was that by the end of the 1960s, the cost of job loss, and more important the perception of this cost, had fallen; productivity growth began to suffer. The existing rules of coordination, operating in a system of production in which the interests of capital and labour were fundamentally at odds, lost their effectiveness in extracting labour from labour power.

Full Employment Profit Squeeze

Whatever the sources of the productivity growth slowdown, it could not but have a strong impact on the macroeconomic structure. Profits fell markedly since the decline in productivity growth in no way impeded the power of workers to impose wage demands on their employers. Steady growth in real wages was a tacit part of post-war economic arrangements, and none the less real for being tacit. Indeed, having renounced any real say in the organization of production, trade-union leaders were under all the more pressure to deliver the goods in the form of real wage increases. In consequence the profit share fell almost everywhere. In Europe the decline was from a high of 25 per cent in the mid 1950s to 20 per cent at the end of the 1960s, in the United States, from 20 per cent to 15 per cent. Only in Japan, where the system of production and the rules of coordination were substantially different, were profits higher in

¹⁸ *op.cit.*, 1988.

1970 than in the mid 1950s, but soon (before the first oil shock) Japanese profits too were substantially reduced, from an average of about 35 per cent of corporate output in the mid 1960s to 30 per cent in 1973. There was, in short, well before the oil shock, a general “full employment profit squeeze” throughout the OECD countries. This was not a phenomenon associated with business “cycles”, that is with swings of a few years’ duration, but the result of a long period of sustained growth, rising wages, high employment, and increasing economic security for working people.

This full employment profit squeeze had a direct effect on accumulation. The rate of growth of the capital stock fell in the wake of the profit squeeze; for the OECD countries as a group the decline was from a rate of over 5 per cent per year in the late 1960s to about 4 per cent in the late 1970s. But this decline was the result of a fall in the output:capital ratio rather than a fall in the investment share. Indeed, the share of GDP devoted to business investment proved remarkably resilient in all countries except Japan!

How can the resilience of the investment share be accounted for in terms of a logic of accumulation based on the centrality of profits? The argument developed by Marglin and Bhaduri¹⁹ leads to an answer along the following lines: investment remained strong because, until the very end of the golden age and possibly beyond, profit expectations declined by much less than profit realizations. The paradox is explained by the gradual erosion of fears of depression; profit expectations improved as these fears dissipated despite static and even declining profits. Indeed, profit expectations only caught up to actual profits as the tide began to recede markedly in the late 1960s, and even then actual profits fell by more than expected profits. This relative resilience of profit expectations was reinforced by declining real interest rates as inflation accelerated and was accommodated by relatively passive monetary policy.

If this explanation is correct, then time-series data obscure rather than illuminate the connection between profit and investment shares. Had the profit share remained constant, the investment share would have risen, which would have offset the fall in the capital:output ratio and allowed the capital stock to continue to grow in the 1970s at more or less its accustomed rate.

The view that profits strongly influence investment is supported by the cross-country data. For example, until very recently the Japanese profit share has exceeded the British share by roughly the same margin – 50 per cent – by which the Japanese investment share has exceeded the British. And overall the cross-country correlation between the two shares, while not as striking as these two extreme figures, is impressive.

¹⁹ Stephen A. Marglin and Amit Bhaduri, “Profit Squeeze and Keynesian Theory,” WIDER Working Paper, Helsinki: 1988.

Bretton Woods and Pax Americana

The harm done to accumulation by the profit squeeze was compounded by international developments. Bretton Woods was undermined by slower productivity growth relative to real wage growth in the United States than elsewhere. The productivity growth differential was presumably due primarily to the difference in initial conditions – the United States was way out in front at the end of the war. The recycling of United States trade surpluses into foreign direct investment helped to improve productivity and competitiveness abroad, and ultimately helped to turn the solution to the dollar problem of the 1950s (too few dollars) into the problem of the late 1960s (too many dollars). The requirements of international liquidity made the reduction in the US surplus not only tolerable but functional for a time, but the development of the eurodollar market soon rendered the United States superfluous as a source of liquidity. During the 1960s the dollar was transformed from an undervalued to an overvalued currency, and as the decade wore on the United States, increasingly torn by strife over the Vietnam War, looked less and less like a safe haven, despite the return of political unrest to Europe after an interlude of 20 years.

