INFLATION!
A STUDY IN STABILITY

J.W.C. CUMES

PERGAMON PRESS AUSTRALIA

Pergamon Press (Australia) Pty Limited, P.O. Box 544, Potts Point, N.S.W. 2011
Pergamon Press Ltd, Headington Hill Hall, Oxford OX3 OBW
Pergamon Press Inc., Fairview Park, Elmsford, NY 10523

Cover design by Allan Hondow

Typeset and printed in Adelaide at The Griffin Press

Registered in Australia for transmission by post as a book

National Library of Australia Cataloguing-in-Publication entry:
Cumes, James William C.
Inflation!: a study in stability/by J.W.C. Cumes. —
Rushcutters Bay, N.S.W.: Pergamon Press, 1974.
Index.
ISBN 0 08 018167 8

1. Inflation (Finance). I. Title.

332.41

I
Introduction

Economic theories and policies operate in a constantly changing context. We like to think that human societies move ahead. Sometimes indeed they do. But whether the criteria for 'progress' are satisfied or not, the criteria for social change certainly are. Sometimes the change is relatively slow, as in the Middle Ages; sometimes it is fast, as in the industrialising countries in the last couple of centuries; sometimes it comes with a speed that threatens to shock the individual's equilibrium, as during the last few decades in most countries.

If economic theories and policies do not adapt to these changes the results could be disruptive and might be disastrous. In saying this, we must bear in mind that economic policies that may have been thoroughly valid in the context in which they were originated, are themselves responsible for not only economic but also social and political change. New economic policies create new human situations. The extent of the novelty depends on the degree of novelty in the economic policies. A change from a plural, free-enterprise economic system to one of monolithic public ownership and management creates such fundamental transformations that the human situation is radically different and is clearly seen to be so.

Changes falling much short of this produce a new human situation whose novelty may not be so obvious.

Nevertheless, failure to recognise and act upon the change may cause serious and continuing disruptions.

Let us be a little more specific. The Keynesian solutions of the period after the Second World War were seen by some to rescue the private-enterprise system, to solve the problem of widespread unemployment, to enable the non-socialist industrial economy to operate at a high level without the periodic crises of the nineteenth and earlier twentieth centuries. Keynesian policies represented, for many people, *remedies*, not change. They restored the virtues of the free-enterprise system; they did not do away with that system or modify it in any fundamental way.

Was this in fact the case? Were Keynesian policies a means of enabling the existing economic system to continue fundamentally unchanged? Would we have a continuing economic 'progress' based on the same methods and procedure as far ahead into the future as we could see?

If the answer to these questions is in the affirmative, then obviously we (or the traditional capitalists amongst us) were on to a good thing. We had a formula ready-made for all time—or all time that we could reasonably foresee. Moreover, we had done something which was historically unprecedented: we had managed to freeze a human situation at a certain point of time. All that we had to do was refine, not change, our ways of dealing with that deep-freeze situation.

Unfortunately, the management of human societies is not as easy as that. Human societies, as we have noted, are in constant flux, only the rate of change being subject to inconstancy. Especially in the last few decades, the rate of change in the advanced industrial societies has been enormously rapid.

But, in terms of economic theories and policies, we have behaved as though these societies have been static and as though the economic theories and policies inaugurated at the beginning of the period have not changed but have rather preserved these societies in their deep-freeze. Keynesian policies of the 1940's are, so the adherents to the static assumption would say, still good in the 1970's. Unfortunately, most of us *are* adherents to the static assumption. We become fixed in our attitudes and our rules. We do so even when almost everything else, not subject to our control, is changing around us. Perhaps we are even more victims of the static assumption when everything is changing. We are all, in some ways, Charlie Browns; we all need the comfort of our familiar blanket. We all love to reach for the stars—and hope we'll find a three-bedroom brick veneer when we get there.

This is not the whole explanation of our persistence with relatively unmodified Keynesian policies. But, whatever the complexity of the reasons, the fact of the persistence is undoubted. Over three decades or so, Keynesian economic policies have themselves changed the economic, social and political context in which they operate. The situation that they were designed to deal with has passed. The situation that they are now applied to does not respond to them. They are, of course, not wholly without merit. We cannot abandon them and return to the chaos of the 1930's. In any event, that sort of historical return to square one is just not possible. The 1930's are a part of history that will never be recreated in quite the same way. But Keynesian policies should also now be a part of history. They have served their purpose and are outworn. If we persist with them, the 1970's and perhaps the 1980's will be a period of chaos with its own unique characteristics but still as terrifying in its way as the 1930's.

That, I think, is the first point and what follows in this book will seek to explain something of the nature of the new economic situation and the ways in which we should deal with it. But there are many aspects of the present human situation with which this is associated and, to set the context, let us look at what, in broad terms, confronts the person born into our world today.

On 1st January 1974, about 360,000 children were born throughout the world, about 240,000 of them in Asia. By the end of this year, about 131 million children will have followed them, two-thirds of them in Asia. Fifteen to twenty-five years later, depending on the time they spend in training, they will be confronted with the problem of earning their living.

When they do—between 1989 and 1999—the environment in which they will live and the economy from which they will seek their livelihood will be very different from what they are now. So will the market in which, as consumers, they will seek their many satisfactions. So different that it will be a fundamentally changed world from that which we know today.

Not entirely, of course. Some things will never—can never—change. Man will always need those basic things which are essential to sustain life. He will still need to breathe air; and especially those of us who are old enough to remember a poor but unpolluted world know that both affluence and breathing breathable air are costly, each in its own way. He will still need food—although the form and fashions might change—and he will need shelter in the form of clothing, housing and a domestic and working environment which are adjusted to that relatively small band of temperatures which man finds comfortable or at least tolerable.

All these things he will still need. But, with a little bit of luck, he won't have any trouble getting them. For the most part, he will take them for granted. He will eat what he wants when he wants. He will be as warmly clothed as he wants to be; and he will have all the shelter he wants acclimatised to his personal—or his very nearly personal—needs.

So he'll take the basics for granted. Those which are marketable he'll buy in the market. But he'll expect the market to provide a great deal more than his basic needs. The market for basics will not be negligible and it will be subject to the consumer's choice—probably a wider choice even than today—but there will be a questing for things other than basics and it is here that the greatest challenge will emerge both for the consumer to conceive or react to new satisfactions and for the producer to provide them.

The margin for expenditure above fundamental needs will, in the future world economy, be vastly greater than it is now. Let us suppose that private consumption per head of today's consumer is $2,000 a year[1]. It is not unreasonable to suppose that seventy-five per cent of this—or $1,500 a year—is spent on necessities or near-necessities, leaving twenty-five per cent or $500 a year on which each person may exercise a wider option unconnected with the fuelling and protection of his fragile human frame.

But, if the experience of the recent past continues, we can nourish a reasonable expectation that per capita income will increase, in real terms, at something like five per cent a year. Sometimes the rate of improvement will be much greater than this; sometimes—depending on the wisdom of our economic policies—it will be rather less. But it is not unreasonable to hope that per capita income will double about every fifteen years. Therefore, by 1989, real private consumption of our notional consumer will have doubled from $2,000 to $4,000. Expenditure on necessities and near-necessities will, at constant prices, be

[1] In 1971, it varied from $3,230 in the United States, through $2,450 in Canada and $1,910 in Germany to a low of $1,120 in Japan, among the developed industrialised countries of OECD (that is, excluding Ireland, Greece, Spain, Turkey, Portugal and Yugoslavia where the figure—for Turkey—dipped as low as $230).

still only $1,500. Expenditure on those things which are a matter not of necessity but purely of choice will therefore increase from $500 a year to $2,500. While real income will have doubled, expenditure on non-necessities will have increased five times.

This in itself will introduce far-reaching changes into the future economy. The exercise of choice will be available to mankind to an extent that we have never known before.

There are of course a couple of qualifications to be made to this. There always are. All those millions of people born in 1974 were not born in developed countries. Nor did they all have a per capita income of about $2,000. In fact, most of them had much less than that. Most of them were born in developing countries and many had a per capita income of around $100; some of them had more, of course, but many of them had less.

These were the millions of people with whom the population explosion is most normally identified. Those few thousand children born in the rich countries on 1st January 1974, were not really part of a population explosion at all nor were they ever likely to become part of one[2]. They would, for the most part, replace their mothers and fathers and, in turn, produce just about enough children to replace themselves. But that is all. They would, by and large, be fascinated spectators of a population explosion occurring somewhere else.

That somewhere else would be in the poor countries—the same in which most people would continue to have a per capita income not too much greater than $100 at constant prices, rising often quite quickly in percentage terms but remaining small in absolute terms even if it doubled to $200 by, say, 1989. So there would be two

[2] The United States population of 212 million in 1974 is likely to be 250 million in 1994, an increase of eighteen per cent in twenty years. In the twenty years before 1974, it increased by thirty per cent.

world economies—or two major parts into which the world economy would continue to be divided. The one would be rich and relatively static in population; the other would be poor and increasing rapidly in numbers. We can of course hope that some countries would move out of the latter category into the former, but the existence of the two fairly clear categories is likely to persist as far ahead as we can see at the moment.

There will be other differences. People will have greater mobility of occupation and location; they will be freer to choose when to work and when to play. The rich countries will be polluted—or will have to take special and sometimes quite stern measures not to become or remain polluted. The poor might not suffer so much from pollution, just as they might suffer less than their richer brothers from the other luxuries of material civilisation. And the traditional environment will continue to surround them longer and more completely than for the rich. They would continue to be—wars, revolutions and natural disasters excepted—the areas of 'tranquil boredom';[3] the rich countries might, both in their individual citizens and as communities, continue to be afflicted with a 'destructive neurosis'.[3]

But it will not be as simple as that. Tranquillity will not be uniquely the possession of the poor; nor will wealth necessarily bring only destructive neuroses and creeping pollution. It may well be that the good things we think we can look forward to will prove to be a chimera. It may be that the world's people face a future of increasing chaos and disruption, with a substantial recession from the levels of economic well-being, the degree of political stability and the relative assurance of national and individual security that we have recently experienced.

[3] Fowles, John, *The French Lieutenant's Woman*, (Little, Brown & Company, 1969), p. 19.

Much will depend on how poor communities use their talents and opportunities and, perhaps most of all, how the rich countries manage their vast and complex estates. Let us turn to this problem of estate management by the rich.

II
Estate management by the rich

The nature of the world's material civilisation in the rest of the twentieth century and beyond will depend to a large extent on how the rich countries manage their own economies. This does not mean that what goes on in developing countries will be unimportant. Certainly the Arab use of the oil weapon has established the power of the holders of key resources. But, within those important limits, the developing world will still tend to be peripheral and dependent rather than central and generative of its own initiatives. The shape of the world will tend to be formed by the initiatives of the rich, even given that they might be prodded into those initiatives, for example, in the field of energy, by the power of the less developed and sometimes by the 'power' of the poor.

The management of their own economies by the rich will call for new departures. It will not be enough simply to continue the policies of the past. Those policies, based essentially on the theories of John Maynard Keynes, were extraordinarily successful and valuable in achieving dynamic and relatively stable economic growth—and doing so within a fairly liberal political system—in the couple of decades after the Second World War. But these policies themselves constituted a revolution that fundamentally changed the environment in which they operated.

It is vital that this element of change be kept constantly in mind. A palpable truth of a plausible theory in one period can be seen quite evidently to be a nonsense some years later. 'The extraordinary productiveness of modern industry', Karl Marx wrote in *Das Kapital* in 1867, 'allows of the unproductive employment of a larger and larger part of the working class, and the consequent reproduction, on a constantly extending scale, of the ancient domestic slaves under the name of a servant class, including men-servants, women-servants, lackeys, etc.'

In at least one sense, Marx was right. As the industrialisation process matured and as incomes rose, the demand for services greatly increased. However, that is about as far as his 'rightness' went. The demand for services became so great and the sellers of labour were able to get so much better prices and conditions for their product that they were able to move almost entirely out of domestic service and there was—unfortunately in some respects—the very reverse of the 'reproduction, on a constantly extending scale, of the ancient domestic slaves under the name of a servant class, including men-servants, women-servants, lackeys, etc.'

The vast expansion of the demand for services, quite outside the sphere of traditional domestic service, was in part responsible for marking down as a fallacy also the claim of Marx that 'the extraordinary productiveness of modern industry' made a large part of the labour force redundant. In fact, the very opposite has happened—although it must be conceded to Marx that this has been obvious only during comparatively recent years, at most a couple of decades or so, and was by no means obvious during nearly a hundred years after Marx wrote. Although for this period of close to a century production did seem constantly to outrun or threaten to outrun demand, it does not do so now. On the contrary, demand now tends constantly to outrun supply. We do not even now always recognise that such a change has taken place. We often look at economic problems with an eye adjusted to focusing on issues belonging to an earlier era. We tend still to think that production is likely, at any moment, to outrun demand. We still think in terms of the dangers of people being thrown out of employment through an underlying chronic insufficiency of demand or technological advance. We should know that the world we live in now is not the world we lived in a generation ago. But sometimes we act as though we do not. Perhaps, indeed, some of us do not really know just how much the world has changed in the last couple of decades. This is, therefore, something at which we might now look.

When Marx wrote, the chances of a stable, continuing equilibrium at a high level of employment and output seemed small. Effective demand was inadequate and unstable. The domestic market—as Marx rightly implied—could not keep pace with the bounding capacities of production. Some relief could be sought outside the domestic market. And it was sought, partly by colonising territories which then became, to a greater or lesser extent, the commercial preserves of the colonising power. What Marx failed to recognise, however, was that, even in the middle of the nineteenth century, the beginnings of affluence were emerging throughout the whole community, including even the domestics whom he derided as slaves under a different name.

True, the affluence was only beginning. And it was a tender, uncertain, unstable growth. A brilliant period could be—and usually was—followed by a bitter recession in which the poor and those just emerging into a greater affluence were among the first to suffer. Depression followed boom with melancholy regularity. Unemployment and economic distress were always not very far round a not very distant corner.

But the beginnings were there, even in the mid-nineteenth century, of what was to make a nonsense out of what Marx had written. All that was needed was, firstly, greater affluence of everyone and, secondly, more assurance that it would persist. The need was not to create what the layman means by demand but to make a virtually insatiable human demand effective and stable.

The greater affluence came, in a sense, more quickly than stability. From about the middle of the nineteenth century, the real income of the average man in the industrialising countries went up. Moreover, it tended, in one sense, to stay up, even in times of depression. Wages remained at their pre-depression levels even when the economy went into a slide.

The pessimists, of course, said that this was why the economy slid and/or continued to slide. 'The logical corollary of the classical position was that, if there was unemployment (other than frictional, transitional, etc.), that was a sure sign that labour, organised in trade unions or otherwise, was refusing to accept a wage sufficiently low to secure full employment. . . . The further corollary was that, if labour consented to reduce wages sufficiently, employment would rise to the level of full employment.'[1] The classical economists thus assumed that there was a natural balance of economic forces which would redress any disequilibrium—provided those forces were allowed to have their way.

This leads to the second point that, whether these forces were allowed to have their head or not, persistent equilibrium at full employment was *not* a phenomenon characteristic of industrialising countries between 1850 and 1945. Quite the contrary. Slump followed boom in a dispiriting and debilitating cycle. That wages were too high was no consolation to the worker who was unem-

[1] Harrod, R. F., *The Life of John Maynard Keynes*, Macmillan, London, 1951, p. 454.

ployed and therefore getting none. There was indeed a secular improvement in average real income of the average man at the peaks of the booms—or at the equilibrium which, the classical economists claimed, should theoretically be a constant condition of the free economy. But, unfortunately, this theoretical equilibrium was attained less and less frequently and depression was more and more a constant condition during the earlier part of the twentieth century and especially in the 1930's.

So what had to be achieved was a stabilising of the economy at or near the full employment level. Against the background of the 1930's, this was seen to be essentially a problem of expanding demand and keeping it expanded in a way that would realise this full employment goal. Investment as well as consumption expenditure would contribute to this demand; and both government and private enterprise would consume and invest so that their aggregate expenditure would employ the economy fully.

An important element in this theory was that demand tended, chronically, to fall short of the productive potential of the economy. This was the thrust of Keynes' *General Theory of Employment, Interest and Money*: 'it is an analysis of the possibility of stable equilibrium with high unemployment and no natural forces tending to redress it; a fall in wages will not avail. Employment is determined by total "effective demand", depending on the propensity to consume and the propensity to invest. From the propensity to consume the "multiplier" is derived; there is a certain amount of investment that the economy wishes to undertake, and this, together with the multiplier, determines how much employment there will be, which may be 100 per cent of full employment, fifty per cent, or any other figure. Only an increase of investment or an increase in the propensity to consume can raise the level. All alleged cures for unemployment can be judged exclusively by their effect on the propensity to invest or the propensity to consume.'[2]

The equilibrating agent in the exercise of keeping demand at the full employment level had obviously to be the government. No one else could do the job. This meant two things.

The first was that the passive role of governments in economic affairs was finished. What the government did was at least as important as anything that labour or employers or anyone else in the economy could do. In fact, it was much more important and each year that passed added to its stature in economic affairs. The government became increasingly an interventionist government—activist, stabilising, a major employer, consumer and investor.

The second element was that intervention led to massive government expenditure *all the time*. And the longer full employment—or something very close to it—was maintained, the more massive these expenditures became, both absolutely and as a percentage of gross national product, even though these expenditures might not be needed for stabilising purposes. The propensity to invest and the propensity to consume of the economy as a whole became much more a function of the government's propensity to consume and invest. This became the case at every phase of the 'trade cycle' (a phenomenon whose character changed during this process). Government economic activity became increasingly not merely an equilibrating factor but a continuing and increasingly massive dynamic element in the economy, month in and month out, year in and year out, whatever the rest of the economy was doing.

Of course, this did not mean that it lost its equilibrating function.[3] Not at all. That grew and burgeoned; although,

[2] Ibid., p. 457.