The first symptom of change was that European countries were able to remove exchange controls that had been imposed to cope with the dollar shortage of the immediate post war period. More ominous signs appeared as the 1960s wore on: the deterioration in the US balance of payments persisted, and the United States pulled back from full convertibility of the dollar into gold. Finally, Bretton Woods could no longer function and in 1971 was definitively and unilaterally abandoned by the United States. The consequences were momentous, if somewhat delayed: faced with an external constraint for the first time since the war, the United States could no longer play a leadership role in the management of aggregate demand internationally. In the late 1970s, when the United States attempted to induce a global expansion by stimulating aggregate demand, the rest of the world was no longer willing to accept a flood of US dollars, except at a price which sent shudders through the financial community from New York to Zurich and from London to Tokyo. Though modest in terms of more recent experience, the fall in the dollar appeared to threaten the stability of the international financial system. The United States did not persist in expanding aggregate demand, and the stage was set for a new head of the United States central bank, Paul Volcker, to introduce a restrictive thrust into Federal Reserve management of monetary policy.

Other international developments had a more immediate bearing on the macroeconomic structure. The defeat of American forces in Vietnam formally signalled the end of the Pax Americana and an

end was close at hand to the smooth flow of third world raw materials at knock-down prices. OPEC was quick to take advantage of the changes in America's world position; there was nothing accidental in the timing of its dramatic entry into prominence in 1973. If instead of in 1973 OPEC had tried to raise oil prices and restrict production in 1953 or in 1963, American marines would almost certainly have been dispatched to teach the lessons that were taught to the Lebanese in 1957 and the Dominicans in 1965.

It seems likely that the increase in the price of energy contributed to the reduction in the output:capital ratio, which accounts in large part for the slowdown in the rate of accumulation in the 1970s. Outside the energy sector, value added per unit of capital would surely have fallen as a larger share of output was required to pay for energy. But, as Glyn, Hughes *et.al.*²⁰ show, it is difficult to sort out the contribution of energy price increases from other changes that occurred almost simultaneously, particularly the sharp decreases in the rate of capacity utilization.

5. The End Of The Golden Age: An Assessment

We now have the ingredients at hand to essay a preliminary answer to one of the key questions that has motivated this study: are we to understand the demise of the golden age, and hence to conduct the search for new institutions, in terms of problems internal to each of the economies of Western Europe and the United States or in terms of the relations among the OECD countries and between these countries and the rest of the world? Evidently the historical account can be read two ways: first, that the essential problem was an internal one, the full employment profit squeeze that resulted from the failure of the system of production and the rules of coordination to accommodate the basic conflict between labour and capital; second, that the essential problem lay on the international side, in the erosion of profits that resulted from the energy shocks traceable to the erosion of American hegemony, and the demise of international arrangements that effectively suppressed the constraint of external balance for the United States as hegemonic power and allowed relatively expansionary demand management policies both in the United States and elsewhere. In the first reading, the end to the golden age comes about 1970, when productivity growth began to decline markedly throughout the OECD countries. In the second reading, the real end comes in 1979 when OPEC II triggered a new round of inflation that revealed – revealed but did

not cause – the United States to be unable to continue to expand the world economy by stimulating the American economy and US imports. In this reading, the post-war regime foundered on the shoals of pluralism.

The part of wisdom is probably to reject both of these single cause explanations. Having emphasized the interaction of complementary institutions as the key to understanding both success and failure, it makes relatively little sense to search for a single essence. The internal problems which produced a profit squeeze are adequate to explain why the growth in the investment share achieved in the 1950s and 1960s did not continue into the 1970s, though even here international problems (OPEC I in particular) contributed to the profit squeeze. But it is the emergence of an external constraint in the late 1970s that explains why the United States, and hence other countries, were no longer disposed to use Keynesian policies to maintain the high levels of employment and capacity utilization as in the earlier period. Thus there are different explanations for the decline in growth rates (where internal issues come to the fore) and the rise in unemployment rates (where the emphasis is on the international side).

The retreat from Keynesian policies of demand management, it should be said, was based on internal as well as on external considerations. From the vantage point of capital, expanding output and employment would only exacerbate the problem of workforce discipline and motivation which had already cut deeply into productivity growth and profits.

Moreover, gains in production and employment would come at the cost of higher rates of inflation. Now reasons for disliking inflation are many and varied, and the deepest reasons are probably psychological rather than economic, at least if we confine our attention to rates of inflation characteristic of the industrial economies in the post-war period. In a world where all values – ethical, moral, and social as well as economic – are in flux, price stability serves the important symbolic value of connecting the older generation to its past, to a world which seems, in retrospect at least, simpler, safer, and surer.

Speculative as this explanation might be, there is no reason to be apologetic. It is the worst kept secret in the economics profession that no one has a convincing story about why inflation, even at the highest rates that prevailed in the OECD countries in the 1970s and early 1980s, should be regarded as such an evil that all economic policy had to be directed to its containment. (For the United States alone, the costs of containing inflation – in terms of output foregone since 1980 – are estimated in the trillions). The best story mainstream economists can offer is that inflation is like pregnancy: there is no such thing as a little bit. Single digit inflation, if allowed to continue, will inexorably develop into double digits, and double digits into triple digits. The next thing we know is that the advanced

capitalist countries will be in the position of Germany in the 1920s, when money lost all its value.