[3] 'The welfare state, however inadequate in actuality, is now a generally accepted model for all industrial societies, and brings with it a considerable degree of socialism in the form of guaranteed incomes, family allowances, public health assurance, educational subsidization of

as it did, many who participated in or observed the process, regretted that governments were not capable of the 'fine tuning' that was required. And they weren't. They became intrinsically incapable of this 'fine tuning' at all. In fact, governments weren't capable even of very unfine tuning. The implications of fine tuning were antithetical to the role governments had come to assume. This was simply because governments were doing something massively greater than their earlier conceived equilibrating function. Let us examine why governments failed in this way. Why was something that worked splendidly in 1945 so patently incapable of serving governments' purposes by the 1970's?

In 1945, the problem of stability was seen to reside in the need to maintain effective demand. Investment had to be kept high enough. Consumption had to be kept high enough. In aggregate, they had to employ the economy fully. The pervasive and constant danger was that demand would fall too low. So all the White Papers and other policy statements of 1945 and subsequent years contained proposals to keep it up or get it up again if it fell too low. Demand management was the problem. Government investment and consumption and redistribution of income were a large part of the solution. They were not the whole of the solution. Fiscal and monetary stimuli were also intended to stimulate private investment and consumption. Low interest rates and low (or reduced) tax rates would help an economy out of a slump. There were sometimes conflicts between, for example, the desire to redistribute income and the desire to stimulate private investment and general consumption by reduction of tax rates; but the

---

lower income groups and the like. The extreme vulnerability of the system to failures of aggregate demand has been tempered by the growth of a public sector' Heilbronner, Robert L., *Economics—Our Best Guide to the Future.*

general objective was to manage demand so that it would keep the economy zooming along at the full-employment level.

Production was not a problem. The assumption was that the secular trend was for production to be too high. Production always tended to outrun demand. When it did, the boom became converted into a slump. It followed that what you had to do was to control demand; if you did, production would look after itself. In discussing the phenomenon of inflation accompanying unemployment, an economics commentator asked, in October 1971, 'What, if not a fall in demand caused by lower incomes, caused production to fall?'[4] To him as to everyone else, production was a simple function of demand. Move demand up and production must follow. Move demand down and production would move down too. There seemed to be no conception that the attempt to move demand down might, in fact, move down only employment and production while aggregate consumer demand might be fully maintained or that the attempt might move employment and production down more than demand so that, in either case, the disequilibrium between supply and demand would not be reduced but increased by this attempt to reduce demand. Thus the attempt to reduce demand might intensify inflation rather than relax it.

There was a curious mental block in this. In an inflationary situation, it was always assumed that demand had got too high; it was never conjectured that production had got too low. The great Keynes had done his work too well. Or perhaps the period of depression in which he had laboured had furrowed the personalities of succeeding generations too deeply, so that the policy-makers who were to carry his theories into practice never rid themselves of the subliminal vision of the 1930's.

[4] Bracken, Warwick, writing in *The Canberra Times*, 27 October 1971.

True enough, when Keynesian policies were first used after 1945, demand management might have been enough. The economies of the major Western countries were then still fundamentally the same as in the 1930's. All that was added were policies of demand stimulation at a level of activity below full employment. But, as time passed, the maintenance of these policies and their implications for the role of government caused what Keynes, in speaking of other matters, had called a 'sea change' in the nature of the economy.

Government expenditures increased over the whole range of the trade cycle. Automatic stabilisers—some of them deliberate, some of them involuntary—were introduced. Social changes, which were partly a reflection of scientific and technological change and partly a result of an affluent, fully employed economy, occurred, and this imposed heavy and continuing expenses on government. Infrastructural needs increased as the economy developed technologically and as increasing affluence spreading through the whole community brought these technological benefits not merely to some but virtually to all.

So the economies of the 1930's became merely a relic of history, cruel and unforgotten but no longer relevant. This was so not only because of policies of demand stimulation but because the new economies that emerged after 1945 could, after a period, never again be subject to the nightmarish imperatives, largely involuntary, that had operated in the free economies before the Second World War. A policy of unadulterated and unrepentant demand management implied, first of all, a willingness deliberately to re-assert, if need be, those involuntary imperatives of the 1930's. In other words, if demand stimulation went too far, the process would be reversed to the extent necessary to achieve equilibrium in the same way as in the 1930's. Create unemployment; if necessary, let people starve. Cut social benefits. Reduce wages. If at first you don't succeed, squeeze harder. Increasingly, this just wasn't on.

But, in the second place, governments had such a substantive as distinct from an equilibrating role in the economy and such large continuing expenditures that they were progressively incapable of restoring equilibrium by adjustment of their own demand policies. Increasingly, the measure of their own demand was *a* if not *the* primary cause of the inflationary breakdown of the economy and they were unable to operate as an effective 'breakdown gang' for a breakdown they had themselves largely caused. This incapacity was, as we have seen, partly a reflection of the political impracticability of imposing on people, as a deliberate policy, the economic hardships of the 1930's; but it went beyond this. Increasingly, governments have had to do a number of things; they had to:

(i) Provide a complex material infrastructure for the economy (roads, airfields, bridges, dams, harbours, communications, etc.).

(ii) Provide what may be called a personnel infrastructure for the economy (primary, secondary and tertiary education, technical training and vocational guidance, employment service, etc.).

(iii) Directly operate certain essential services within the economy (postal, telegraphic and telephonic services, overseas communications, rail and sometimes road and/or air transport, etc.).

(iv) Transfer income from the more wealthy to the less wealthy in the economy (age and invalid pensions, unemployment, maternity and child benefits, etc.).

(v) Provide law and order services to maintain domestic peace and armed forces to safeguard national security.

All of these and other, especially welfare activities, mean that the governments of most of the developed economies now spend amounts equal to about one-quarter to one-third[5] of the gross national product. In all of the Organisation for Economic Co-operation and Development (OECD) countries over the period 1956-70 public expenditure increased at a rate faster than GNP. The income elasticity of public expenditure of OECD as a whole was 1.24. Within this overall figure, there was a variation extending from Norway, whose public expenditure increased at a rate forty-one per cent faster than GNP, through Canada thirty-four per cent faster, United States thirty-three per cent faster, Australia twenty-one per cent faster, United Kingdom and Germany eighteen per cent faster, Italy fourteen per cent faster, down to Japan only three per cent faster.

Within these total elasticities, there was a tendency for some functions to show a high elasticity in all or almost all countries. For example, public expenditure on education in most advanced countries increased at a rate forty per cent to 90 per cent faster than GNP, and health, social security and welfare, housing and other community amenities, and other community and social services tended also to be high although the pattern was erratic. The expenditure elasticity for defence was almost universally low, tending to increase at a rate substantially slower than GNP. Generally, public expenditures in areas of economic or infrastructure intervention have shown high elasticities while traditional heads of public expenditure have tended to increase more slowly in relation to GNP.

As this indicates, many elements of public expenditure have increased rapidly—in relation to GNP and still more rapidly in absolute terms. For example, expenditure

[5] Total current revenue was 49.1 per cent of GNP in Sweden in 1971, 44.1 per cent in the Netherlands (1970), 39.7 per cent in Britain (1971) and went down as low as 21.9 per cent in Japan (1970).

on education has increased enormously because of the higher school-leaving age and the much greater numbers now allowed, largely under government assistance, to stay on longer at school and go on to university. Moreover, expenditure on education is only marginally capable of reduction to relax pressure of public expenditure in an overheated economy. Some school-building might perhaps be deferred but more allowances might have to be paid to students because of reduced parental incomes in a government-induced recession. The great bulk of education expenditure just goes on—and goes on increasing—year after year, almost irrespective of the general condition of the economy.

Most other expenditure will similarly remain at a high level. There might be some peripheral cuts. Some reduction might be made in defence spending, by cancelling or postponing purchases of new military 'hardware'; but expenditure might still increase, in monetary terms, because of increasing wages and prices—that is, because of the very thing that has induced the government to act to stabilise the economy. Some government expenditures, especially transfer expenditures, will actually increase. Unemployment benefits will increase to the extent that the government-induced recession turns people, however temporarily, out of work.

At the same time, government revenues will decline; or what is just as important, they will increase more slowly than expenditure. The typical situation is one in which production declines and unemployment increases; but consumer demand and retail sales tend to be maintained or to increase, in real and certainly in monetary terms. So long as these two are maintained, it might be thought that government revenues should also be maintained, but the elements constituting personal incomes in recession tend to be less highly taxable than those in time of boom and company income declines. The net result is a fall in revenue at a time when built-in stabilisers become most potently operative and in a situation in which it is extremely difficult to cut other government expenditures. So the government contributes to an excess of demand over supply at the very time when it is adopting policies purportedly aimed at countering that sort of inflationary situation.

No two economies are the same. No two economies will therefore have precisely the same experience in an induced recession. But the broad features will be the same. Let us take the West German experience between 1970 and 1971 as an example. Over a twelve-month period, unemployment increased by fifty per cent (from ninety-eight thousand to 147 thousand); and the index of industrial production slipped by 1.7 per cent. However, overall earnings were up by 11.3 per cent; industrial sales increased by 3.8 per cent; and retail sales increased by 9.8 per cent. The retail sales increase was real and substantial, since the cost-of-living increase had been 5.9 per cent for the same period. Tax revenue available to the Federal and Laender Governments increased by 7.8 per cent, *at higher rates of taxation,* so that revenues increased in both monetary and real terms, although not as rapidly as overall earnings. One of the interesting features of the German experience between 1970 and 1971 was the decline in the production of and new orders for capital goods. Thus, there had been a disincentive to production while demand (as represented by overall earnings) increased substantially. The result was a movement in demand away from capital to consumer goods, leading to a steep rise in retail sales and a substantial rise in the cost of living. The disincentive to investment (which might otherwise have both boosted production to meet increased demand and diverted funds from consumption to investment goods) caused a substantial upsurge in savings deposits which increased by a massive 34.3 per cent over twelve months from August, 1970 to August, 1971.

Allowing for the peculiar characteristics of individual economies to which we have already drawn attention, much the same thing happened in Australia and other economies which experienced recession in 1970 and 1971. The similarities were too obvious and widespread to be accidental. All of the highly developed economies had progressed, in the post-war period, in much the same way. All of them applied much the same policies of demand management. The shortcomings of these policies therefore showed out in all of these economies in much the same way.

And all of them, after a time, showed a desire to reverse those policies of demand restraint used when strain showed at the upper level of activity of the economy. Demand stimulation was fine at the lower level but demand restraint proved impractical and ineffective at the upper level. After a period in which restraint was applied, therefore, theories and principles were abandoned and, despite the Cassandras who predicted more inflation, more instability and generally more economic disasters, policies of reflation were adopted. What this suggested was that governments realised that the economic situation did not respond to established remedies and that something else was needed. Just what was needed still had to be demonstrated. In the 1930's, the theories of the classical economists were generally applied until mounting economic disasters forced their modification. Roosevelt's New Deal policies were applied, in one form or another, in many other countries. These were not 'solutions' to the disasters of the 1930's; they were policies, adopted with misgivings, that political and social imperatives forced on governments around the world. So it has been in recent years with reflation. It is the current 'New Deal'. It is imperfect, being founded neither on the old

Keynesian economic theory nor on the theory that must emerge to allow effective management of the modern economy. But policies of reflation, like the New Deal, are a step on the way towards practical management of the economy. What they need is an economic theory not so much simply to support them—because they are inadequate as they stand—but to give them the character, the purpose and the effectiveness that they now lack. Simple policies of reflation are inadequate. What is needed is a better balance of production in the modern economy. What are the means to be adopted to achieve this better balance of production?

III
The balance of production

Subject to a couple of very important qualifications, the wealth and income of a person or a country must depend, fundamentally, on the production of goods and services at his or its command. To reduce that production cannot make a person richer nor his income greater. The same applies to a country. It cannot be better off if its gross national product falls. It cannot be better of if it reduces its production of goods and services. Of course what is produced must be needed or, more important, demanded by consumers. There may be advantages in reducing production or moving productive resources to other purposes if what is produced is either not demanded or not demanded in the currently produced quantities. There may be advantage too in cutting production (for example, of oil, to use a topical example) if that will mean or can be accompanied by such a rise in price that the producer's return is increased and his actual command over resources is greater at the lower than it was at the higher level of production. The example of oil illustrates too that there may be economic benefit in *conservation* of resources so that reserves are not flooded on to the market to be sold at giveaway prices over a relatively short period but rather are conserved to be marketed more gradually and more rationally at a price more in keeping with the scarcity of the resource over a longer period of time. The concept of the economic benefit of conservation extends beyond the benefit to the individual producer or consumer to the benefit to the human community as a whole which might need to husband its finite resources more carefully; for example, the human community might need to use these resources in the most productive way over a span of many generations, rather than to exhaust them in a few decades in the way most profitable to today's producers and cheapest for today's consumers. This concept of conservation for the human community leads to the further but related concept of preservation of the human environment. 'Today, in human society, we can perhaps hope to survive in all our prized diversity provided we can achieve an ultimate loyalty to our single, beautiful, and vulnerable planet Earth. Alone in space, alone in its life-supporting systems, powered by inconceivable energies, mediating them to us through the most delicate adjustments, wayward, unlikely, unpredictable, but nourishing, enlivening, and enriching in the largest degree—is this not a precious home for all of us earthlings? Is it not worth our love? Does it not deserve all the inventiveness and courage and generosity of which we are capable to preserve it from degradation and destruction and, by so doing, to secure our own survival?'[1] In this context, the maximum expansion of our material production may not produce the best result for the human community; or, put in another way, we may need to insert into our calculation of the gross national product elements of conservation and of nonpollution that suggest we should reduce production of some material things now to enjoy a fuller and finer life now and later.

These qualifications to calculating our wealth and income by simply counting the gross output of a heterogeneity of goods and services are, as we have said, very

[1] Ward, Barbara & Dubois, Rene, *Only One Earth*, W. W. Norton & Co., New York, 1972, p. 220.

important. But they are qualifications to a rule that is probably more often applicable than otherwise. And certainly the rule is valid in the sort of unstable economic situation that afflicts the advanced economies today. The 'advantage' that was once seen in cutting production in the traditional recession fashion, so as to stabilise internal prices and the external balance through unemployment and seriously curtailed incomes especially for those at the lower end of the income scale, can no longer be tolerated and therefore can, in effect, no longer be obtained. If, for social and political reasons, either unemployment or seriously curtailed incomes for the unemployed and other low-income groups must be eschewed, then production-cuts become an absurdity that will intensify and not remedy economic instability. To state what seems to have become progressively less obvious[2] in recent years, inflation derives essentially from demand exceeding supply. The point in the economy at which this demand-excess originates will be important, if the excess does not extend over the whole economy or with the same intensity over the whole of it. But, the inflation having got under way, consumer prices will not be brought down, in modern social and political circumstances, by a cut in production. That price-reduction will be achieved only by an increase in production or, alternatively—and this alternative has become progressively less practicable and more limited—by a reduction in consumer demand.

In recent times, the real problem has not been the 1930's problem of insufficiency of aggregate demand, but a superfluity of it. For this, there have been two main causes. The first is—at least in the human circumstances

[2] We have been bombarded in recent years with ideas of 'cost-push' rather than 'demand-pull' inflation and generally with ideas that inflation can be caused by various economic demons that have little to do with the economy having less of something available than people want to get hold of at a certain moment.

with which we have been and will be familiar in the relevant future—that the demand of the average consumer has increased and will continue to increase so long as the funds available to him increase. The proportion that his consumption bears to his income will not remain constant: sometimes he will spend more, sometimes he will save more and the greater spending or the greater saving will be neither precisely nor predictably related to the rate of increase in his income. Furthermore, the 'average consumer' is difficult to define precisely and varies in his characteristics over time and as between economies. However, in the developed economies at least, redistribution of *income* (though not necessarily of wealth) has tended to move the 'average consumer' further and further up the income scale and this is likely to continue. Aggregate consumption will therefore tend to remain high and to increase fairly constantly though not in constant amounts nor necessarily as a proportion of GNP. The second is that government has constantly increased its role as a direct participant in the economy and all the indications are that this will intensify in the future.

These two strongly contributing causes to the contemporary superfluities of demand suggest that we must look more closely at the balance of production in the modern economy. In examining that balance, we must look, *inter alia* and perhaps especially, at two things:

(i) There must be a balance among primary, secondary and tertiary production. As a simple illustration, we must be careful that we do not create an imbalance by giving or allowing too much encouragement to retailing without giving at least equivalent encouragement to the production of those things that are being retailed.

(ii) There must be a balance between aggregate *final consumer* demand and the aggregate supplies avail-

> able to meet it. Bearing in mind the tendency for the final consumption of the 'average consumer' to remain high and to increase constantly (though by a varying and unpredictable amount), demand management will have difficulty in achieving a balance between aggregate production and aggregate demand by reducing *all* demand, that is consumption and investment demand in both the public and private sectors. Demand management will therefore have to accept certain social and political imperatives and apply policies of demand and production control with sufficient sensitivity to ensure that these imperatives do not create intolerable economic disruptions and distortions.

Let us examine these two aspects of the balance of production in turn, starting with the balance between the primary, manufacturing and services sectors of the economy.

The continuing use of significant resources in inefficient sectors of the economy and special support for these sectors reduces growth and increases costs, especially in those phases of the economic cycle at which production falls below demand. This has been most obviously so in agriculture. 'Protectionist agricultural policies', an OECD report said, 'have generally removed or much reduced the potential benefit to consumers of cheap imports. Moreover, agricultural policies appear to be moving further in this direction, which can only be inflationary in effect. Self-sufficiency in formerly importing countries has been wholly encouraged, and the enlargement of the EEC, involving the application of the common agricultural policy to the United Kingdom and other European countries, seems likely to limit still more the scope for food imports from low-cost producing countries'.[3] However, the vice

[3] *Inflation, The Present Problem, OECD, December, 1970,* paragraph 150.

of high-cost inefficiency and wasteful use of labour and capital is not confined to agriculture: 'government intervention in private industry and commerce for social, strategic and other reasons is widespread and on a large scale. Perhaps because of the greater heterogeneity of the sector, problems of resource wastage and its causes in industry tends to receive less attention'.[4]

The OECD suggested the obvious solutions that governments should reduce agricultural protection, including price-support systems, and limit intervention in some important industrial sectors which give rise to inefficiencies and high costs. But the report also made some interesting references to what it calls 'sheltered sectors'. The report notes that 'irrespective of government policy, certain sectors are naturally protected from international competition and as a result tend often to show weak resistance to inflationary pressures, notably many of the service industries, construction and internal transport. Construction and distribution are two of the most important sectors falling into this category, accounting respectively for about seven per cent and twelve-seventeen per cent of GDP in OECD countries'.[5]

If this growing sector of service industries is most protected from international competition, it is also this sector that can most naturally expect to draw its needs for additional labour and capital from the declining or static sectors of the economy. However, if declining agriculture and some parts of industry and commerce are protected by a whole series of devices from international competition, movement of resources from declining to growing sectors will be retarded. In these circumstances, the service industries will be protected not only from international competition but also from the cost-reducing impact of mobility of resources within the economy itself.

[4] Ibid., paragraph 161.
[5] Ibid., paragraph 176.

The service industries will become, or will more nearly than is necessary or desirable approximate to, a 'closed shop' in which intensifying demand will push up profits, wages and costs and the flow-on from these industries will affect the cost/price structure in the rest of the economy.

The service industries, important as they are, have not yet been subjected to the same disciplines as agriculture and secondary industry. They are not subject to the same kind of competition and, to a large extent, competition in the service industries is not as easily measurable. Because of intangible qualities, they cannot be as easily measurable. Because of intangible qualities, they cannot be as easily assessed as efficient or otherwise nor is it easy to calculate changes in productivity either in the service sector as a whole or in individual industries within it. Furthermore, the service industries have not, in many areas, taken as much advantage of the economies of scale as secondary industry although certainly they often operate in units as large as or larger than those in the more traditional agriculture.

However, farmers operate in a sector that is declining relative to secondary and tertiary industry. The multitude of small units[6] provides one of the purest forms of competition, when they compete outside support systems. The service industries operate in a different context. The multitude of small units does tend to introduce an element of real competition. But the dynamic growth of service industries allows the high-cost, inefficient unit to persist. And most of these industries are, by their very nature, protected from foreign competition and many of them are so localised in character that they are protected even from competition from other urban centres within the national economy.

[6] In many modern economies, the units are tending to get larger.

Of course, this does not apply to all industries within the services sector. Banking is generally carried on by large units and so is much retailing. Neither banking nor retailing is wholly protected from foreign competition, although there is a marked tendency—in Australia and Japan, for example—to restrict the establishment and operation of foreign banks in the highly developed economies. This is partly at least because governments believe that their control of monetary policy will be greater if the banks through which that policy will be largely implemented are wholly subject to their jurisdiction and control. Retailing is not controlled in the same way or for the same reasons as banking but it tends to be in the hands of local individuals and companies, perhaps partly because the larger units have had small beginnings, because the techniques of retailing are not so esoteric as some of the techniques of manufacturing and because successful retailing is largely a response to the local character.

There are other services such as insurance that are provided on a large scale. But most are not. The fragmented nature of the services sector, in the context of its dynamic growth, consequently encourages or at least accepts high-cost inefficiency. The services sector is a gold-mine, not so recently discovered and with lodes that are not likely to be quickly exhausted. The hopeful gold-diggers stream in their thousands or millions to the diggings, often without much, if any, training and filled with the conviction that it is their right to squeeze as much dust or as many nuggets out of the situation as others no better qualified and no less avaricious are doing.[7]

While, to the liberal economist and the liberal politician, there is a fundamental rightness in this, it does

[7] Those engaged in the servicing of motor-cars and of household appliances seem especially to fit into this small-unit, high-cost, inefficient pattern, with a multitude of small-time enterprisers seeking bonanza profits from a dynamic, shortage situation.

carry certain problems with it. One of them is that a gold-rush has effects on a lot of more mundane pursuits. The services sector does not operate in isolation. Its inefficiencies lower the efficiency of the whole economy. Its costs and prices flow on to manufacturing and primary industry. Its wages are the wages that, with some distortions and perhaps some time-lags, everyone must pay whether he is raising cattle or making steel.

It may be a plausible hypothesis that manufacturing industry is going through a traumatic experience in cost and marketing analogous in some ways to that which, in an earlier period, primary industry went through in relation to manufacturing. Indeed, of course, the process for primary industry has never stopped; we have just got used to it. But, for manufacturing, the process—or our recognition of it—is relatively new.

The process seems, in broad terms, to have its origin and take on its character along the following lines.

The most dynamic sector of any modern economy is the tertiary-services-sector. The growth of public as well as private activity and enterprise is greatest in this sector. Labour—of all levels of skills from the most distinguished professional talent to the least trained and the most rudimentarily educated—tends to flood into this sector. In periods of the greatest expansion, it tends to be the sector where labour pressures are most intense. In periods of contraction, when labour tends to surplus in primary and secondary industry, the surplus tends to flow into the tertiary sector, sometimes taken up by government, sometimes by the private sector from professional to domestic service. Surplus labour certainly occurs from time to time in the service sector but this is nearly always fairly highly specialised rather than generalised service labour.

The effect of this is that the labour-cost level of the economy tends to be that of the service sector. Primary and manufacturing industry must bear the labour cost of the most dynamic sector or else lose labour to it. To offset the cost of labour and the constant pressure on wages that has its origin elsewhere, primary industry has long sought to mechanise, to create larger farm units and so on, in order to compete with manufacturing; and the latter is highly capitalised and must now increasingly capitalise in order to compete with the service industries.

But this can be done effectively only if costs other than labour can be kept low—or at least low enough to permit efficient manufacturing to compete with services. Therefore, capital equipment—which, in its turn, must contain a certain labour component as well as a capital element —must be costed reasonably and interest charges must be relatively low.

If either the cost of capital equipment or interest charges or both are high—the precise level will vary with the particular circumstances and the particular economy —the balance of activity of the economy will tip further in the direction of the service industries. The latter generally use less capital equipment as well as less capital; they will therefore be less affected by capital and interest costs and, over a relatively short period, will do no worse than share labour costs, whatever their level, with other sectors of the economy.

In many ways, this will accord with the shifting proportions of demand, so that if factors of production move out—or move out proportionately—from manufacturing, this might do no more than appropriately reflect necessary structural changes in the economy. But, if the movement —because of high labour, capital equipment and/or interest charges—is too great, then the output of manufacturing will fall too low, prices will rise and a circular effect will take place through the cost-creating impact of the services sector; this might cause a further contraction of manufacturing output.

If this happens, some special action may be necessary to restore stability to the economy by stimulating the output of manufacturing industry. A reduction of interest rates—provided it is sufficiently large—might adequately improve the competitive position of manufacturing *vis-à-vis* services. But more might be needed.

Manufacturing industry might come to need some fiscal concessions of a kind to which we have become used for primary industry. It might need some special stimuli to 'mechanisation': low interest rates, investment and depreciation allowances, concessions in company taxation for use of certain labour, income-tax concessions for equity investment in manufacturing and perhaps policy measures which will increase training and supply of labour for manufacturing while relaxing the tightness of labour supply for services. (The latter might be helped, *inter alia*, by exercising restraints on employment in the non-manufacturing public sector.) Measures of assistance are, as we have said, common enough for primary industry. We might need to become more used to them for manufacturing.

In any event, what we need to acknowledge is that fiscal and monetary measures might have an uneven impact in the non-primary sectors of the economy and we might need to apply measures specially devised to support and stimulate secondary industry if we are to avoid sometimes temporary, sometimes chronic dislocations in the economy.

Turning now to the balance between aggregate *final consumer* demand and the aggregate supplies available to meet it, we need first of all to note that policies of demand management have, in recent years, shown more and more inadequacies in more and more of the developed economies. *Prima facie*, there is evidence that these policies have failed. This does not mean that demand management should be abandoned. Clearly, it should not be; if anything, the theory that demand will tend to expand to fill a high proportion of the space[8] that the funds of the average consumer make available to it means that there should be more not less demand management. But demand management may be only part of our task. A supplementary and potentially more important task may be production management, control and stimulation. The problem will be less to move demand up to keep the economy fully employed and much more to keep aggregate demand in a relationship to aggregate production to give some control of inflation and maintain stability at the upper level of the economy. Therefore, governments will need a much more sophisticated and complex policy of both demand management and production budgeting if they are to succeed in their task as equilibrators of the economy.

The British experience in 1970-71 confirms the trend of economic events elsewhere but introduces an additional element that illustrates both the complexity of economic relations and developments and the uniqueness—even though a peripheral uniqueness—of a particular economy. The recession induced with considerable intensity by the Heath Government in 1970 led to considerable unemployment—approaching very close to one million workers by the end of 1971—and a sharp increase in wages and prices. The extent and persistence of the wages/price increase, in the context of such large-scale unemployment, caused surprise and concern. As unemployment grew more massive, the Government took action to reflate but this action was inadequate and in any event took many months to have effect. One of the principal shortcomings of the reflationary policies was that it aimed too heavily at expanding demand—which was already too high in

[8] Savings in the modern economy, although they fluctuate, generally remain high; but the recipient of transferred income saves less than the taxpayer from whom it is transferred.

relation to supply, except for capital goods—instead of concentrating as much as it should have on expanding production and stimulating incentives to invest in production. So a situation persisted in which unemployment continued to expand along with rising prices and wages.

But this was also accompanied by one of the traditional benefits of recession. Exports increased. They increased dramatically. And imports, although they increased too, increased more slowly. So the balance of trade improved. So also did the balance of payments, for reasons both associated with the trade position and otherwise. Britain showed a merchandise trade surplus of $738 million for the calendar year 1971—the most splendid surplus in any one year since 1936. (Including services and transfers, the current balance in 1971 showed a surplus of $2,537 million.)

How did this magnificent performance come about? Did it irrefutably confirm that, whatever an induced recession did to employment, wages and prices, at least it brought the expected and traditional benefits to the trade balance? We must doubt that it was so.

The first cause for doubt derives from the nature of the components that contributed to the increases in imports and exports, especially as the trade balance worsened in 1972. So far as the former were concerned, the greatest was in finished consumer goods and exports began to lag in keeping with a lag in the output of the British economy as a whole. 'The volume of merchandise imports picked up rapidly in early 1972 after the relative stability experienced during 1971. The commodity pattern corresponded fairly closely to domestic trends of demand and output: as demand recovered and output lagged, imports of finished manufactures expanded rapidly but imports of basic materials grew only modestly. . . . Over the first half of the year import volumes grew appreciably while export volumes fell, though the impact on the trade balance was slightly offset by the more rapid increase in export prices. Nonetheless, with net invisible receipts declining there was a sharp reduction in the current account surplus from an annual rate of about three billion dollars in the second half of 1971 to about three quarters of a billion dollars in the first half of 1972.'[9]

What seems to have happened therefore is that, to the extent that British domestic production was inadequate to domestic consumer demand and to the extent to which, in addition, British domestic production was drawn off in exports, an attempt was made to correct the deficiency by an increase in imports of consumer goods. To the extent that imports were unable to bridge the gap between supply and demand, prices were forced up.[10] The comparative lag in British imports of raw materials indicated the continuing lack of adequate incentive to increase aggregate production and, therefore, the unlikelihood that the gap between supply and demand could be bridged in the short-term or perhaps the medium-term.

But, while Britain was experiencing a shortfall of supply in relation to demand, the United States had been going through the same experience in even greater intensity—or at least with more momentous effect on the world economy. The United States experience indeed was like its experience during the Second World War *in reverse*, with vast capacity unused.

This leads to the second reason to doubt whether recession in Britain really provided the expected and traditional benefits to the British trade balance—or would do so in any 'orthodox' situation. It also explained the curious surge in British exports and the more or less

[9] *OECD Survey of the United Kingdom, January 1973*, pp. 13-14.

[10] Retail prices in Britain rose by 3.75 per cent annually in the period between 1961 and 1970, by 9.5 per cent in 1971 when the trade balance greatly improved and by seven per cent in 1971 when the trade balance worsened again.

accompanying surge in British imports of finished consumer goods.

The surge in exports was not peculiar to Britain; it affected all the major trading nations. The Western European countries, Japan and Australia all found their exports suddenly booming. All of them too found their price and wage levels rising more rapidly than usual. The principal reason for these phenomena was that the United States—still the most dominant of the world economies—was busily importing, largely consumer goods, on a vast scale and *ipso facto* simultaneously exporting inflation.

The situation was, in some ways, a ludicrous caricature of the situation after the Second World War, with the roles now reversed. Now the United States was desperately short of most things except labour and idle productive capacity. Most of the other developed countries (notably except Britain, although its imbalance between supply and demand was less in absolute terms than in the United States) had *relatively* more plentiful consumer goods and more of most other things, except labour and idle productive capacity. Their exports flooded across the Atlantic and the Pacific to meet the shortages in the United States, just as the United States had poured out its plenty to meet the needs of the war-devastated and economically exhausted countries of Europe and Asia in the years immediately after the Second World War. How had this ludicrous caricature come about?

In part, of course, it had happened because the United States tried too long to do the things that it had been able to do in the disequilibrated situation of the 'forties and 'fifties. It tried to be the defender and the lender, the generous ally and the generous donor far beyond the point, in both time and magnitude, at which the disequilibrium in its favour continued to operate on a sufficient scale. When the United States adopted more thorough Keynesian policies with more built-in social-security stabilisers in the 'sixties and then became heavily involved in Vietnam, the writing was unmistakably on the wall. The only question was how soon United States policies and burdens would be adjusted or how soon the economy would break down.

The use of the American dollar as a reserve currency both delayed the collapse (or the need for a policy change) and made it heavier when it finally came. The final precipitant of the collapse was the well-intentioned efforts of the Nixon Administration to avoid it by adopting orthodox 'deflationary' policies in mid-1969.

At the time, employment was high, the rate of economic growth was high and wage and price levels were (by comparison with subsequent experience) relatively stable. But the balance of payments situation had continued to deteriorate almost constantly throughout the 1960's and wage and price rises, although modest in retrospect, were becoming worrying. So the Nixon Administration, in the summer of 1969, applied orthodox remedies to bring the economy off the boil and so correct the external payments position and stabilise wages and prices internally. From that point, disaster was inevitable. It was only a matter of time.

The restrictive economic policies introduced in the United States in July 1969 were superseded by reflationary policies in January 1971. In that intervening period, GNP in current prices moved from $930.3 billion in 1969 to $976.4 billion in 1970; $1,050.4 billion in 1971; and $1,151.8 million in 1972. At constant prices, the movement was:

	$ billion (1958 dollars)
1969	725.6
1970	722.1
1971	741.7
1972	789.5

The movement in gross private domestic investment was much the same, except that it moved down in one year in both monetary and real terms. The figures were as follows:

	$ billion (current prices)	$ billion (1958 dollars)
1969	139.0	110.5
1970	137.1	104.0
1971	152.0	108.6
1972	180.4	124.0

A similar movement took place in government purchases of goods and services, as follows:

	$ billion (current prices)	$ billion (1958 dollars)
1969	210.0	145.9
1970	219.0	139.0
1971	232.8	137.6
1972	254.6	142.8

However, while these three indicators moved down then up in constant-price terms and while gross private domestic investment moved down for a period even in current-price terms, the movement in personal consumption expenditure was very different, as follows:

	$ billion (current prices)	$ billion (1958 prices)
1969	579.5	469.1
1970	616.8	477.0
1971	664.9	495.4
1972	721.0	524.6

Thus, personal consumption expenditure continued to move up in both current and constant prices, despite the contrary movement in GNP and private domestic investment. The movement in government purchases of goods and services was also more than offset by a massive change in federal transfer payments which increased by more than fifty per cent from $50.7 billion in 1969 to $78.6 billion in 1972. (The estimate was that these payments would increase further steeply to $91.6 billion in 1973 and $101.9 billion in 1974, in other words, that they would double in the five years after 1969.) If government purchases of goods and services and transfer payments are set down together, the result is as follows:

	Govt. purchases Goods & Services $ billion (current prices)	and Transfers Payments $ billion (current prices)	Total $ billion (current prices)
1969	210.0	50.7	260.7
1970	219.0	56.8	275.8
1971	232.8	69.8	302.6
1972	254.6	78.6	333.2

Therefore, over this period of restrictive economic policy followed by reflation, the total of these two heads of government expenditure continued to increase substantially and the federal budget moved heavily into deficit, as receipts dipped before moving up again. The aggregate budget figures were as follows:

	Total Receipts $ billion (current prices)	Total Expenditure $ billion (current prices)	Surplus (+) or Deficit (−) $ billion (current prices)
1969	190.4	185.7	+ 4.7
1970	195.0	196.3	− 1.3
1971	193.0	212.8	− 19.7
1972	211.9	233.1	− 21.1

So there we have, in a nutshell in the United States experience, the problem of the modern economy and the basic reason for inflation. The 1969 economy was showing signs of pressure of demand on supply, with consequent modest but increasing inflation. As a consequence the Nixon Government applied restrictionist economic policies. GNP and private investment moved down, the latter in both real and money terms. But private consumption stayed up and increased over the whole period in both real and money terms. Government expenditures stayed up too and a growing and eventually massive deficit occurred which because of long time-lags, was not expected to decline seriously until 1974. This growing deficit helped to ensure that the pressure of demand against supply was not only maintained but greatly increased and a modest inflation became a major disruptive force in the economy (and overseas). Fortunately in some ways, the United States was saved from the most devastating effects of the inflation that its governmental policies had created by a massive increase in imports and a slower increase in exports. Imports moved from $35.83 billion in 1969 to $39.87 billion in 1970, $45.53 billion in 1971 and $55.66 billion in 1972. Thus, there was an increase in imports of about fifty-six per cent between 1969 and 1972. During the same period, exports moved up from $36.49 billion to $48.84 billion, an increase of about thirty-four per cent. The deficit on merchandise trade which reached $6.82 billion in 1972 helped to combat inflation but ran down United States reserves and exported inflation to its trading partners. The recovery of United States production, reflected in a recovery of the percentage increase in GNP from —0.5 in 1970 to 6.4 in 1972 gradually moved domestic supply and domestic demand more nearly into balance, along with a closer balance in merchandise trade in 1973 and 1974. But by then other distortions had entered or were entering the world economy, with countries other than the United States experiencing a high rate of inflation, continuing instability in exchange markets, an upward movement in food and raw material prices and a random mix of policies by the United States and other governments in an attempt to stabilise their economies by orthodox means. The result was a resumed round of inflation in the United States and continuing infection and re-infection in the other major developed economies.