In contrast with psychological costs of inflation, which are widely shared, its economic costs (and gains) are infinitely complicated to work out. But it is worth reflecting on the fact that the sure losers from inflations of the kind that prevailed in the industrial countries are the very rich who constitute the bulk of the holders of assets denominated in nominal terms. Unlike common stocks or houses or other assets whose income rises more or less in line with the underlying income stream, bond income and principal are generally fixed in nominal terms. Now according to a recent survey in the United States,²¹ 40 per cent of federal, state, and corporate bonds and 70 per cent of nontaxable holdings, chiefly municipal bonds, are held by the wealthiest 2 per cent of American families. Even without introducing psychological considerations, it is easy to see why the rich would oppose inflation.

In short, while there may be a presumption that the retreat from Keynesian policies was rooted in international considerations, these were at the very least reinforced by domestic considerations of both capital:labour conflict and the acceleration of inflation. Once again internal and external problems became intertwined, perhaps inextricably so.

6. Lessons Of The Golden Age

The preceding discussion is not intended as a summary of all the papers that have been prepared in the course of the WIDER project – most of which are available separately as WIDER Working Papers. Nor does the entire set of papers purport to cover the whole field. In particular, we have given relatively little attention to the increasing importance of managerial capitalism; trans-national corporations; the rise of competition from the newly industrialized countries like Brazil and South Korea; the direct impact on accumulation of the increase, relative to the pre-war period, in government spending on civil and military account – to mention only some of the considerations without which the story of the golden age and its demise is incomplete.

We believe there are methodological, analytical, and policy lessons to be drawn from our research. The main methodological point is the need to integrate history and theory. In our view the failure of most economic analysis, particularly neoclassically inspired analysis, to provide any useful insight into the successes

²¹ *Survey of Consumer Finances*, Federal Reserve Board, September 1984, pp.679-792.

and failures of post-war capitalism lies in excessive abstraction.

The key word is “excessive”. All theory is abstraction and we have nothing against abstraction in principle. The problem of theorizing is to trade off the potential generality of the theory, which leads one to institutional sparseness, against the need to say something specific about specific problems in specific historical circumstances. The balance is obviously a delicate one, but it seems clear enough that the kind of theory which dominates in the economics profession has erred in the direction of too much generality. In pursuing generality, neoclassical theory has become so sparse in its institutional specification that it has next to nothing to say about concrete problems.

By contrast, the theory of growth that underlies the present research project is firmly rooted in capitalist institutions. We draw heavily on Marxian and Keynesian traditions to make up for what we perceive to be the deficiencies of mainstream theory: the Marxian tradition for the discussion of the system of production, particularly the analysis of labour extraction, and the Keynesian tradition for the discussion of macroeconomic structure, particularly the analysis of saving and investment. Each tradition makes assumptions that tie the analysis closely to the conditions of a developed capitalist society.

Both of these traditions make the rate of profit central to the growth of the capitalist economy. In part this is because both traditions, drawing on classical economics, place considerable emphasis on profits as a source of saving. In our view, the distribution of income, particularly between corporations and households, is central to the determination of the overall propensity to save, in sharp contrast with the mainstream insistence on a uniform propensity to save that is independent of distribution. Observe that the “neo-Keynesian” tradition,²² in which we would situate our own view of savings and investment, has in some respects parted company not only with the mainstream but, arguably, with Keynes himself.

Our view of saving differs from the mainstream of the profession for two reasons. First, when we speak of “saving” we have something very different in mind from what the mainstream intends by this term. In the mainstream view, saving consists of additions to the stocks of *all* durable goods, whereas our interest focuses on plant, equipment and related “productive” capital.

Second, we mean something very different by the term “household.” In accordance with the logic of their theory, purists in the mainstream attribute virtually all saving to households by reason of the beneficial ownership that one way or another is attributable to households. In our view, saving by organizations like corporations

²² See Footnote 5.

and pension funds is not reducible to households, at least not behaviorally, whatever the legal situation might be.

At issue here is an important difference with the mainstream as to how saving behavior is to be viewed. The mainstream sees saving behavior, like all economic behavior, as purposefully calculated: the preferred models, like Modigliani's life-cycle hypothesis or Friedman's permanent-income hypothesis, are concocted in terms of utility maximization over a long period of time. It obviously fits such a framework to assume that households take account of the saving done by the corporations or pension funds of which households are beneficial owners. The corporation or pension fund is in effect simply an extension of the household.