In 1973, United States imports moved up still further to about \$68.83 billion, an increase of about twenty-four per cent on 1972, while exports soared upwards to \$69.66 billion, about forty-two per cent higher than 1972. There was therefore a surplus in merchandise trade of about one billion dollars—the first surplus for three years. One thing that we have to note about this is the long time-lag in the expansionary policies of January 1971 producing a sufficient expansion of production to achieve a transformation of the merchandise trade deficit into a surplus.

Apart from the 'normal' delays in any economic policy taking effect, a number of other factors tended to increase the lag in reversing the trade deficit. The first was that the expansionist policies of January 1971 aimed primarily at an expansion of *demand*, which would draw along an expansion of production with it, rather than at a *direct* stimulus to production itself. (There were *some* direct stimuli to production after January 1971, including the investment tax credit in the measures of August 1971.) Second, the effective devaluation of the dollar under the Smithsonian agreement of December 1971 and the further devaluation of 12 February 1973 together with subsequent revaluations, formal or effective, of other currencies widened the United States trade deficit in the short term[11]. (The impact of devaluation is discussed in Chapter 7.) Third, the stimulus to production from the expanded demand policies of January 1971, from the policies of August 1971, the devaluations of the American dollar and the lowering of interest rates from about mid-1970 to early 1972 were progressively offset in some measure by a renewed upsurge in interest rates from early 1972 which was maintained throughout that year and 1973.

All of these factors together meant that the improvement in the merchandise trade balance flowing from increased United States production was smaller and slower than it otherwise would have been and, when a surplus was achieved, a lower rate of improvement in GNP at the end of 1973 threatened (quite apart from the oil crisis) that the surplus would disappear in 1974 or, in any event, be lower than the 1973 level.

We must follow this through just a little further for both Britain and the United States. Both tried orthodox 'deflationary' policies. Both saw them fail. Both then tried expansionist policies, especially under the pressure of soaring unemployment (which was, of course, accompanied by increasingly severe inflation). The expansionist policies were better than the 'deflationary' policies. At least unemployment went down and production went up. In some measure—much more particularly in the United States—the inflation rate moderated and the balance of trade and payments improved. The flood of imports into the United States plus the recovery in production brought the United States inflation rate down to tolerable levels for a while.

But the policies of both governments, in their expan-

11 'The Smithsonian exchange rate realignment also tended to raise the dollar value of imports more than it reduced the quantity of imports. The relatively small quantity effect can be partly explained by the fact that the United States is becoming increasingly dependent on foreign energy resources, and the propensity to import consumer goods of various kinds remains high'. *OECD Survey of the United States, June, 1973*, p. 15.

sionist phase, were directed to expanding demand generally. The typically Keynesian assumption was that the expansion of demand would drag employment and production along in its wake. Of course, to some extent, this did happen. But it happened too slowly and inadequately. Consumer demand, already too high, was increased further. Production lagged behind. Some stimulus was given direct to production, especially in Britain but also in the United States; and, if this had been persisted with, it would have led, not overnight but gradually, to stability. But it was inadequate and, when demand pressures continued to outrun supply, with mounting inflationary pressures, both governments tended to apply orthodox fiscal and monetary 'remedies' to reduce the pressures. The particular monetary measure used was a rise in the interest rate and, over a couple of years, the interest rate was raised especially in Britain, to quite astronomical levels—and other developed countries did the same. The impact of the interest rate on the modern economy will be dealt with in Chapter 8. Here suffice it to say that the rapidly rising interest rate tended to depress incentives to production and to move the substantial funds available in the economy away from production and over into consumption or into financing consumption.

On top of all this came an acute shortage and a consequent sharp increase in food and raw material prices. This development was different in that the swing from low to high prices was as it has traditionally been—much greater for primary than for secondary and tertiary production. But, in other respects, the uniqueness of the rise in food and raw-material prices was less than complete. The rise in food prices seems to have been due to a combination of adverse climatic conditions and, over a number of years, in adequate incentives to food producers to produce enough food to supply both a rapidly expanding world population and higher nutritional levels especially (but not only) in the more advanced countries. The food experience seems to have provided further evidence that final consumer demand remains high and continues to expand even during periods of government-induced or other recession and while production might be dropping back or lagging behind the mounting demand. There is no inevitable equilibrium between demand and production: certain factors might be operating to keep final consumer demand high while certain other factors are acting as disincentives to production. Just as Keynes found in the 1930's that there was no necessary and stable equilibrium at full employment of the economy but that such a full-employment equilibrium had to be engineered by appropriate policies of the government, so we need now to acknowledge that a bounding demand will not necessarily stimulate a corresponding and adequate production to meet it and that government policies are needed to bring demand and production into a carefully engineered equilibrium.

Much the same factors applied to raw materials. Final consumer demand remained high but, during the recession period, production fell and so the demand of manufacturers for raw materials fell. During the subsequent expansionist phase, final consumer demand became even more buoyant but the stimuli for the production either of final consumer goods or of raw materials as components for them were inadequate to match the demand. Prices of both therefore tended to bound forward, once again with the wide swing between highs and lows that have been characteristic of prices of raw materials.

Against this background, the 1973-74 oil crisis illustrates in acute and encapsulated form the nature of the shortage, inflation, failure-of-investment-and-planning problems that have beset the advanced economies in recent years. That oil is a 'special' problem does not separate it intrinsically from other problems in which the same elements have come together to give a less and more slowly explosive situation.

Consumption of oil, as part of the broader consumption of energy, has been increasing enormously over many years. Discovery and exploitation has, on the standards of any past experience, been on a gigantic scale; but it has hardly been sufficient to keep pace with consumption. Throughout most of the past quarter-century, the prospect has been that oil supplies would be exhausted in the reasonably foreseeable future if present rates of consumption were realised. This in itself indicates just how flexible our estimates of world reserves of oil (and other raw materials) must be but it also illustrates the inadequacy of our pricing system to deal with a situation that, on the basis of known data, suggested exhaustion of a vital resource within a short period. Thus, despite the reserves outlook, the price of oil remained low, much lower than other energy resources in much greater long-term supply. This low price at the same time led to excessive dependence of consumers on oil, while it tended further to hasten the early exhaustion of reserves.

But there was another vital factor in the oil situation that made it especially explosive. Although oil deposits occur widely throughout the world, they are concentrated especially in the Middle East and one or two producers (Saudi Arabia and Kuwait) so dominate production and reserves that they have it in their power to determine a sufficiency of supply or otherwise and high or low world prices. This, with the other features of the oil situation, suggested that there should be a careful long-term planning of energy needs and supplies, looking towards a phasing out of supplies of oil and a phasing in of other sources of energy. Reliance on a variety of energy resources and on a number of sources of supply would give each industrialised country greater assurance of supply and the world economy as a whole greater stability.

But the chronic pressure of aggregate demand on aggregate supply, the chronic tendency to inflation in the modern economy and the dislocations which that has caused, have hampered forward planning. Governments have tended to be preoccupied with immediate problems and to hope that the problems of the future either will not eventuate or will be capable of solution in easier economic circumstances when and if they do. This Micawber-like hoping for the best applies not only to the failure to plan adequately for an almost inevitable oil and energy crisis but also to plan adequately for the longer-term requirements of a deteriorating human environment and aid to developing countries. The pressure of an intense and continuing economic crisis make it almost inevitable that this should be so.

With that partial digression on oil, we can now go back to recall that, for food and raw materials, disequilibria between supply and demand developed because aggregate demand for final consumer goods did not drop as far as production during a 'recession' and, when 'reflationary' policies supervened, sharp and large increases occurred in the prices of virtually every commodity entering international trade, partly because the level of production had fallen in the 'recession' phase and partly because sufficient incentives to production did not exist to get production up far enough in the 'reflationary' phase.

With some commodities, of course, special factors operated. Bad seasons in many of the producing countries caused a huge increase in the price of wheat. The disastrous fall in wool prices in the couple of seasons preceding the latter part of 1972 and the consequent large-scale movement of farmers out of wool caused an unusually massive rebound of prices in 1972-74. The rapidly mounting demand for oil accompanied by the location of reserves in a limited number of countries, the most significant of which could restrain output without injury and indeed advantage to themselves, caused especially large increases in the price of oil and use of oil supplies to achieve other than economic objectives.

While there were these special factors related to particular products and particular countries, none of the commodity or country situations could have existed without the secular tendency for demand to outrun supply. This secular tendency persisted whatever the phase of what the old-fashioned still refer to as the 'trade cycle'.

Britain and the United States were particularly afflicted with the attempt to apply old-fashioned orthodoxies to their modern economies. In more measure than most other economies, they retained many of the characteristics of outflow of capital and persisting overseas commitments that marked the developed economies of the pre-World-War-Two period. The balance of production in the United States and Britain therefore suffered special dislocation. But other economies were not entirely immune and the economic dislocations, especially in the United States, had their impact on these other economies.

Perhaps one special comment on Britain might be made before we look further afield. In Britain, the growth factor *at home* has been just too little. Too many people have been migrating—in net terms. Too many people—servicemen and their families—had, until recent years, been living outside the British economy. Too high a proportion of investible funds has been taken up in (declining but persisting) colonial-administration costs, in aid to developing countries and in overseas investment undertaken in fairly traditional ways and in more or less traditional directions, that is, to the Commonwealth as well as to North America and Western Europe. Lord Rothschild, head of the British Central Policy Review Staff said in September 1973 that 'unless we take a very strong pull at ourselves and give up the idea that we are one of the wealthiest, most influential and important countries in the world, in other words, that Queen Victoria is still reigning, we are likely to find ourselves in increasingly serious trouble.'[12] He seems to have had some specific but rather limited manifestations of wealth and greatness in mind but the principle he enunciated, that Britain should not continue to live economically in a past era, was valid.

The low growth factor and the outflow of investible funds—the two are, of course, not unconnected—have in turn led to or maintained a high net emigration (except in the period of free colored immigration from the Commonwealth) and have themselves tended to be self-perpetuating. The great reduction in Britain's overseas responsibilities, if accompanied by a favourable investment climate at home, could now lead to a retention of investible funds within the economy, to a high rate of direct investment at home and to a high growth rate; and these elements could, in their turn, prove to be self-perpetuating.

But Britain never seems to have been able to achieve these results except for short periods, for example, in the late 1950's and early 1960's and policies of production, as distinct from demand expansion seem always to have been reversed or drastically modified after a short time. The way in which economies embark on expansion but remain prisoners of their old economic orthodoxies is illustrated by the complex mix of British policies adopted as disequilibria persisted or were feared during 1973. 'While the tightening of monetary policy', said an OECD report[13] in October 1973, 'was mainly related to the fall of the sterling exchange rate, which had been aggravating the already serious price and cost problem by pushing up import prices, the authorities' action may also have

[12] Address to the Letcombe Laboratory of the Agricultural Research Council at Wantage, 24 September 1973.
[13] *CMC (73) 8*, Paris, 4 October 1973.

reflected concern over domestic monetary developments. Although the development of demand and output did not seem to be out of line with official aims, it may have been felt that the accompanying expansion in monetary aggregates and domestic credit was excessive, and would jeopardise prices and incomes policy. In fact the narrow money supply . . . increased at an annual rate of 12.5 per cent during the first eight months of the year; the broader aggregate . . . rose at an annual rate of twenty-seven per cent. . . . In following a policy of high interest rates, an important concern of the authorities has been the sheltering of the housing market. In mid-September, the authorities intervened to protect the building societies from competitive bidding with banks for deposits, by placing a limit of 9.5 per cent on the rate which banks can pay on deposit accounts of less than £10,000. But shortly afterwards the dwindling net inflow of funds to the building societies forced an increase in the mortgage rate from ten to eleven per cent'. Thus the nervousness of the British Government about the continuing expansion, even of *output* and at rates in accordance with official aims, led to a throttling back of economic activity but a deliberate attempt to sustain demand in at least one socially important sector of the economy, that of private house-building. There seems to be special irony in the suggestion that this disequilibrating orthodox policy was sparked off at least partly by a desire to protect a prices and incomes policy to which the Heath Government had become progressively more dedicated and which was itself a disequilibrating factor through the depressing effect that it had on effort and production.

Britain and, for a shorter period the United States, have felt with special intensity the peculiar dislocations of a modern economy operating under obsolete economic theories and policies. But the fundamental problems of their economies have been experienced by other advanced countries. We might therefore turn now, for purposes of comparison and contrast, to Japan.

Japan's experience of 'recession' in 1970-71, although it contained features typically Japanese, was in essence characteristic of the experience of other highly developed economies. It was essentially a recession deriving from a decline in the propensity to produce and especially in the propensity to invest; it did not derive essentially from a decline in the propensity to consume, that is, from a decline in the demand for consumer goods.

In fiscal year 1968, Japan's real GNP grew by 13.7 per cent. In fiscal year 1969, it grew by 12.6 per cent. In the first half of fiscal year 1970, the Government adopted a budget which aimed 'not to stimulate economic activity overly'.[14] This was because it believed that the economy was too lively and inflationary tendencies had begun to appear. The budget reduced public works expenditures and aimed at a further budget surplus. 'Despite a continuous and sizable increase in the total disbursements of public finance, the Government account balance became restrictive toward the business, owing to the large gain in current revenue, mostly tax receipts. This high increase in current revenue reflected the functioning of a build-in-stabiliser (sic) in the form of an expansion in tax receipts at a time of the business upsurge. The growth in tax receipts in fiscal 1970 was attributable partly to the upward revision of the corporate tax rates.'[15]

Here we see a picture of conflicting government actions. On the one hand, the 'built-in-stabilisers' operated to keep government expenditure below receipts in a period of high activity and so move aggregate demand down towards aggregate supply. However, concurrently there was 'a continuous and sizable increase' in public expenditures,

[14] *Economic Survey of Japan (1970-71),* Economic Planning Agency Japanese Government, Tokyo, 1971, p. 38.
[15] Ibid., p. 38.

which helped to keep aggregate demand up, while the increase in corporate tax rates tended to move supply down. Moreover, the fiscal restraints on business were accompanied by a tight monetary policy: 'under the impact of the tight money policy, the funds position of corporate enterprises gradually worsened from the end of 1969 to the beginning of 1970. In the second and third quarters of 1970, it deteriorated greatly. Although the tight money policy was removed in the fourth quarter of 1970, corporate financing did not improve until the first quarter of 1971.'[16]

Under the impact of these policies, Japan's real GNP grew by *only* 9.7 per cent in fiscal year 1970. Compared with the 13.7 per cent and 12.6 per cent of the previous two years, this was a somewhat modest growth; but, compared with the experience of other contemporary economies, it was an extremely high rate of growth and most of the economic indicators remained absolutely favourable, although there was a relative decline in excellence. Unemployment remained low. The index of industrial production which had stood at 164.9 in 1968 (17.2 per cent up on the previous year) moved to 194.1 in 1969 (17.7 per cent up) and 220.4 (13.5 per cent up) in 1970. The industrial performance in 1970 was therefore distinctly below that of the previous two years in terms of percentage growth, but the addition of twenty-six points to the index for more than a thirteen per cent increase was a splendid result in every respect except in relation to Japan's immediately preceding economic history.

What, therefore, was the justification for calling the situation a 'recession'? Of course, there had been a slowing in the rate of growth, but was there anything more significant than that? Among the less sparkling of the

[16] Ibid., p. 39.

economic indicators was the movement in the index of producers' inventories of finished goods; and this gives some clue to the strategic centre of Japan's economic problems. The inventories index, which had stood at 91.3 in 1968 (an increase of 6.4 per cent on the previous year), moved to 93.1 in 1969 (up two per cent) and then shot forward to 103.4 (up 11.1 per cent) in 1970.

But, in examining this aggregate index, we need to look at its components and particularly at the two major components of capital and consumer goods. These give a very different picture from the simplified sketch suggested by the aggregates. While the inventories of capital goods shot up in 1970—the line on the graph approximated to the vertical—consumer inventories, although somewhat erratic for particular items, remained steady or declined. A most astonishing phenomenon at first blush was that the rate of climb in the wholesale price index declined and the index then started to turn down, while the rate of increase in the consumer price index continued to move up strongly.

There was one major explanation for all this. The fiscal and monetary measures that the government had instituted to stabilise economic activity had hit principally at production and had reduced the propensity to invest. Increased taxation and tight money had not only a psychological effect but also a real and practical effect, in that producers had the edge taken off their material incentives to maintain supply or to increase it at earlier rates. This was enough to affect the capital-goods industries. 'Strong recessionary feelings . . . spread to the producer goods branch such as iron-steel and chemical industries, (and) the capital goods branch such as heavy electrical machinery and machine tool industries.'[17] This affected the

[17] Ibid., p. 14.

total output of the community but aggregate demand and especially consumer demand remained buoyant.

There seemed to be two main reasons for this. The first was that, although the rate of growth slowed, employment and personal incomes remained high and there was 'a notable acceleration in the pace of wage rises'.[17] There was consequently fairly full maintenance of consumer demand while the incentive to maintenance or expansion of production was reduced.

The second factor is less easy to establish. The funds that were withdrawn from or that failed to be channelled to investment for production could, under the tight-money policy, more profitably be directed to lending for consumption or were available for consumption. For a time after the measures of fiscal and monetary restraint were introduced, some durable consumer goods, as well as producer and capital goods, seem to have suffered a downturn in demand but this was fairly quickly reversed and consumer demand continued strong over the whole range of the market. The service industries, which contained producer as well as direct consumer elements but which are largely directed towards immediate or near-immediate consumption, continued throughout to enjoy a boom.

Therefore, there was simultaneously a decline in productive investment, a downturn in the rate of increase in industrial production, a continuing movement upwards in personal incomes, including wages, a continuing strong demand in the service industries and for consumption goods. This combination of factors created a disequilibrium which inevitably forced up prices at a rate greater than that which had inspired the original fiscal and monetary restraints. The consumer price index increased by 7.3 per cent in 1970, compared with 6.4 per cent in 1969 and 4.9 per cent in 1968.

The Japanese Government found the combination of recession and inflation startling and upsetting: 'how should we interpret the upward pressure on consumer prices in the midst of sluggish business activity? Why do prices go upward in an affluent economy where a plentiful supply of goods is assured?'[18] The latter question was strangely wide of the mark. While there was a 'plentiful supply' of capital goods and, for a short time, of durable consumer goods, generally there was not in fact a plentiful supply of consumer goods and there was an intense pressure on the service industries. There was also of course, massive and growing pressure from the import demand of the United States.

In the immediately preceding paragraphs, we have implied that the Japanese economy is the same as other developed economies. In fundamental measure, the comparison is valid: Japan will react in much the same way to the same stimuli and depressants as its fellows in the first-class economic league. But—again like each of its fellows—it has distinctive features. Its social traditions are not the same. Some aspects of its worker-employer relations are unique. It has moved more rapidly than most from low to high average-income levels. But there are distinctive features more fundamental and far-reaching than those, which Japan shares especially with its ally of the Second World War, Germany. This shared distinction leads us to ask the following question which may be highly relevant to any realistic analysis of stability in the modern economy: Why have Britain (and, more recently, the United States) had such desperate and continuing trouble with maintaining balance in their internal and external economies, while other countries, including especially Germany and Japan, have not?

The question is an especially good one because it goes to the heart of the matter whether the Anglo/American

[18] Ibid., p. 11.

troubles are *sui generis* or whether they are part of a failure of macro-economic policies more generally. At first sight, they seem to be the former. Economic virtue seems to have resided especially with Germany and Japan and to have been only an occasional visitor to Britain and the United States. If this is so, then we can draw no general conclusions for macro-economic theory from the Anglo/American experience. We can only tell them to pull their socks up and to apply themselves virtuously to their tasks and all will be well in the German-Japanese manner. There will, in these circumstances, be no need to modify, far less reject, current macro-economic theory but only to apply it.

But the position is not as simple as that. The Germans and Japanese have demonstrated that, when they apply the same less than 'virtuous' policies of the British and the Americans in the same economic circumstances, they tend to be rewarded with the same economic difficulties. Moreover, we must bear in mind that, for historical reasons, the British and the Americans arrived earlier at the crisis point of maintaining equilibrium at the upper level of the economy and they did so at a time when much of their former relationship (in terms of capital flows, external political and defence obligations, reserve-currency complications and so on) with the rest of the world still persisted. This disequilibrium, on the side of external deficit, was reflected—as it had to be—in other countries, especially Germany and Japan, by disequilibria of the opposite, surplus kind. These latter countries, supported in a state of chronic surplus by those in a state of chronic deficit, never experienced an imperative compulsion thoroughly to test the efficacy in their own economies of the policies that had given such a sad and shabby result in Britain and the United States. In so far as, from time to time, they did try these policies in a modest way, the same symptoms of the same economic illnesses appeared in their economies. They had, therefore, it appeared, no deep and secure immunity, embedded in their virtuous personalities, from the diseases which afflicted the deficit economies but only perhaps a shield forged and held by the latter economies themselves. Although it never seems to have been seen in these terms, it was an unstable, dependent situation, viable only so long as the deficit countries saw their situation as deriving from a failure virtuously to apply existing macro-economic theory, instead of as a failure of the efficacy of that theory itself.

One of the key elements that has destroyed the efficacy of Keynesian macro-economic theory has been the trend in the nature and magnitude of government expenditure. Expenditure patterns in the developed economies have been undergoing great change, with a tendency for private consumption to decline in *relative* importance to public consumption. A report of the OECD, published early in 1972, said that 'the broadest generalisation—and perhaps the single most interesting feature—which emerges . . . is that the quite marked decline in the share of private consumption at current prices during the 1960's is expected to continue into the 1970's. If attention is focused on "pure" private consumption—that is, consumption not paid for out of transfers received from the public sector in connection with social security and other welfare schemes—the declining share has been even more marked (typically of the order of five-six per cent of GNP over the twelve-year period studied). But, although there were some important exceptions, this shift away from "pure" consumption has not been accompanied by a decline in the share of consumers (*households*) in primary *incomes*, which indeed tended to rise in a number of countries. It was thus only made possible by a sharp increase in either or both the savings of, and taxes paid by, the household sector.

'The future policy problems involved in this broad shift in the pattern of expenditure are doubly important. On the one hand, it is within the components of expenditure which have been rising in relative importance—investment, public consumption and publicly-supported consumption—that are to be found the items most closely related to the rising concern with improving the "quality of life". In its report *The Outlook for Economic Growth*, Working Party 2 noted: "such objectives as the alleviation of poverty, meeting the demands and aspirations for educational opportunities and adequate health and social security provisions, the prevention of pollution of the environment, urban congestion and decay, and loss of amenity, and the implications for land use create obvious and important problems of resource allocation." Under investment—apart from what is needed simply to support high growth rates—comes improved housing, improved communal and leisure facilities, and no doubt, to an increasing extent, investments needed to protect and improve the physical environment. And under public and publicly-supported consumption comes the improvement of health standards and the extension of health care, the extension and improvement in the quality of education, the alleviation of poverty, and many other programmes designed to ensure a fair sharing of the benefits of material progress. These things have, of course, to be paid for. It is thus the difficult task of governments not only to be responsive to these changing needs and desires, but also to devise policies which enable the necessary money transfers to take place as smoothly and efficiently as possible.'[19]

As the OECD notes, 'Government expenditure is usually treated as a policy variable in economic models'.[20] But, we

[19] *Expenditure Trends in OECD Countries 1960-1980*, 3 February 1972, p. 4.
[20] Ibid., p. 73.

might add, if it continues to be treated as a variable, we shall get grossly misleading results. In fact, it can be regarded less and less as a *cyclical* or *compensating* variable and more and more constitutes a variable only in so far as it moves constantly upwards, though at varying but usually high rates.

In illustration of this, we can again quote the OECD report, as follows:

'82. The two main factors behind the rising share of government expenditure have been the sharply rising demands for certain services traditionally provided partly or wholly by the public sector (health and education) and the rising share of other private expenditures financed by the government as a result of the extension and improvement of social security and other welfare programmes. These two trends can be well illustrated for the United States, for which a parallel functional breakdown of total expenditure and government expenditure is available, together with some projections up to 1975 (*Table* 20). These estimates "are crude in many respects, the existing national accounts not having been developed for the uses made of them here."[21]

'83. Although relatively small in themselves, the rise in the shares of education, health and general government—administration, sanitation, fire and police protection, prisons, and conservation and recreation—is quite striking; together they rose from ten per cent to sixteen per cent of total resources between 1955 and 1969 (*Table* 20A). This was offset by a decline in the relative importance of "basic necessities", transportation, housing and defence. Looking at the share

[21] Council of Economic Advisers, *Economic Report of the President 1971.*

of governmental financing[22] in total private and public expenditures, the main feature that stands out is the government's increasing involvement in the financing of "basic necessities" (*Table* 20B). These transfers are aimed primarily at income maintenance; in the main they consist of income support for the unemployed, for those with large families, for those below a certain income level and, more importantly, of old age payments. As a share of total expenditure on "basic necessities" they rose from ten per cent in 1955 to sixteen per cent in 1969 and are projected to rise to nearly twenty percent in 1975, by which time they would be equivalent to around eight per cent of GNP. This rise stems from the relatively more rapid rise in the number of people over sixty-five, as well as from the extension and improvement of various social programmes.

'84. Total expenditure on health in the United States over the past fifteen years rose by more than fifty per cent while the government's share increased by about seventy per cent to almost forty per cent of total health expenditure in 1969. The rise is largely the result of the programme for government health insurance for people over sixty-five and for certain poor people, which made its first payments in 1966. For the period up to 1975 the government's share is projected to remain stable at forty per cent on the basis of existing policies.

'85. Total expenditure on education in the United States increased by about seventy per cent between 1955 and 1969 and a further marginal rise is expected by 1975.

[22] In the context of the functional breakdown of GNP expenditures it is most useful to define 'governmental financing' as purchases of goods and services plus transfer payments. Where the latter are not tied to a specific use—largely social insurance and welfare payments—they are assigned to 'basic necessities' as they are most likely to be spent on food, clothing and rent.

Governmental expenditure on education rose at a slightly slower rate than total educational expenditure and its share in the total will decline further by 1975. This would imply that private expenditure on education, which constituted about twenty per cent of total educational expenditure, could rise to about twenty-five per cent by 1975. Governmental expenditure, on the other hand, would remain at about 5.5 per cent of GNP in 1975, the same percentage as in 1969, reflecting the underlying assumption of "no change" in government policy.

'86. A comparable functional breakdown of resource allocation is not available for most countries. . . .

'87. Although a classification similar to "basic necessities" is not available for other countries, a somewhat similar presentation can be made showing the share of private consumption financed by social security transfers (assuming, not unreasonably, that all such transfers are spent on consumer's goods and services). The figures show a substantial rise over the period 1955-65; they also indicate that such payments are higher in the six European countries for which figures are shown than in the United States.'[23]

There is nothing in the United States experience that is surprising. Nor is the United States experience unique. Most advanced countries have gone through much the same sort of increase in public expenditure and in the share of government expenditures in certain functional areas in recent years. Indeed, most other countries started earlier and have gone further than the United States. The United States persisted longer with its reluctance to have the government intervene in matters that American political, social and economic philosophy had re-

[23] *Expenditure trends in OECD Countries 1960-1980*, pp. 62-65.

garded as the individual's responsibility. Even in a country such as Australia, ruled by conservative governments for a full generation after 1949, government expenditures under health, education, transfer payments and other social welfare heads increased enormously, especially in the later 1960's and into the 1970's.

Table 20

Allocation of Resources by Function and the Share of Public Expenditure by Function in the United States 1955, 1969, 1975

Current prices, percentages

A. *Allocation of Resources by Function*

	1955	1969	1975
Basic necessities*	45.7	41.6	40.7
Education and manpower	3.7	6.3	6.5
Health	4.1	6.4	7.4
Transportation	10.6	10.0	9.5
New housing	5.9	3.7	4.6
Private business fixed investment	9.6	10.7	12.1
Inventory change	1.5	0.9	
General government	2.0	3.1	3.7
Defence	9.3	8.3	
Net exports	0.5	0.2	13.9
All other	7.1	8.8	
Unallocated	—	—	1.6
Total GNP	100.0	100.0	100.0

* Includes private expenditures on food, clothing, accessories, personal care, rent, government purchases for agriculture and welfare and government investment in public utilities.

Table 20 (continued)

B. *Share of Public Expenditure by Function*

	1955		1969		1975	
Basic necessities*	9.9		15.8		19.4	
Education and manpower	89.3		87.0		85.0	
Health	23.4		39.9		40.1	
Transportation	16.3		20.2		19.9	
New housing	0.1		6.3		6.1	
Defence	100.0	64.8	100.0	56.2	......	43.5
Other†	18.8		15.0		......	
Total as a percentage of GNP‡	23.2		29.6		28.7	

So long as these expenditures and increases in them remained small, if not absolutely then in relation to GNP, they did not change the fundamental nature of the economy or the methods for its efficient management. But past a certain point, the fundamental nature of the economy *was* changed and the accepted means of management of the economy ceased to be either appropriate or effective. Just when that point of no return was reached

* Includes private expenditures on food, clothing, accessories, personal care, rent, government purchases for agriculture and welfare and government investment in public utilities.

† In the private sector are included net exports, personal business, recreation. In the public sector are atomic energy development, space research and technology, international affairs and finance, regulation of commerce and financial and postal services.

‡ The figures differ slightly from those in Tables 22 and 23 because U.S. National Accounting definitions are used here and because interest and net subsidies are excluded from Government expenditures.

Source: For the past: *Economic Report of the President 1971*; Council of Economic Advisers *Annual Report 1971*, p. 10; the *Survey of Current Business May 1971*; the *National Income and Product Accounts of the United States 1929-1965*. Projections supplied by the United States Delegation.

in each of the developed economies or in the developed world as a whole is difficult to say. A certain amount of research would no doubt establish the point satisfactorily enough for the punctilious researcher and student. But, once the point was passed, its timing became of little more than academic interest because there was no going back. Any attempt to do so, for example, by applying 'deflationary' or restrictive policies only tied the bonds of higher government expenditures—certainly higher public *relative to other* expenditures—even more tightly. It was rather like a goat tethered to a stake desperately trying to gain its liberty by running in the direction in which it used to enjoy its freedom: all that it succeeds in doing is running in circles, constantly shortening its tether and finally being held tightly to the stake itself, unable to move anywhere. At that point, governments, just like the goat, feel only puzzled frustration.

The frustration is even more marked because governments often fail to realise on just what small margins economies operate. Policies need to be sensitive and, particularly, if they move the relationship between two macro-elements in a modern economy in a direction opposite to that which they intend, then the impact can be serious, even though the movement be small. To be more specific, economists and policy-makers do not seem to realise just how small a margin of decline in production is permissible if excess pressure on prices is to be avoided. A whole range of social expenditures—including defence and ranging through education and highways to maternity allowances—are immutable, inflexible or difficult to change quickly. They are at a level appropriate to a very high—at or close to a maximum—level of production and employment of human and other productive resources. A quite small cutback in this level of production throws the economy out of balance.

The traditional way of restoring balance when wages and prices are rising and the economy is tending to go through the ceiling, is to reduce demand, employment and production. However, in modern conditions, with that vast array of social expenditures, this traditional approach does not, in fact, restore balance but only intensifies the imbalance. It succeeds—within the limits of what is politically practicable—in reducing employment and production; but the impact on aggregate demand is less, may be negligible and, in some circumstances, may be the opposite of what is intended, that is, it may be increased absolutely or is, in any event, certainly likely to be increased relative to production and employment. The margin permitting balance is therefore overrun and whatever chance of maintaining balance that there was, is destroyed. It can be restored only by expanding production.

This seems to be the point to emphasise that the shibboleth persists that the modern economy suffers from a chronic deficiency in demand. A recession or even a depression is always feared to be just around the corner. For those who suffered their earliest and most severe economic traumas in the 1930's and who in the postwar years absorbed wholeheartedly the Keynesian remedies for those dark days of depression, this preoccupation with a chronic deficiency of demand is understandable. But, while it may be understandable, it is, in the economic circumstances of today, completely unforgiveable. This is so for a variety of reasons and not least because it gives a seriously unsatisfactory result when a government attempts to 'reflate' after restrictive or 'deflationary' policies at the top of a boom have failed to bring anything more than unemployment, less production and more inflation. 'Reflation' is usually carried through mainly by injecting more consumer demand into the economy, the theory being that this expansion of demand will carry investment and production along with it.

Any idea that bounding demand will bring forth an equivalently bounding production is outdated. It belongs to the 1930's and the early years of Keynesian policies when a chronically deficient aggregate demand did indeed need supplementing to bring forth and sustain full employment and production. But those days are past. Every economic crisis of the last twenty-five years and most of the time in between has been used to add to public outlays whether on social services or roads or housing or education or foreign aid, or more recently, the environment and the 'national estate'. These expenditures have increased so massively and are so stable, except in an upward direction that the problem is no longer one of chronically deficient demand but of chronically excess aggregate demand and chronically deficient aggregate production. To hope that production will automatically follow and match a bounding demand situation is to rely much more on faith than on reason.

But when it does not follow and match, the orthodox economists then damp down economic activity to compel an equilibrium between production and demand. They then show utter astonishment that the equilibrium does not emerge and—just like their equally astonished ancestors a generation or so ago in the 1930's—they look for reasons why their splendid 'model' did not work. In the 1930's, a lot of them blamed too-high wages for *de*flation; now a lot of them blame too-high wages for *in*flation. Some of them in the 1930's wanted to get back to a gold standard, at least in international payments. Now a lot of them have wanted to revalue the currency, a remedial device that the pundits have sometimes sold to a well-meaning government.

The current orthodoxies, however they be applied at the top of the boom, can give only a new inflationary impetus to existing inflationary pressures; that is, an underlying inflationary trend is only intensified by governmental policies inhibiting production. If such policies are accompanied by social welfare policies enlarging consumption, the pressure of demand on available resources will enhance price and wage distortions and, in effect, seek to ration supplies through price rises. In circumstances where food is short, partly through climatic conditions and partly through earlier lack of incentives to production in surplus areas, then food-price rises, as in 1972 and 1973, establish a new wave in the already stormy surf of price and wage rises.

Let us be very clear that we cannot—certainly a left-of-centre government cannot—cut consumption very far. It cannot cut social services or education or health or housing. It cannot allow much unemployment. In a 'recession', expenditures especially on social services will go up, not down. The only thing that will go down will be production. Prices will rocket. Depending on what is happening to a country's major trading partners, imports could rocket too. The flow of capital could add to an adverse trade balance in a way that could disastrously run down international reserves. Admittedly, if other countries adopt similar restrictive policies, returns for exports could remain high and get higher and a scramble for imports could mean that a serious deterioration in the trade and payments balance of any single country might be retarded. But, in that event, the inflation rate for everyone would be likely to bound upwards all around the world. If all this sounds familiar, it is not surprising: in simplified form, it is what the world has been going through in the last few years.

Is there a way out, other than by the highly uncertain operation of good luck? Fortunately, there is; and it is as simple as the solution that was available to governments in the early 1930's if only they could have seen it. It will require the same sort of revision of economic thinking that was then needed. The question is whether the economic advisers of governments can achieve this change or, if they can't, whether the governments themselves can see through the fog of outmoded theory to define practical solutions.