We see households as more reactive than reflective, for the most part responding to the stimulus of income by the action of spending, with some saving taking place as incomes rise simply because there is a lag in the adjustment process. There are, to be sure, exceptions: the salaried professional whose life prospects are reasonably certain and whose life experience reinforces the notion that he or she is "in control" – a necessary precondition for the utility-maximization framework to make psychological sense.²³ And then there are the rich and super-rich – about whose saving behavior we know next to nothing.

Since we regard long-period utility maximization as an exceptional basis for household saving behavior rather than the normal basis, we consider corporations and pension funds to be distinct behavioral entities, which cannot be assimilated to households. Unlike the "assimilationists,"²⁴ we regard the relatively high observed rates of corporate profit retention as indicative of a structural relationship between profit and saving – not the mere substitution of one kind of household saving for another.

For all these reasons, we put relatively little emphasis on the household as a source of saving in the modern capitalist economy (Japan being in this, as in other matters, a striking exception to the general pattern). Our working hypothesis is that the more income stays in the hands of organizations like the corporation and the pension fund, the higher will be the community's propensity to save.

²³ A colleague once observed that the life-cycle hypothesis is exactly the theory of saving behavior one might expect of a middle-aged college professor!

²⁴ See, for example, Martin Feldstein, "Tax Incentives, Corporate Savings, and Capital Accumulation in the United States," *Journal of Public Economics*, 2 (1973):159-171.

But the role of profits in determining the propensity to save is only part of the story, and the other parts of the Marxian and Keynesian theories are very different, indeed diametrically opposed to each other, despite the fact that the rate of profit is central to both. The Marxian theory focuses on a chain of causality running from real wages and productivity to the rate of profit, whereas the Keynesian theory emphasizes the interconnections between profit and investment *demand*.

Marx begins from the notion of a “subsistence wage” inherited from Smith and Ricardo. Although Marx went to great lengths to emphasize the historical, social, and moral elements that enter into wage determination, “subsistence” still suggests to many a biologically determined standard of living bordering on malnutrition or even starvation. In our view, it is not biology but community standards which play the central role in determining real wages.

Community standards depend in large part on the course of class struggle and the balance of class power between capitalists and workers. In part, the norms that govern real wages come out of a shared cultural tradition about what constitutes a fair day’s pay. Wages are thus a matter of *convention* in two senses of the term, one being the idea of custom, the other the idea of an agreement, accord, or contract. Indeed, “conventional wage” better fits our understanding of the Marxian view of wage determination than does the older terminology of subsistence, with its misplaced connotation of a biologically determined wage rate.

Over a period of time like the one this book covers, the conventional wage cannot be conceived of as an unchanging norm: productivity growth must be reckoned in. However, it is not primarily through the demand for labour, as mainstream theory would have it, that productivity has affected wages. Rather, it is through the cultural assumption, common to the advanced capitalist countries, that workers may, by right, lay claim to a share of productivity growth. Community standards combine with the power of the working class to dictate that wages should rise roughly in line with productivity. As time goes on, the presumption of wage growth takes on a life of its own, in the form that collective bargaining agreements assume and in the general expectations of workers and capitalists. It was precisely the persistence of the momentum of wage growth as productivity growth declined in the late 1960s which led to profit squeeze in most of the industrialized capitalist world.

It will immediately occur to many to ask how a conventional wage can suspend the laws of supply and demand. The answer lies in that, in the Marxian perspective, demand and supply operate quite asymmetrically in the long run. Over the long period the supply of labour is highly elastic at the conventional wage because of the “reserve army” of labour. The reserve army is not a static concept, not a number of bodies to be counted, but a force which expands (and contracts, albeit with greater difficulty and a consid-

erable lag, hence the problem that Rowthorn and Glyn²⁵ address) to fit the needs of capitalist growth.

Students of economic development will recognize the reserve army as an adaptation of W. Arthur Lewis's "unlimited supplies of labour."²⁶ Intended by Lewis as a description of poor, densely populated countries, particularly in Asia, this conception, in our view, is equally applicable to the capitalist economies of Western Europe, North America, and Japan.

The post-war reserve army was constituted out of a variety of sources. In virtually all the capitalist countries, workers were drawn from the farm and the kitchen: the agricultural labour force shrank to insignificance and women entered into capitalist production in increasing numbers. Europe (and Canada) also relied heavily on immigration, as the United States had done in an earlier epoch of expansion.

With the labour supply highly elastic at the conventional wage, the wage rate is in the first instance a supply side issue. In our perspective, the main impact of demand is on output and employment. The demand for labour operates on the real wage only indirectly, through its impact on the conditions of conflict and accommodation.