The essence of the solution is that, in an economy of high welfare standards, of massive government expenditures tending to go up in a recession rather than down, the way to deal with an inflationary situation is not to cut economic activity and production but to increase it. Governments should provide incentives for people to undertake more work, more investment, more production. The effort should be to have an aggregate production sufficient to meet private and public consumption and investment, to meet export and foreign aid requirements, to meet the newly enlarging demands of the environment, creation of new towns and so on and to do so in a volume to ensure that they do not need to be severely and unjustly rationed by excessive price rises but can meet presently existing needs and promise a future in which welfare and leisure will be improved. 'The lower our GNP', said Lord Rothschild, 'the greater the percentage of it which has to be spent on the disadvantaged and the less there is available for other important matters, such as capital investment in the nationalised industries, reducing taxation, getting a better rail service, stopping giant articulated lorries thundering through country villages by building by-passes, providing theatres and museums, and so on'.[24]

Let's be clear that we can get the steel or the beer or anything else we want only by producing it or producing something to exchange for it or by promising to produce something to pay for it (with interest) in the future. And, most important of all in present political and economic and social circumstances, we won't need any less

[24] Address to the Agricultural Research Council's Letcombe Laboratory, Wantage, 24 September 1973.

steel or beer by not producing it or certainly our needs won't fall as much as our production if we deliberately stifle economic activity. So really we have little choice. We must produce more to do those things we really want to do. We can gain nothing by restriction. We must plan what we need and then provide all the incentives and effort necessary to meet those needs. Any economy can, of course, plan to do more than its capacities, however well managed, will allow. If so, there will be inflation. But a solution to that inflation will not be to bring production down. On the contrary, the solution will be to keep production up and try to be more rational about the plans we seek to satisfy within that productive capacity.

That productive capacity will be largely determined by the size of the labour force, its skills and the intensity and efficiency of its utilisation. In an economy in which labour flows are particularly sharp to certain sectors, stability and balance and equilibrium will be facilitated by relaxing demand for labour in and/or increasing supply of labour to those sectors. In a modern economy in which labour is increasingly concentrated in the service sector, stability will be promoted by bringing demand and supply for labour in tertiary industry (including many government services) more nearly into balance. It is to this that we might now turn our attention.

IV
The service revolution

A couple of hundred years ago, an essentially agricultural (and commercial) economy began to give way to an industrial economy, which did not ignore agriculture and commerce, but whose dynamism and the way it transformed people's lives, gave the particular character to those societies that adopted or were adopted by it. It did not really come suddenly. It lurched to full stature. The putting-out system gave way to the factory system and that in turn was subject to changes in dimensions which led us only gradually to the organisation and power-form of 'The Managerial Society' and the large-scale corporation of 'The New Industrial State'. It was both a product of invention and a stimulus to further invention, so that a new product which would have been an epoch-making device in the millions of years before the Industrial Revolution became no more than something repeated or superseded every few decades or even every few years. Physical inventions did not necessarily exclude moral, philosophical, political, social or cultural inventiveness; indeed those areas of human activity, have flourished in the last couple of hundred years. But we might, in the short perspective with which we can view them, be giving them more value than those who come later will do. Whether, in the non-material fields, the modern contribution has been greater than that, for example, of the ancient Greeks, may be open to question in the longer perspective of time.

But that, for our present purposes here, can be regarded as an irrelevance. What we want to establish is that, whatever the non-material advances, it was the material achievements that gave the industrial age its idiosyncratic character. But while the Industrial Revolution was going on, another emerged within it. In some ways, this was a reversion to an earlier period—a reversion away from the physical and material and back to a period in which man served man.

One of the characteristics of the Industrial Revolution somewhere near its apogee was that man served machines and material production and no longer seemed, as he had done for generations in the past, to serve a human master. The human master was in fact still there but the modern industrial state obscured him often in a corporation and the machine and 'organisation' immediately seemed dominant. The gracious living of the rich in the era before the Industrial Revolution ultimately gave way in the advanced industrial countries to an era in which nearly all were relatively rich, nearly all lived ungraciously and nearly all were equally unserved.

We may now have in prospect a new period in which, in the advanced countries, most of the material needs of mankind will be met—or can be met—and in which greater attention will be paid to providing those services and that graciousness of living—or 'quality of life'—that he has for centuries identified with wealth and success and power.

Feudalism was a system of authority and an economic system based on land and service.[1] At the upper end of

[1] 'Interests in land were not granted outright and complicated feudal ties were created between the King and his tenants in chief. Thus, for example, in return for a grant of an interest in land a tenant in chief might agree to provide a certain number of knights to serve the King

the hierarchy, the barons received land from their king and in return gave him service. At the lower end, the serfs received no land to which they could claim any title but they were permitted to use the land of their lord to provide for their own sustenance. In return, they provided service to their lord by working his land and thus creating a tribute that the lord could use himself or pass on to someone else in the hierarchy. Wealth resided principally in land. Income derived principally from service. Not only income, but also security derived from service, for the king could command military service from his barons who, in turn, could command it from their vassals. Perhaps much of the 'service' was in fact labour for material production but in some sense and to some degree, we can think of feudalism as a service economy.

The decay of feudalism and the eventual advent of the industrial era brought a change that concentrated attention on the production and sale of material things. People still sold their services in the form of labour but this sale was fundamentally dependent on the employer's capacity to sell his product. Sale of labour conferred no right except to a wage which was or might be no longer payable if the product of the wage ceased to be saleable or its saleability declined. In addition to labour, other services such as banking, insurance, transport, and professional (legal, architectural, engineering, etc.) services were provided but very largely as an adjunct to capital formation and the

---

for forty days of the year. In turn the tenant in chief, as mesne lord, might grant the land or part of it to knights in return for their services. Through this constant process of subinfeudation a complicated pyramid of feudal relationships grew up. At the top of the pyramid was the king, for all land was held of him. Each person in the pyramid to whom the land had been granted owed services to the mesne lord immediately above him, and was owed services by the person immediately below him. The person at the bottom of the pyramid was in actual occupation of the land and was known as the tenant in demesne.' *Property Law Cases and Materials*, Sackville & Neave, pp. 201-2.

marketing of goods. This is not to say that, in the early years of the Industrial Revolution, there was no place in the industrial economy for the provision of services which had their value quite separate from goods, but their place tended to be minor and peripheral and they were not the element that gave the economy its essential thrust and kept it moving.

But as the industrial era advanced and matured, it underwent changes. The services connected with the supply of physical goods increased in value and complexity; but, quite apart from this, the provision of services having an intrinsic market value in themselves greatly increased in scale. Percentage employment in the services sector grew rapidly while that in agriculture declined sharply and that in the industrial sector remained static or declined slightly. 'As the history of every industrialised country indicates, the proportion of the labor force employed in agriculture shrinks to a very small fraction of the total work force: in the United States only four per cent of the civilian labor force is to be found on the farm and this includes a considerable residue of subsistence farmers. Meanwhile, the industrial "core", comprising manufacturing, mining, transportation, construction and utilities, has stabilised at roughly one-third of the work force. The remainder of the population—more than sixty per cent of the work force in the United States today—is employed in the congeries of occupations that produce "final" services. From one industrial country to another the magnitude of these proportions varies, but the drift is visible in all. Nonetheless, a few cautionary remarks are in order. First, let us note that the industrial sector has not been the source of the main change in the profile of sectoral employment. Although it has declined slightly in France and England during the last twenty years, in Germany the percentage is unchanged; and in the United States over a period of seventy years the decline has been miniscule. The great sectoral transformation of our times, in other words, has not been so much a shift from industry to service as a shift from agricultural to service tasks. In addition, we must note that some part of the rise in service employment represents the transfer of certain kinds of work from the nonmonetized household sector to the monetized commercial world. The well-known rise in female labor participation (from eighteen per cent of all females of working age to 37.4 per cent, in the years 1890 to 1970 in the United States) has brought as a consequence the illusion of a rise in service "employment", as tasks that were formerly carried out within the home, where they remained invisible to the eye of the statistician, emerged onto the market-place. The growths of the laundry industry, the restaurant industry, the professional care of the aged and even "welfare" represent instances of this semi-spurious inflation of the growth of "employment" in service occupations. . . . Let me warn against the misconception of that change (to service tasks) as a massive emigration from industrial work. Nothing of that kind is visible. Instead, the primary "experiential" fact of the employment shift has been the decisive decline of agricultural (farm) employment and a corresponding growth of market-located, service-connected tasks. The industrial "core" remains roughly constant.'[2]

We must therefore keep in mind some important qualifications about the 'rush' from other sectors into the service industries. But the central fact remains clear that the service industries have been proportionately the great growth areas in the advanced economies in recent times. By comparison, agriculture has declined and secondary industry has remained static. It is these differences in

[2] Heilbronner, Robert L., *Economics—Our Best Guide to the Future,* Dissent, 1973.

proportionate rates of growth and relative dynamism that might be significant for tracing the origins of pressure in the cost structure of the modern economy and, in some measure at least, for tracing the origins of instability in the economy.

The problem of excess demand in certain industrial sectors is one that has plagued the modern, free, mobile economy since the beginning of the Industrial Revolution. Labour tends to flow to the growth industries. Because demand in these industries is high, wage rates there tend to be high. This, in turn, tends to accentuate further the flow of labour to them. At some point, equilibrium will be reached but, if growth is more than a short-term trend, this will take a long time. For example, when the former essentially agricultural economies were industrialising, labour flowed from the countryside to the towns. Despite massive fluctuations from time to time as the trade cycle moved up or down, wages in the industrialising cities tended to move up in monetary and real terms over a long period. The industrialising process has occupied a couple of centuries and still continues. Therefore, the movement of labour and the effect on wage rates was not a temporary but a continuing phenomenon, with a fundamental effect on the economy as a whole and on the relative rates of growth and profitability of the urban and rural sectors.

The same is true now of the evolution from an industrial to a service economy. It is not a temporary but a long-term phenomenon. It fundamentally affects the whole economy and the relationship not only between the rural and urban economies but between the industrial and service sectors within the urban economy. The demand and competition for labour in the service sector will determine the brightness or otherwise of the whole labour market; and wage rates will tend to flow on from the service sector to the other sectors or the relative shortage of labour in the industrial sector will cause a rise in labour costs there that will flow out to other sectors.

The problem for the future will therefore be to maintain stability in the service industries just as, in an earlier period, the problem was to maintain stability in the industrialising sector. This does not mean that the evolution of the economy towards services should be reversed; that would be difficult or impossible. But it will need to be controlled. On the one hand, demand management (or resource utilisation) will need to direct itself more explicitly to the service sector, often without interfering (or perhaps interfering in an opposite direction) with the rural and industrial sectors. On the other hand, production budgeting will need to ensure that the demand for labour in the service industries is met more completely and continuously, so that the pressure of demand does not force up too high in that sector wage rates which will then flow on to the rural and industrial sectors. We must bear in mind that a flow-on of rates that can be borne by a high-growth sector to a relatively static or low-growth sector can seriously reduce incentives to production in the latter and cause further distortions in the labour market, in equilibrium between supply and demand in the low-growth sectors and in the price level generally in the non-service parts of the economy. Support arrangements for secondary industry could become as formidable and extensive as they have been for primary industry in the past. Of course, there can be periodic variations from this secular situation. For example, a dwindling proportion between agricultural land and an exploding population could restore primary industry as a high growth sector; but it seems, at this stage, that the relative growth in the rural and service sectors might not be likely to change so far that the flow-on would be from the rural to the service sector. Therefore, the principal imperatives for control would seem likely to remain in tertiary industry at least in the period we can now see ahead.

The potential for development of the service industries is immense—or, in any event, as great as imagination and the quest for novelty have made the actuality of manufacturing industry in the past and are likely still to extend its potential in the future. Service industries will both satisfy consumers' spontaneous needs and titillate their demand for services they had not previously known they wanted. There will be fashions in services as there are fashions in goods. There will be transience and fatuousness. Some services will be experimental and never get beyond that. Others will satisfy a continuing human need for physical or psychological satisfaction.

Alvin Toffler suggested that some future industries will be directed towards providing experiences and live environments, as part of the 'emphasis upon the inner as well as the material needs of individuals and groups'[3] He says that we shall 'witness a revolutionary expansion of certain industries whose sole output consists not of manufactured goods, nor even of ordinary services, but of pre-programmed "experiences". The experience industry could turn out to be one of the pillars of super-industrialism, the very foundation, in fact, of the post-service economy. As rising affluence and transience ruthlessly undercut the old urge to possess, consumers begin to collect experiences as consciously and passionately as they once collected things. Today, as the airline example suggests, experiences are sold as an adjunct to some more traditional service. The experience is, so to speak, the frosting on the cake. As we advance into the future, however, more and more experiences will be sold strictly on their own merits, exactly as if they *were* things . . . One

[3] Report of the Stanford Research Institute by its Long Range Planning Service, quoted by Toffler in his *Future Shock*, Bantam Books, New York, 1971, p. 234.

important class of experiential products will be based on simulated environments that offer the customer a taste of adventure, danger, sexual titillation or other pleasure without risk to his real life or reputation. Thus computer experts, roboteers, designers, historians, and museum specialists will join to create experiential enclaves that reproduce, as skilfully as sophisticated technology will permit, the splendor of ancient Rome, the pomp of Queen Elizabeth's court, the "sexoticism" of an eighteenth-century Japanese geisha house, and the like. . . .'[4]

The service economy will rely on more solid supply and demand than this. Retail, banking and insurance, transport and similar services, which form the bulk of tertiary demand today, will probably continue—along with a mass of public and community services—to provide the bulk of tertiary employment and tertiary investment in the future. The more novel and exotic services will also be available but while they might gradually provide more than 'the frosting on the cake', the already known services will be used more intensively by more people, especially in the lower-income groups.

Some distortions might be caused by the impact that expansion of the services sector will have on the need for investment. Tertiary industries generally require less investment than either primary or secondary industries. Certainly, they need some. Most of them need some land, building and/or offices. Most of them need some equipment. This may be extremely costly—as in the case of large, long-range jet aircraft—or virtually negligible—as in the case of equipment for agency and advisory services. If tertiary industries form a larger and larger part of the modern economy, and they require less investment than the other sectors of the economy, the established

[4] *Future Shock*, p. 226 & p. 228

habits of saving may not be in harmony with the new need for investment.

If this is so, distortions could occur. Excess saving could mean a failure of aggregate demand of such a magnitude that unemployment—perhaps chronic unemployment—could result. Since this would, in the future, be increasingly difficult for any government to allow, public expenditure would be used either to provide work or to compensate the unemployed. As we shall suggest elsewhere, the demand for public investment and public expenditure might, in the future, be so great that any relatively smaller investment requirements of tertiary industry will relieve pressure on limited resources and help to slow the rate of virtually inevitable inflation.

The impact of the flow of labour to the services sector, in so far as it is inadequate to meet the demand there, will be to push labour-costs up there and for that increase to flow to the other sectors. In so far as the attractions for labour in the services sector are greater than in other sectors, again the tendency will be for labour-costs in those other sectors to rise because those sectors will have less labour than they would otherwise have had and will need to give additional incentives to retain labour or increase it. In either set of circumstances, the services sector will tend to be an inflationary influence on the economy. Let us look at this a little more closely.

Buoyancy in the service sector is fed by demand both from private enterprise and from public expenditure. The range of services in a modern economy, as we have seen, is being constantly extended and the proportion of the average consumer's expenditures on services tends constantly to go up. Cities are economic organisations in which people are largely and increasingly occupied in serving and being served by each other. The large retail stores, the small boutiques, the huge banking, insurance and hire-purchase buildings, the docks, the supermarkets, the laundromats, the solicitors' offices, doctors' surgeries, the hospitals, the law-courts, the parliament buildings, the towering public-service offices, the garbage trucks, the taxis, the dentists' surgeries, the cinemas, the theatres, the sportsgrounds and the television studios, all of these are means of providing services. The tremendous growth in the size of cities in recent years is a sign not of rural growth and efficiency or even so much of industrial growth and efficiency but of the crowding of people together in vast congregations to provide and enjoy the services that they both increasingly want and increasingly want to provide.

That people want to enter service industries has been a phenomenon shared by both the poorer and the most advanced countries. Leaving aside the Wall Street, the Oxford Street and the Pitt Street farmer, fewer and fewer people have wanted to enter and remain in rural industry. A smaller proportion of people (though so far not much smaller) have seemed to want to work in factories. Fewer people overall have seemed to want to acquire the manual skills which the rural and secondary industries require. But more and more people have wanted to work in tertiary industries. Robert L. Heilbronner noted this as 'a change in the expected life-styles of a postindustrial population. Whatever else its effect may be, the exposure to prolonged schooling seems to encourage an expectation of careers in office, as opposed to manual, tasks; and this may indeed militate against the willingness of the "educated" population to consider many manual tasks as appropriate ways of making a livelihood, regardless of the relative incomes to be had from goods-handling, rather than paper-handling, work'.[5] There is thus both a high-potential and a high-actual flow of labour into the tertiary sector. While so far this flow has

[5] Heilbronner, R. L., *Economics—Our Best Guide to the Future.*

not been sufficient to create any large or lasting surplus in service-sector labour in the advanced economies,[6] the ardent supply suggests that greater control of use of labour in this sector could establish a situation in which the flow-on of costs and wages could be reversed so as to come from the labour-short industrial sector rather than from the then labour-surplus service sector.

More and more people want to become solicitors, architects and doctors; advertising, television and public relations consultants/employees; real estate, financing and development entrepreneurs. As part of this, the demand for university education has sky-rocketed in the last 20 years. Where once a university was a comparatively rare and thinly-populated institution, now they are everywhere and the campuses are crowded. Other tertiary-education institutions have also flourished. The need to staff and administer these institutions causes in itself a huge increased demand for their own output and enlarges the services sector of the economy. In turn, the higher-level educational institutions have to be fed by more and better primary and secondary schools. Again, the services sector of the economy is enlarged in terms both of demand and supply.

Much of the services supply and demand comes, as we have said, from private enterprise but much of it comes from the vast increase in public expenditure and public services at the national, regional and local level. National governments spend much more on welfare and diplomacy, on roads and bridges, on health and education and so on. At the regional and local level, much more than

[6] In the developing economies, the same urge of the 'educated' in the absence of a sufficient tertiary sector has led to large-scale chronic unemployment of university graduates and other 'white-collar' labour. In the advanced economies, downturns in specific areas such as space research and mineral exploration have led to surpluses of highly educated labour from time to time (for example, in the United States between 1969 and 1972).

before is spent on police and urban amenities, on city-cleaning and access routes, on attempts to brighten and enliven the city environment. The demand for highly qualified professional and administrative staff by these public institutions is immense.

This flow of labour into the service industries means that the supply of labour to the rural and (though so far only marginally) to the industrial sectors is reduced. Moreover, the long-term buoyancy of demand for labour in the service industries tends to push up wages there and thus to set a standard to which the rural and industrial sectors must conform or else lose still more labour to the services sector. Indeed these latter sectors might need to offer *greater* incentives to retain labour. The flow of labour away from the rural and industrial sectors, the buoyancy of demand for labour in the services sector and the steady or rapid increase in wages necessary to hold labour in the rural and industrial sectors all mean that the growth of output in the rural and industrial sectors is slowed and the cost of that output is enhanced. The chronic surplus situation that once afflicted the rural and industrial sectors tends to be replaced by a chronic shortage situation, except to the extent that rural industry is supported by a variety of subsidy devices and secondary industry, though so far supported less than rural industries, receives a variety of incentives. Attempts to halt inflation by holding wages down tend much more to apply to rural, industrial and mining workers (for example, coal miners) than to professional and managerial staff and service labour generally, and this again tends to move labour out of the 'commodities' sectors—the rural and industrial sectors—of the economy. The resultant tendency to scarcity or to lesser supplies than would be available in a more nearly equilibrium situation pushes up the prices of the products of the rural and industrial sectors and so inflates living costs for the whole economy, including the services sectors. The process then begins again so that a spiralling effect produces inflation at an ever-increasing rate.

To more nearly round out this picture, we must also say that the comparatively lesser need for capital of the service sector (although, as we have pointed out, *some* parts of the services sector are highly capitalised) means that monetary restraints on the economy, including especially a rise in interest rates and credit curbs generally, affect tertiary industries less and have less effect on their cost structure. These monetary restraints therefore provide fewer incentives for tertiary industry to reduce its demand for labour while at the same time hitting the rural and industrial sectors. Commodity production drops while most of the economy remains buoyant. Rapid price rises of commodities therefore again follow from their relative scarcity and an inflationary surge flows through the whole economy.

We thus have a macro-economic problem of labour supply which is not so 'macro' as an aggregate labour shortage (athough that too is always an actual or incipient condition in the modern economy) but is rather a question of the balance between the labour supply flowing to the three main sectors of the economy. In brief, we have a problem of trying to relax the pressure of demand for labour in the services sector, of trying to increase the supply of labour for this sector without reducing the supply to the rural and industrial sectors and of trying to improve the cost and efficiency of services labour.

We must bear in mind that both the supply of and demand for labour in the services sector are subject to technological change and, by one means or another, to control. There is no absolute reason that demand in the services sector should always exceed supply at any point of time or constantly. 'In the heretofore technically "neglected" service area, labour costs are high, productivity low, and a new level of technological capability begins to bring many heretofore unmechanizable tasks within the reach of machinery. As a result, we have the vending machine instead of the counter-man; the self-service store for the clerk; the programmed lathe, the automatic check-reader, the omnipresent computer. What will be the effect of this further mechanization? The answer hinges entirely on the elasticity of demand for the services produced in this sector. If demand swells *pari passu* with the increased productivity per service worker that will result from automation, then the service sector may continue to absorb its present sixty to sixty-five per cent of the labour force. If demand swells more rapidly, or if technology enters more slowly, employment in this sector may rise still further in both absolute and percentage terms. It is also possible that the demand for services, like that for manufactures, will ultimately reach satiety. In more concrete terms, there may be a limit as to the amount of government services, retail-trade services, education, recreation, financial advice, etc., that a man wants at a given income level; and the amount of services (measured in the dollars we spend for them) may not rise as rapidly as income rises. In that case, increased unemployment would result.'[7]

The above commentary refers to the United States. Most other economies are still to experience the intensity of the pressure on the services sector that the United States has experienced before they 'catch up'. Nevertheless, even in the United States increasing governmental activity, which has traditionally been inhibited, may continue to intensify the pressure on services and aggregate pressure may be even greater in other economies from both government and private demand. If unemployment develops in the services sector, this may cause some structural difficulties and some personal hardship, but it would

[7] Heilbronner, Robert L., *Economics—Our Best Guide to the Future*, in 'Dissent', 1973.

be relatively easy to cure in macro-economic terms by applying established Keynesian remedies. The important thing that the above commentary draws attention to is that excessive buoyancy in the services sector does not have to be accepted as inevitable and continuing but can be controlled and might eventually need to be controlled even in a way that sustains demand in that sector. Given the present and prospective buoyancy of demand there, what are some of the means we can adopt to control it?

The first place to start in solving the problem is in the public-activity area. That is the major growth sector for expenditure. It is the major growth sector too for the service industries. How can economies be effected?

The first and most obvious and most often advocated means is simply to cut public-service manpower: introduce efficiencies, cut out unnecessary activities, establish better priorities in what needs to be done. Undoubtedly there is a good deal of fat in almost every public service but it seems traditionally very difficult to reduce the level of public-service labour for any length of time. A temporary reduction seems to be followed a little later on by a renewed surge forward. This does not mean that the temporary effort should not be made; clearly it should, especially in an inflationary, labour-scarce situation.

The second method is one that is rarely used or even thought about. That is to reduce the need for so much public-service labour by reducing the regulatory and revenue-raising burdens of government. The general principle would be that where regulation of services and payment for services can be dispensed with, this should be done especially where the labour cost of regulation and/or revenue-raising is relatively high.

For example, a good deal of public transport involves collection of relatively small amounts of money by highly paid, scarce labour. Behind the direct collection lies a great organisation of accounting, auditing, security and other procedures that make the whole operation almost prohibitively costly. Much of the cost of public transport has to be met from the budget anyway. The waste to the economy in collecting the margin of revenues seems generally to be out of proportion to any resultant advantages. The solution would seem to be to make available completely free such public transport (including highly capitalised and underutilised national railway systems) as the public authority decides should be provided. From the viewpoint of the economy as a whole a further advantage would accrue that public capital installations and equipment would be much more fully utilised than before.

Just how far this can be extended is difficult to say. Hospital and public health services generally should be made available without any passing of money and a minimum of supervision to eliminate corruption. Use of postal services might be free or paid for by an 'extra' on income tax. Radio and television receivers are now so widely and uniformly spread throughout the community that it is no longer sensible to collect revenues for them separately from general revenue.

In the field of social welfare, the simplest criteria should be adopted for payment of pensions, unemployment benefits, child endowment and so on. Means tests for age pensions should be abolished. Public authorities should also take over much of the 'individual' liability in the field of torts, injuries and accidents which now absorb such a mass of service labour in insurance and legal processes.

These examples are illustrative rather than exhaustive. The objective should be to provide public services, most of which are going to be provided anyway, in the most economic way especially so far as the demand for labour is concerned. To what extent are similar economies possible in private enterprise?

One of the persistent characteristics of organisation in the services sector is the predominance of small units. This does not apply to banks, insurance companies and retailers. But it does apply to most professional and trade services. Plumbers come in small units and so do motor mechanics, solicitors, real-estate agents (mostly), washing-machine, refrigerator and television mechanics, travel agents and a lot of others from motor-mower repairers to massage parlours. There has been no development yet of the service department store or the super-service-market. The inefficiencies of small units, their high costs and the lack of effective competition because of the absence of an easily identifiable standard of service related to cost means that a large part of tertiary industry injects high costs throughout the economy. The establishment of large 'universal-service' stores that would enable visible competition in the service area among the equivalent of Macys and Gimbels in each large city could go some distance towards producing the sort of cuts in costs and prices that the large product department store has achieved compared with the corner shop.

Whether these proposals are practicable or are the best proposals we do not know. Perhaps they and many others might be considered and some of them put to practical trial. The important thing is that we should seek around for ways of expanding the supply of labour in the service industries, for ways of reducing the demand for it and for ways of making it more efficient when it is put to work.

One of the things that has inhibited the supply of labour in all industries, service and other, and has thus tended to raise its costs and, in some ways, to reduce its efficiency is the belief that the ultimate joy of every human being is to be at rest. To be idle is to be in Paradise. When man attains to his final Valhalla, he will have absolutely nothing to do. This is the myth—if it is a myth—that we must shortly examine. But, before we do that, we need to consider whether, in circumstances short of that final Valhalla, there are expectations that man hopes to be fulfilled. How great are these expectations? What pressures do they exert for further and continuing effort from man?

V
The pressure of expectations

Forming habits is dead easy. It's breaking them that comes hard. Mankind led, for thousands of years on this earth, a life that was 'solitary, poor, nasty, brutish and short'. His expectations were often related much more to the next world than to this. In a couple of generations, he has forgotten all about it: both the nightmarish nature of his life on earth and his hopeful belief in heaven. He looks down that long line of sadly mistreated generations as though they could never have spawned him. But, perhaps more importantly, he cannot really conceive—despite all that talk about the environment and population explosions and the atomic bomb—that he and his children will ever spawn successors who will live less well than he. Habits, formed so recently, are conceived to be enduring. Expectations of the future are of an affluence greater than now, superlatively greater than in the past. And the stimulus of these habits, the pressure of these expectations will go much of the way—resources and good fortune allowing—to ensure that the habits endure and the expectations are realised.

But habits and expectations will not be all that is required. There will be difficulties. Man has extended the frontiers of production tremendously in the last couple of generations; he has more now than he ever had and his margin for choice is vastly greater than ever before.

But it is not infinite. He can now choose—and he can choose from a great variety. But the need for choice lives on.

Somewhere round about now we are beginning to face one of the greatest choices in mankind's history. We are on the banks of a Rubicon which we are certainly going to cross whether we like it or not but we are still uncertain how we are going to make the crossing and what political and social, as well as economic complications will accompany it.

So far, much of the progress in the Western, liberal-democratic world has been associated with an increase in the material satisfactions of the individual. Especially in the last generation, the individual has judged his lot according to the consumer goods that he has had at his disposal. These have not always been 'hard' consumer goods; many of them have consisted of entertainment, of holiday facilities, of services of diverse kinds. The great god of GNP has often been worshipped too much by economists and politicians; but, if the average man has known little and cared less about the GNP, he has cared a great deal about His Individual Blessings. And he has expected HIB to get bigger every year; for his children he expects even more.

If HIB don't grow, there is likely to be political and social trouble. We have mentioned already that there is a very narrow range of temperatures in which the human body feels really comfortable; it is very easy for any of us to become too hot or too cold. So it is for our economic conditions. Of course, in this we have to keep in mind what we said a short time ago about habits and expectations. A man accustomed to taking a cold shower every morning will not suffer the shock that cold water would give to a man with a well exercised hot-water system.

Between 1858 and 1938, unemployment in Great Britain exceeded five per cent about half the time. It exceeded ten per cent around 1858, 1878 and 1886 and for almost the whole of the period from 1921 to 1938. From 1930 to 1935, it was more than fifteen per cent and, for a couple of years in the early 1930's, it was well over twenty per cent. In those halycon days, the British and others were very nearly all cold-shower men. The habit bred a pretty spartan set of expectations and, in place of present satisfactions, an unpermissive theology substituted the vision and the rewards of an after-life for privations that were inescapable anyway.

But, when that changed after 1945, the range of tolerable economic temperatures changed dramatically. 'In the years immediately before the war', said a British Government White Paper in 1956, 'the average rate of unemployment in the United Kingdom was over ten per cent. Since the war it has never (except for a few weeks in 1947) exceeded three per cent. For most of the period 1945-1955 it has been under two per cent; it is now about one per cent.'[1] This set the pattern. A national economic disaster was identified not only with an unemployment rate above ten per cent or even five per cent but at or above 3 per cent. When, in early 1972, unemployed in Britain passed the one million mark, with an unemployment rate of 3.8 per cent, it represented the most serious depression—in the sense of unemployment—for a generation. Much the same sort of general situation had developed, though more slowly and with more conservative misgivings, in the United States. When these two countries pulled themselves out of their heavy unemployment situation in 1972 and 1973, it seemed unlikely that they would lightly let their economies slip into the same disaster again. Better inflation than unemployment; certainly better full employment than both. The only likely cause of mass unemployment was something beyond the

[1] Cmd. 9725, *The Economic Implications of Full Employment*, para 2.

control of either government, such as grave energy shortages or industrial disputes.

So habits develop and the range of tolerable fluctuation narrows. A real growth rate of nine per cent in Japan is a national calamity after the country has become accustomed to a growth rate of twelve per cent. As people's expectations grow, the pressures of these expectations become irresistible. This is the way it will be in the future. People will expect an increase in their material satisfactions and their consumption of services—and they will expect this increase at least at the rate to which they have recently become accustomed.

This should not be difficult, we might think. But that assessment would lose sight of a very important element: the admixture of social with individual objectives. We may be at the threshold of a new conception of the balance between individualism and society—and of the morality of individual as distinct from social satisfactions. Robert Ardrey tells a story of social behaviour in a troop of baboons threatened by a leopard:

> 'It was still dusk. The troop had only just returned from the feeding grounds and had barely time to reach its scattered sleeping places in the high-piled rocks behind the fig tree. Now it shrilled its terror. And Marais could see the leopard. It appeared from the bush and took its insolent time. So vulnerable were the baboons that the leopard seemed to recognise no need for hurry. He crouched just below a little jutting cliff observing his prey and the problems of the terrain. And Marais saw two male baboons edging along the cliff above him.
>
> 'The two males moved cautiously. The leopard, if he saw them, ignored them. His attention was fixed on the swarming, screeching, defenceless horde scrambling among the rocks. Then the two males dropped. They

dropped on him from a height of twelve feet. One bit at the leopard's spine. The other struck at his throat while clinging to his neck from below. In an instant the leopard disembowelled with his hind claws the baboon hanging to his neck and caught in his jaws the baboon on his back. But it was too late. The dying, disembowelled baboon had hung on just long enough and had reached the leopard's jugular vein with his canines.

'Marias watched while movement stilled beneath the little jutting cliff. Night fell. Death, hidden from all but the impartial stars, enveloped prey and predator alike. And in the hollow places in the rocky, looming krans a society of animals settled down to sleep.'[2]

The sacrifice of the individual in the interests of the society is seldom manifested as dramatically as this. But, although it may be seldom, it is not rare—in the society of man no less than, apparently, in the society of baboons. Man has derived his strength from the society that he has formed. His strength depends on the way he works with others, on his capacity to organise groups—sometimes millions or even hundreds of millions—of people and on his skill in communicating from one point to another, from one person to another and from one generation to another. There is, of course, place for the individual in this society—for the satisfaction of his ambitions, his pleasures and all those needs which are an expression of his personality.

But the degree of his individual 'liberation' is as limited as the range of temperature which, physically, man finds tolerable. There have been and will be times and places at which the society demands more of the individual and other times and places at which it demands less; but the

[2] Ardrey, R., *African Genesis*, Dell, New York, 1967, pp. 82-3.

need for compromise and the fundamental imperatives of man's strength through society will persist.

The long period in the liberal, Western world in which the prerogatives of the individual have seemed paramount may be drawing to a close. Not in all ways. Some elements of his liberation will persist. The strength that social organisation has brought will in some ways allow greater individual freedom. Greater economic power has brought release from many of the constraints that operated on the individual in earlier generations. And oppressed groups may be less oppressed than they were.

But some restraints on the anarchy of individual action and the satisfaction of individual desires may now be necessary. Many people would say quite unequivocally that they *are* necessary. The earth is being despoiled, the water and air are being polluted, this generation is failing to conserve those things without which future generations cannot survive or can survive only poorly and painfully. Dusk is falling; the leopards of man's own creation, or of man's own negligence, are out for prey; the troop of baboons, if not shrill with terror, is showing some unease; and, unless it can sacrifice some individualism to its collective cause, the troop might not survive.

But survival will cost something. It will be a serious competitor for those resources that we have become accustomed to use for our own individual and largely material and immediate satisfactions. And it will be a serious competitor too for those resources that the rich countries have shown some willingness—though a diminishing willingness—to give to the poorer, developing countries. Our expectations might have to be modified; the pressures that they exert might have to be resisted.

Let us examine those things that will provide the most competition for the satisfaction of our selfishly individual expectations; and let us start with foreign aid.

A future historian might see the last quarter century as having taken its special character from the concern which the rich and powerful countries showed for the welfare of the poor and weak. Perhaps when we remember the Cold War, the spread of nuclear weapons and sophisticated delivery systems, the ending of colonialism, the emergence of scores of independent states, space exploration, racial equality, women's liberation and many other things, that might be going too far. But certainly there has been a great deal of novelty and significance in the international attention given to aid to the poorer countries since the end of the Second World War. The provision of aid to the poor and weak by the rich and strong was made all the more remarkable because with increasing vigour the strong advocated liberty and power for the weak; and the weak, in their turn, criticised with ever-increasing vigour the failure of the rich to be generous enough; the more they got the more they demanded and the more their clamour seemed right and natural.

That this was a dramatic reversal of all previous human history seldom seemed to impress itself on the consciousness of either the donors or the recipients who were involved in the vast international aid programmes. The human tradition had been for the strong and rich to levy tribute from the poor and weak. To oppress, to enslave, to rule and to kill were the traditional prerogatives of power. Of what use was power if it were not exercised for the benefit of him who held it? Colonialism—which was, by and large, the system that preceded foreign aid—had not made too many bones about the prerogatives of power. Certainly, the critics of colonialism had made no bones about denouncing its characteristics: it was a system to enslave and oppress for the purpose of maximum exploitation of a conquered, tributary people. Colonies might be squeezed more or less, according to the taste of the colonising power, but there was no question of the squeezing, even if the pips did not always squeak as loudly as the critics might have expected.

The myth to which we have become accustomed in recent decades is that the conscience of the world turned against colonialism and the myth may indeed have had something in it, even if it was far from the whole story. As part of the exercise of this conscience, the direction of the tributary flow was reversed: instead of the colony contributing to the economic welfare and growth of the colonising power, the latter poured out funds and personnel for the economic welfare and growth of the liberated colony.