The determination of wages gets us halfway to the determination of profits. The other half of the Marxian story is productivity. Mainstream views emphasize technology to the virtual exclusion of other considerations in telling us how to think about productivity. In the Marxian perspective, technology is an important but not the sole determinant of productivity. Productivity also depends upon the system of production which, under capitalism, reflects both the underlying antagonism of the interest of bosses and workers and the accommodations made to allow the two classes to get on with the business of production in spite of their fundamental differences. Once again, naked power and cultural norms both play a role; together they determine what is acceptable as a "fair day's work," the other side of the coin of a "fair day's pay." Mechanisms of labour extraction, ranging from close supervision and monitoring to the payment of efficiency wages, are ways by which the capitalist seeks to enhance labour productivity. "Stints" and "pacing" are ways by which workers defend themselves. The important point for present purposes is not the specific accommodation through which

²⁵ Bob Rowthorn and Andrew Glyn, "Coping With Unemployment: Some Success Stories," WIDER Working Paper, Helsinki: 1988.

²⁶ See W. Arthur Lewis, "Economic Development With Unlimited Supplies of Labour," *Manchester School* 22 (May 1954): 146. Widely reprinted.

the conflict is resolved, but the idea that conflict and accommodation take place, are central to the determination of productivity, and change over time as economic, political and social conditions change. Since productivity is central to profitability, the rate of profit cannot be reduced to the operation of technological parameters mediated by impersonal markets.

The Marxian theory of growth, to summarize, starts from the conventional wage and the system of production to determine the rate of profit. The propensity to save out of profits determines the rate of growth of the capital stock.

This is of course not the only possible interpretation of Marx. The labour extraction model developed by Bowles and Boyer²⁷ is firmly grounded in the Marxian distinction between labour and labour power and on this basis argues for a positive relationship between the wage rate and unemployment. In this model, the reserve army fails to adjust the supply of labour in time; it reacts to an increase in labour demand by increasing the supply of labour, but too late to avoid a squeeze on profits. This profit squeeze reflects the fall in the cost of job loss, which both induces workers to produce less and requires capitalists to pay them more.

Although the labour-extraction view of the labour market is different from one that emphasizes the endogeneity of the labour supply, the two views can be reconciled: the labour supply can be taken as endogenous in the long run but fixed in the short run. This would make the dependence of labour-extraction on the unemployment rate a phenomenon of the short run of the business cycle, and open the door to a different explanation of profit squeeze in the long period. Labour extraction would remain an issue in the long period, but be tied less strongly to the unemployment rate and more strongly to long period changes in the realities of class relations and perceptions of those relations on the part of both capitalists and workers. These long period changes would replace the unemployment rate as the central explanation of the change in the relationship between wage growth and productivity growth that occurred in the late 1960s and early '70s.

Formally, the difference between the two explanations is that the "class relations" model interprets profit squeeze as a shift in the aggregate supply schedule relative to a fixed aggregate demand schedule, whereas the "unemployment" model interprets profit squeeze as a shift in the aggregate demand schedule along a fixed aggregate supply schedule. Of course, this puts the difference between the two models in the starkest possible way. In fact, the two

²⁷ Samuel Bowles and Robert Boyer, "Income Distribution, Labour Discipline and Unemployment" WIDER Working Paper, Helsinki; forthcoming.

papers which attempt to apply formal models to the question of profit squeeze, tell more nuanced stories, in which both aggregate demand and aggregate supply schedules shift.²⁸

Neo-Keynesian theory, it has been observed, shares the Marxian view of saving as a function of the distribution of income. Where it offers a novel and distinctive interpretation of growth is in its emphasis on the capitalist as investor, and particularly on his psychological state as a determinant of the propensity to invest. In the neo-Keynesian view, businessmen as a class, if not individually, have the power of self-fulfilling prophecy. Suppose businessmen are optimistic about the future and therefore about the prospects for profit, and that they are consequently disposed to take a chance in committing their capital to specific forms, as *investment* requires but *saving* does not. Then investment demand will be high and the rate of profit will have to be high in order that the requisite saving be forthcoming; that is, in order that the demand for investment and the supply of saving be equal, as macroeconomic equilibrium requires. By the same token, if investors are pessimistic and little investment demand is forthcoming, the rate of profit required to equate desired investment with desired saving is relatively low. In short, the “animal spirits” of businessmen, their state of confidence, rather than rational calculation, brings about a corresponding state of affairs. As Keynes put it in the preface to *Essays in Persuasion*, “There is a subtle reason drawn from economic analysis why . . . faith may work. For if we act consistently on the optimistic hypothesis, this hypothesis will tend to be realized; whilst by acting on the pessimistic hypothesis, we can keep ourselves forever in the pit of want.”

This is not the place to elaborate the neo-Keynesian theory of investment in any detail. Suffice it to say that a variety of auxiliary assumptions are entailed in the neo-Keynesian view. These range from endogenous, or at least passive, money to the assumption of slack resources, in the manner of a Marxian reserve army. Here we shall focus on only one of these assumptions, namely that adjustments in the real wage accommodate propensities to invest and save. The essential point is the sluggishness of money wages compared to prices: prices respond to demand with greater alacrity than do money wages. In the *General Theory*, this process accompanies changes in the level of capacity utilization and output, or rather

²⁸ Samuel Bowles and Robert Boyer, *op.cit.* and Stephen A. Marglin and Amit Bhaduri, *op.cit.*

²⁹ That ground is partially covered in Marglin and Bhaduri, *op.cit.*, 1988, and more exhaustively in Stephen A. Marglin, *Growth, Distribution, and Prices*, *op.cit.*, 1984, and Marglin, “Investment and Accumulation,” in *The New Palgrave*, John Eatwell, Murray Milgate, and Peter Newman (eds.), London: Macmillan 1987.

drives producers to change the level of capacity utilization, which adjusts in accordance with the dictates of profit maximization. But from the point of view of growth, it is changes in the distribution of income which are primary, and these changes can take place whether or not capacity utilization changes.

In short, in the neo-Keynesian view, it is investment and saving which jointly determine rates of profit and growth, even as each is separately determined by the rate of profit. Productivity is determined by technology, and the real wage is a residual, determined by the output that remains after businessmen's appetite for accumulation has been satisfied.

Evidently this is a very different point of view from the Marxian (not to mention the mainstream) view. In contrast with Marxian theory, the rate of profit and the rate of growth are determined by the macroeconomic structure. The system of production plays a role only insofar as it influences investors' animal spirits.

An obvious question at this point is whether two such diametrically opposed interpretations of the basic mechanisms of capitalist growth can be harnessed together into a single, coherent theory. There are at least three alternative tacks that might be followed. First, we might treat inflation as a safety valve which resolves the tension between the pressure of conventional wages and productivity and the pressure of aggregate demand on profits. Inflation can erode both the real wage *and* investment, as well as the real value of government spending, and thus "harmonize" the conflicting claims on a limited economic pie. In this hybrid of Keynes and Marx, conventional wages and productivity on the one hand and investment and saving on the other jointly determine the profit rate and the growth rate; each of these elements operates with diminished force relative to a pure strain of the Marxian or Keynesian model. This is the tack followed in Marglin (1984).³⁰

An alternative is to treat the conventional wage and aggregate demand and supply as constraints which may or may not be binding. That is, the space of outcomes is partitioned into distinct sub-spaces, each associated with a regime in which the conventional wage *or* aggregate demand (*or* supply) drops out of the picture. This "regime" approach is followed by Edmond Malinvaud (1980) in a somewhat different context.³¹

A third possibility is to drop the assumption that producers determine output by profit maximization but retain the notion that capacity utilization responds to aggregate demand. In this model, aggregate demand affects the profit rate solely through the effect

³⁰ Marglin, 1984, *op.cit.* ch. 20

³¹ Edmond Malinvaud, *Profitability and Unemployment*, Cambridge: Cambridge University Press, 1980.

on capacity utilization, whereas the real wage is not determined by capacity utilization alone. This model, unlike the pure Keynesian one, has room for a Marxian conventional wage. Michal Kalecki³² is the intellectual father of this approach, although in Kalecki the conventional wage is transformed into a mark-up determined by what he calls the “degree of monopoly.” The papers by Marglin and Bhaduri (1988) and by Bowles and Boyer (1988) can be interpreted as Kaleckian hybrid’s, Keynesian model’s with an admixture of Marx. The difference between the two is that Marglin-Bhaduri emphasise the investment function and Bowles-Boyer focus on the labour extraction function. In this sense, the two papers are complements rather than substitutes in the story they tell of the golden age and its demise.

None of these theories, however they might be combined with one another, offers more than a bare-bones analytic structure, an *approach* to understanding growth in the post-war capitalist economy rather than a detailed blueprint of how the post-war regime functioned. In particular, these theories do not have much, if anything, to say about the international economy, nor do they have much to offer on the relationship in the post-war regime of the state to other actors in the economy.

The basic premise of this research in respect to both the state and the international economy is more Marxian than Keynesian: the state and the international economy are each regarded fundamentally as arenas of conflict. This approach does not however prevent at least some of the contending players from mutually benefiting from compromise and agreement, explicit or tacit, which may endure for substantial periods of time. This was the case, at least until the golden age began to tarnish, both as regards the internal class compromise that governed the intervention of the state in the domestic economy and the international understandings that underlay American hegemony.

Beyond Keynes and Marx

A major innovation of this WIDER project is the attempt to situate the theory of growth within an institutional framework, and to explain the successes and failures of the post-war regime in terms of the mutual interaction of these institutions. One virtue of this approach is that it allows us to transcend the reductionism inherent in separating the analysis of the internal and external aspects of the golden age. Not only does the emphasis shift from “external shocks” like OPEC I and II (which became symptoms rather than

³² Michal Kalecki, *Selected Essays on the Dynamics of the Capitalist Economy*, *op.cit.*, 1971, Chapters 1-8.

causes) to more fundamental issues, but individual causes are seen in their relation to the whole. The question no longer is whether the demise of the golden age was the result of the breakdown of internal cohesion of the productive system or the result of the breakdown of international arrangements. It becomes instead how the internal and international institutions played upon each other and how these institutions stopped reinforcing one another and began to undermine each other, in short, how the successes of individual parts of the system bred failure of the system as a whole.

Major policy conclusions follow from this way of looking at things. The first is that partial solutions which deal with only one aspect of the problem – the internal or the international – are likely to be temporary stop-gaps at best. For example, coordination of economic policies might reproduce the international Keynesianism that characterized the last phase of American hegemony in the 1960s. It is quite likely that such a measure, permitting a simultaneous expansion of the major industrial economies, would provide substantial relief on the employment front, but since coordination fails utterly to address the problem of profit squeeze, it could hardly make much of a contribution to restoring the growth rates of the golden age.

By the same token, austerity and liberalization, the conventional wisdom practically everywhere in the capitalist world today, would at best address only part of the problem. Even on the most optimistic assumptions about the effects on worker motivation and in turn on labour productivity, it is unlikely that capitalists would respond to higher profit margins with a higher rate of accumulation; the uncertainties of the international economic order are likely to dampen investor enthusiasm as fears of major depression did earlier. Even more telling, the benefits would at best be temporary. Given the dominant system of production and rules of coordination, any policies which are successful in maintaining a high rate of growth and employment over a substantial period of time must undermine the effectiveness of the carrot and stick in calling forth the best efforts of workers.

We believe that full employment and high growth can be restored, but only on condition that policy makers face up to the need for a profound restructuring of the system of production, and along with it the rules of coordination, the macroeconomic structure and the international order. A common element in the success of small countries like Austria, Norway and Sweden in maintaining employment levels through the last decade is the muting of the antagonistic basis of the capitalist system of production. This too is the “secret” of the Japanese model; indeed a kind of corporatism permeates the Japanese model even more thoroughly than it does that of the successful European countries.

It must be admitted that these alternatives raise many questions. For one thing, we have very little understanding of how macro-

micro links would develop under alternative structures, that is. how the macroeconomic structure would connect to the system of production and the rules of coordination. For example, what would be the connection between wages, productivity, investment and growth? Is the goal to break the link at the connection between profitability and investment, to provide mechanisms of accumulation which do not depend on the expectation of profits to induce demand and the realization of profits to supply savings? Or should the goal be the more modest one of finding a new bargain between labour and capital which realistically promises a substantial period of both high profits and high employment? Should we, for example, envision trading wage restraint for greater democracy and participation in production decisions?

Finally, it must be recognized that, however necessary, no reform of the system of production itself will be sufficient for a renewal of prosperity. There must as well be a restructuring of capitalist economic relations internationally. A central issue here is whether there are alternatives to hegemony. If no single country any longer has the political and economic clout to dictate to the others, is there nevertheless a set of practices, a system of behaviour, which one or more major powers can follow in order to induce cooperative behaviour on the part of the others?

In the answers to these questions may lie the future of capitalism.

APPENDIX I

Outline of Project

The macroeconomic research project was set up at WIDER in the summer of 1985. (A list of participants of the research group is provided in Appendix II.) The project sought to understand the making and the unmaking of capitalism's golden age in terms of the arrangements which fostered sustained growth and high unemployment in Northern and Southern countries alike after World War II, and the forces which began to undermine the effectiveness of these arrangements in the 1960s and, increasingly so, in the 1970s and the 1980s. A particular focus was the interplay of external and internal considerations in the determination of growth and employment.

On the basis of initial discussions, a total of 14 research papers were commissioned to examine at various aspects of this debate. These papers were presented in draft form at a research conference held in Helsinki from August 12-14, 1986. Revised papers, incorporating comments and suggestions from the conference, are being published in the form of two volumes.

The first volume, which analyses the causes and consequences of the vulnerability to external shocks and poor economic performance of Latin American countries in the 1980s, particularly in comparison with East and

South Asian Economies, is tentatively entitled *No Panacea: The Limits to Economic Liberalization*. The second volume is entitled, *The Golden Age of Capitalism: Lessons for the 1990s*. Appendix III gives the tables of contents of these two volumes.

Openness, Autonomy and Vulnerability

The papers collected in the first volume, despite differences of emphasis, are remarkably cohesive in terms of their analysis of the causes and consequences of the higher vulnerability of Latin American economies to the external shocks of the 1970s and 1980s. All reject currently fashionable single-cause theories, such as inappropriate exchange rate regimes, or misguided policies of import substitution. Going beyond negative agreement about how *not* to analyse the problem, these papers emphasise the importance of the historically-evolved political and social context as a transmission mechanism for the effects of external shocks, such as changes in terms of trade, the costs of debt service, flows of new capital, and the global recession. The policy implication is that any uniform medicine – such as the orthodox medicine of devaluation, liberalisation, and contraction – is likely to be counter-productive, in Latin America particularly. For policy to be effective, it must take account of the diversity of the political and social environment in which the economy operates.

The Golden Age

The second volume analyses the rise and fall of the golden age of capitalism in order to find ways of understanding and ameliorating current global economic problems. We make two passes at this target, one historical and one theoretical. The historical section consists of two chapters. Chapter 2 discusses the historical evolution of the key arrangements which together provided the historical framework of the post-war regime. Chapter 3 analyses the evolution of a particularly important aspect of the macroeconomic structure, namely, demand management. Once again the focus is on the interaction of this part of the puzzle with other parts; a key question is how monetary policy relates to other forms of government intervention in the management of aggregate demand – fiscal policy, trade policy, and policies dealing with capital flows.

The next section analyzes two features of the historical narrative, the investment climate and its impact on accumulation and growth (Chapter 4) and capital:labour relations (Chapter 5). These chapters are intended to serve two purposes; first, to spell out more precisely our view of the relationship between key features of the macroeconomic structure and the system of production, and, second, to analyse how the evolution of the investment climate and labour:capital relations affected, and was affected by, the evolution of other features of the post-war regime. Thus the historical and theoretical sections complement each other.

The last section is an attempt at applying the lessons of the past to the future. Chapter 6 analyses the characteristics of those countries which have maintained high employment levels after the golden age, and focusses on four countries – Austria, Japan, Norway and Sweden – which have been particularly successful. It should be noted at the outset that these “star performers” have been less stellar in maintaining high rates of growth. Nevertheless the experience of these five countries is important in indicating both common features and differences in ways in which the system of production and the rules of coordination can successfully cope with economic adversity. Chapter 7 discusses the question of restructuring labour:capital relations; an important implication of the historical and theoretical analysis of Sections I and II is that fundamental reorganization of the system of production is a precondition for the resumption of growth on a sustainable, long-term basis. Recognizing this necessity we, like many social scientists before us, have been drawn to Japanese labour:capital relations as an alternative to the model that has dominated in the West. We share the widespread view that the West has much to learn from Japan, but as Chapter 7 shows, we believe the proper lessons are generally obscured by the rhetoric and hype of special pleading using “made in Japan” to impress the audience. A concluding section of this chapter poses the question of the “exportability” of the Japanese system of production: to what extent can specific techniques that have proved successful in Japan be transplanted to Western soil?

APPENDIX II

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2. The World Economic Slowdown and the Economy, by Alan Hughes and Ajit Singh
3. Economic Institutions and Policy Constraints: Lessons From Latin American and Asian Experiences, by Edward Amadeo and Tariq Banuri

Part Two: Openness

4. Economic Openness: Problems to the Century's End, by Lance Taylor
5. Financial Openness and Economic Policy: A Comparison of Latin America and Asia, by Tariq Banuri

Part Three: The Developmentalist State

6. Latin America – Performance and Policy, by Albert Fishlow
7. Worlds Within the Third World: Labour Market Institutions in Latin America and Asia, by Tariq Banuri and Edward Amadeo.

THE GOLDEN AGE OF CAPITALISM: LESSONS FOR THE 1990s

1. Introduction, by Stephen A. Marglin
2. The Rise and Fall of the Golden Age, by A. Glyn, A. Hughes, A. Lipietz, and A. Singh
3. Macropolicy in the Rise and Fall of the Golden Age, by Gerald Epstein and Juliet Schor
4. Profit Squeeze and Keynesian Theory, by Stephen A. Marglin and Amit Bhaduri
5. Income Distribution, Labour Discipline and Unemployment, by Samuel Bowles and Robert Boyer
6. The Diversity of Unemployment Experience since 1973, by Bob Rowthorn and Andrew Glyn
7. A New Paradigm for Work Organization: the Japanese Experience, by Masahiko Aoki