The poor, ex-colonial and developing countries made no objection to this change. There was little reason that they should:

> 'What female heart can gold despise?
> What cat's averse to fish?'[3]

Countries newly emerged from colonialism were not averse to taking whatever aid was offered, in almost any form: grant aid, loans, commercial and supplier's credit, technical aid and so on. There were some qualifications, although they were not perhaps as obvious in the early years of aid-giving and were shouted loudly and with a fair degree of universality only as the habit of aid became well-established and widespread, especially in the later 1950's and the 1960's. The particular qualification which aid-recipients made about their aid was that it should be given without political strings: it should be a free and generous gesture to the poor with no return, not even the satisfaction that the charitable should derive from the exercise of their charity. Indeed, those to whom aid was given reserved an untrammelled right to upbraid their 'benefactors' whenever the occasion or the mood or the whim provided any modest stimulus.

[3] Gray, Thomas, *Ode on the Death of a Favourite Cat.*

But, of course, the motivation to foreign aid and the relationship between donor and recipient were not quite as simple as this. The rich (and strong) did, in a sense, pay tribute to the poor (and weak). But they had self-interested reasons for doing so. The communists—who themselves are still splendidly successful colonisers—said that the Western powers should repay the developing countries for the exploitation to which they had subjected them: this neatly released the communists—who by definition had no history of exploitation—from any requirement to give aid unless they wanted to.

But the Western countries gave aid for reasons other than submission to this communist reasoning. Some of those reasons were genuinely humanitarian and charitable. But there were also political reasons. Article 55 of the United Nations Charter spoke of 'the creation of conditions of stability and well-being which are necessary for peaceful and friendly relations among nations.' A rich and comfortable world would be a peaceful world.

This was the simple political justification. A slightly more sophisticated motive was that the country given aid was likely to be more friendly to the donor than to others. At a time when communist and non-communist governments were seeking to carve out spheres of influence for themselves or, at least, to prevent the other side from carving out or extending such spheres, there was a measure of force in this argument. Some recipients themselves were not unprepared to give it some credence. They did not in any way sell their sovereignty for gold. But some gave not infrequent indications that they could be more friendly and politically less radical if given aid and that they could always look to the other side for aid if the present donors were not sufficiently forthcoming. Both bilateral and multilateral aid tended to operate in this context; although the 'imperialist', anti-communist governments tended to be those that gave multilaterally in large amounts just as, indeed, they were the biggest, most universal bilateral donors.

The United Nations did not start out with any explicit intention that it should be a disburser of massive amounts of international aid; indeed quite the contrary, for the United Nations was intended to be a self-help agency facilitating co-operation among an original membership the vast majority of whom were already economically more advanced. Certainly, the San Francisco Charter contemplated that the United Nations would be much more concerned than the League of Nations had been with economic and social matters. But, for some few years after 1945, the United Nations occupied itself, on the economic side, largely with problems of stability in the advanced countries. If we leave aside the relief and rehabilitation programmes at the end of the Second World War, it was only after 1950 that the emphasis changed to giving aid to the poorer countries, especially those newly independent, and this emphasis has been maintained ever since.

In this respect, the United Nations effort went far beyond anything expected of it in 1945. At the same time, other programmes, quite outside the United Nations and the Specialised Agencies, contributed greatly to the advancement of the poorer countries. These included, most importantly, the Colombo Plan in which Australia was a prime mover, the bilateral programmes of the United States, France, Britain and, more recently, Germany and Japan; the aid programmes of the communist countries; and the various Commonwealth initiatives to help the growing number of Commonwealth developing countries.

All of these together, plus private capital, were comprehended within the effort and the objectives of the United Nations First Development Decade and were to be expanded in the Second Development Decade of the 1970's. During the 1960's, the aid given by some countries, including Australia, continued to expand fairly steadily. But aid by the major donor, the United States, and by some other large donors such as Britain, steadied and then declined. This decline was not made good by those countries which were better placed to increase their aid, such as Japan and Germany. Nor was the deficiency made good by those smaller countries, such as the Netherlands and Sweden, which embarked on active programmes of aid but whose relatively small national incomes made major contributions to international aid impracticable. Official aid has been supported by foreign private investment and export credits to developing countries. But these cannot substitute for public aid. They tend not to finance the public infrastructure, education, health services or food production needed for development; and the cost of private capital to developing countries is inevitably higher than public (official) aid. However, the prospects are that what began in the 1960's will persist in the 1970's, and that the total amount of official aid for all Western donors will remain at around eight to nine billion United States dollars a year. The additional cost of oil imports by the developing countries, arising from sharp increases in the price of oil, will probably exceed in 1974 the total of all aid by all donors to the developing countries in 1973 or prospectively in 1974 and later years.

This—sadly—is likely to be so because of a very important fact: aid given by the government of a developed to a less developed country cannot be viewed in isolation from the other competing demands on the budget of the donor government, such as defence, education, social welfare, housing and so on. Moreover, the transfer of public funds as aid to developing countries forms part of a complex flow of resources between, and among, developed and developing countries. The continuance, and expansion, of these transfers depends on the general health of the system by which such international flows are governed. That the decline in United States aid has coincided with the secular deterioration of balance within the United States economy and its external payments situation is thus hardly a coincidence.

In some measure, aid may have declined because many of the enthusiasms and expectations among important sectors in the parliaments and communities of donor countries have been disappointed. There has been growing—and not always rational—disillusionment with the seemingly small achievements of international aid. Development is a slow and complex process; and those who hold most strongly to humanitarian, political and economic ideals are not always the most patient about waiting for results.

But, more importantly, aid has declined because the world economy is vastly different from what it was when aid began in the late 1940's. Policies of economic stability that worked splendidly then—so splendidly that the United Nations stopped talking about them—no longer work very well now. Erratic growth, inflation, trade and payments imbalance, unsettling capital flows, currency instability are all symptoms of the failure of our economic policies.

Unfortunately, while we know that the present policies do not work, we are not yet agreed on what *will* work. As we have seen, many advocate wage restraint. Many others advocate—more broadly—incomes policies. There are various proposed remedies for the international monetary system. But the fundamental fact is that present policies are obsolete and, until new ones are devised and implemented, the outlook for foreign aid will remain clouded.

This has happened at a time when the international community has begun to be troubled by a new concern. Some of us are tempted to say that man has always ruined his environment. While that statement is too sweeping and unequivocal, man certainly has *often* exhausted and even more has threatened to exhaust his environment. The

Mayas and the Arabs as well as the modern Americans were all desert-makers. The Fertile Crescent of Babylon became just one more of the deserts of the modern Middle East. Oklahoma became a dust-bowl. Man is not always himself the desert-maker. Sometimes the environment in which he and other animals have been able to survive have been changed by variations in climate. The once vast Lake Chad has shrunk over the centuries and the jungles that once covered the saucer in which the lake lay have disappeared. Man did not do it; the rains that once had nourished the surrounding earth failed to come. The lake came to be replenished only from rains that fell further south; its area shrank; and most of the country surrounding it became desert treasuring only the bones of its former intense animal population.

Deterioration of the environment, caused by man or not, thus takes place in the most primitive societies. The nomad hunts his food or pastures his cattle and moves on. If he stays too long there may be no point in ever coming back. Sometimes, the nomad is less unsettled than the aboriginal hunter or the man with his ever moving herds. Sometimes the civilisation he creates may be as complex and sophisticated as the Mayan but the threat to his environment may be no less devastating. Why were the Mayas 'forced to abandon their cities after such short stays'? 'The available land supply', says one explanation, 'simply became exhausted. The fallow period needed for a field to become once more overgrown with trees and bushes, after which it could be recleared by burning, steadily increased. A necessary consequence was that the Mayan farmer had to go further into the jungle to find suitable woodland to clear for cultivation, and so farther and farther away from the cities it was his duty to nourish, which could not live without him. A wide belt of burned and worn-out steppe appeared between the arable farmlands and the cities. The great culture of the old empire of the Mayas collapsed as the agricultural basis slowly proved inadequate. The pangs of hunger finally drove the Mayas to migrate, after the cities were completely surrounded and ultimately linked together by areas of dry, grassy steppe. And so the people departed, leaving cities and ruined land behind. While the New Empire was gradually taking shape in the north, the jungle slowly crept into the forsaken temples and palaces. Fallow wasteland again became forest, and green things grew over the buildings, hiding them from view for a thousand years. Such may well be the explanation of the mystery of the abandoned cities.'[4] Whether this explanation is valid is subject to dispute; but the fact of self-destruction seems valid.

Now, in the most advanced material societies of which we have any record, man believes he is threatening his environment again. The great surge forward in material standards of the first 25 years after the Second World War has prompted a recent, and sudden, anxiety about the impact of modern production on the environment, and on the possible exhaustion of the world's non-renewable resources. An intense public interest in the environment has been aroused by direct contact with some of the increasingly adverse effects of modern, industrialised society. This involves social, economic and medical factors—population growth, pollution, the depletion of natural resources, the disturbance of ecological and natural control mechanisms, and so on. Although scientists and ecologists have been the first to focus the attention of world opinion on the growing threat of environmental deterioration, those problems are also a challenge to economists and economic-policy makers. Pollution, which is the most obvious aspect of environmental damage, is to a large extent an economic problem. The growth of industrial waste and other pollutants has led to a growing scarcity of what

[4] Ceram, C. W., *Gods, Graves & Scholars*, Gollancz & Sidgwick & Jackson, London, 1952, p. 370.

are often referred to as 'free goods'—fresh air, pure water and unspoilt nature. To cope with this new aspect of the fundamental economic problem of scarce resources there will have to be new government policies. There are forms of pollution for which nothing short of total prohibition may be enough. But in many cases the price mechanism can be used to provide a remedy. This is the direction—the putting of a price tag on environmental pollution—to which OECD member countries have committed themselves by adopting a couple of years ago, the 'polluter-pays' principle. The question is how much will all this cost?

No reliable estimates have yet been made. The most expert evaluations are probably being made by the OECD. But the figures involved will depend heavily on the scope of environmental control that national, regional and international measures aim at. The 1972 Stockholm Conference on the Environment, for example, put forward 109 potentially costly recommendations in the Action Plan agreed to by participants. As for the private sector, costs will be lower—and slower—if equipment with built-in pollution controls is gradually phased in rather than companies being obliged to apply expensive pollution-controls to all existing equipment. Studies such as that by the so-called Club of Rome on 'The Limits to Growth' also indicate the way in which costs escalate in attempting to remove high percentages of pollutants from industrial processes. It is doubtful that we shall know precisely the costs of environmental protection until a great deal more work has been done.

However, such data as we have suggests that expenditure in the near future may be formidable though not unmanageable. Some 1972 estimates by OECD suggested that the United States might spend 1.6 per cent of its GNP on pollution control and Germany 1.8 per cent in the period 1971-75. Sweden might spend about the same percentage as the United States; Italy less in the period immediately ahead, but much more as the decade advances. Japan will certainly spend a much higher percentage of GNP than any of the others—perhaps investment and operating expenditures might total twice the German percentage.

The OECD Secretariat commented in 1972 that 'although even the highest of these figures look at first sight fairly modest they imply a shift in the use of resources which, historically speaking, is not negligible. An important question is how far this may be a transitional phenomenon—part of the increase in planned pollution control expenditure being a consequence of the "catch up" phase which many countries are now entering'. So far as we can judge at the moment, it looks as though pollution control will cost at least as much as the target of one per cent of GNP set for foreign aid. It could cost more.

Late in 1973, this was broadly confirmed when the OECD sought to refine its earlier estimates for 'countries for which significant data on future (pollution-control) programmes are available, i.e. Germany, Italy, Japan, the Netherlands, Sweden, the United Kingdom and the United States'. A general assessment attached to the report of the working party on the subject said that 'the necessarily tentative quantitative estimates suggest that in six of the seven countries covered, additional total expenditure on pollution control may be the equivalent of around one per cent of GNP over 1971-75, rising above this in certain cases in the second half of the decade. The figures for Japan are considerably higher. After considering the impact this may have on the growth of GNP, unemployment, costs and prices and external equilibrium, the report concludes that the main policy issues relate to the probable inflationary impact of these expenditures. It suggests that, in general, the problems should be manageable, but need managing. It stresses, in particular, the need, in countries where public expenditure is rising rapidly in relation to GNP, for the authorities to bear in mind the impact of these programmes on private disposable income, and also the timing of the implementation of the programmes having regard to the relative priorities attached to cleaning up the environment as against other desirable public programmes'.[5] The report itself says that 'it seems likely that the costs involved in pollution control will increase social welfare as much as when spent on other purposes. This being said, it does appear likely that GNP as traditionally measured will grow at a slower pace than it would have in the absence of environmental policies assuming resources are already fully employed and productivity does not increase. . . . It is a fairly common misconception that if pollution control programmes lead to a slower growth of GNP this would cause a rise in unemployment. The slower growth, if it comes about, would reflect a constraint on the supply side, not a weakness of demand. Labour which would otherwise have been producing additional measurable output will be shifted to the production of a cleaner environment. There may, however, be a transitional problem of frictional unemployment reflecting the fact that pollution abatement is not spread evenly over industries and because pollution control activities may have higher capital intensities than the industries from which resources are being shifted. In contrast, pollution control activities are almost certain to have inflationary effects. Initially, higher investment that is not offset by reductions in other components of aggregate demand, accompanied by possible supply restraints in some high polluting industries, could lead to inflationary demand pressures, particularly where bunching of expenditure occurs. Subsequently, higher production costs resulting from pollution control programmes can be expected to be partly passed forward in higher prices.

[5] OECD Document *CPE (73)7* of 2 November 1973.

These may in turn lead to wage claims, partly depending on the general state of inflationary expectations but also on the extent to which the consumer associates the increases in prices with the improved environment and is thus prepared to accept them without making compensating income claims. Where pollution control benefits come with a considerable lag the inflationary effects may be higher. The magnitude of the inflationary problem caused by pollution control costs is likely to be small when compared with the other factors contributing to present inflation rates'.[6]

Some idea of the magnitudes involved in pollution-control programmes may be given by relating the costs of these programmes to the growth of GNP and to total projected investment, as follows:

NEW PROGRAMME
TOTAL EXPENDITURE

Percentage of Total Growth of GNP

A. 1971-1975	
United States	7
Germany	6
Sweden	4.9-9
Italy	3
Japan	11.1-20.6
Netherlands	3.8
B. 1976-1980	
United States	13.5
Italy	7.5
Netherlands	10.6
C. 1971-1980	
United States	7
Netherlands	7.6
United Kingdom	1.3-2.6
Italy	3

[6] OECD Document *CPE (73)*7 of 2 November 1973.

POLLUTION CONTROL INVESTMENT AS A PERCENTAGE OF TOTAL PROJECTED INVESTMENT 1971-75

	%
United States	3.7
Germany	4.3
Sweden	2.1
Netherlands	4.1
United Kingdom	0.9
Italy	2.0
Japan	6.9

So here we come to the essence of the problem of competing expectations: work to improve the environment has coincided with a crisis in economic-policy management and an associated crisis in international aid. Action on the environment has not *caused* a conflict situation with international aid. That conflict had already been created by changes in the economies of the advanced countries and by the failure of demand-management policies. But environmental control could *add* to the conflict. There will now be even more competition for the resources that might have gone to raising living standards at home or to foreign aid. Let us be clear that people in the developed countries will not readily sacrifice the welfare improvements of the past. Nor will they be satisfied simply with the present level of achievement: they will expect a continuing rate of improvement comparable with that to which they have become accustomed. Rather than simply environment versus aid, the problem is thus part of the more general problem of allocation of resources among a number of competing objectives. And the intensity of this competition will depend on the respective magnitudes of the requirements of these objectives. As expressed by the OECD Secretariat, 'if it were true that the cost of reducing pollution to a tolerable level is going to be relatively small in relation to total national product, it would then represent no more than one among other objectives of policy. The problem would be one of allocation—how to divide the increase in national resources among competing ends. If, on the other hand, the costs were to be so large as to absorb the whole increase in national product, there would be a conflict between perpetuating intolerable levels of pollution, and continuing to have increases in national product as conventionally measured.'

Perhaps we should put in a couple of qualifications. Some economists such as Professor d'Arge suggest that environmental control might, in some circumstances, *favour* developing countries by attracting investment to them. Others, such as Professor Beckerman, maintain that 'one of the more obviously phoney issues is the widespread view, chiefly among non-economists, that there is some conflict between overall economic growth and the quality of the environment so that some choice must be made between them'. 'In fact', he goes on to say, 'it is arguable . . . that the faster is economic growth the lower is pollution per unit of GNP (or even in total) . . . The whole notion of there being some aggregative technical relationship between growth and the environment which implies that one has to be sacrificed for the other is a gross over-simplification of the problem'.

John Maddox rejects 'the general argument . . . that technical innovation and economic growth diminish people's enjoyment of the fruits of technology. As the Ehrlichs say, "While the American GNP has been growing, the quality of life in the United States has been deteriorating. The GNP roughly doubled in the decade 1960-1969. Can anyone claim that the average individual's life has greatly improved in the same period?" The short if impolite answer is that the Ehrlichs should enquire of those in the United States who, by the end of the 1960's, had found it possible to send their children to universities and to acquire for themselves the habit of foreign travel. And in any case, as—fair play—Dr Commoner recognises, new technologies are not always more serious sources of pollution than those which they replace'.[7] Dr Barry Commoner had written that 'pollution tends to become intensified by the displacement of older production technologies by new, ecologically faulty, but more profitable technologies. Thus, in these cases, pollution is an unintended concomitant of the natural drive of the economic system to introduce new technologies that increase productivity'.[8] But elsewhere he had conceded that 'the economic growth that in the 1930's began to lift the United States out of the Depression was enhanced by an ecologically sound measure, the soil conservation program. This program helped to restore the fertility of the depleted soil and thereby contributed to economic growth. Such ecologically sound economic growth not only avoids environmental deterioration, but can even reverse it.'[8]

A 1972 Working Party of OECD stated that 'on the basis of available information it seems most probable that pollution control costs will have only small effects on Member countries' ability to satisfy other needs of their economies and societies. The increase of pollution control costs will lead to a change in the pattern of use of economic resources, but this change most probably will not be larger than many other changes experienced in Member countries during recent years. Thus, the pollution control measures would not disturb the economic balance in a way which could not be counteracted by normal economic policy measures'. The Working Party went on to compare the likely pollution costs of the order mentioned earlier

[7] *The Doomsday Syndrome*, Macmillan 1972 pp. 187-8.
[8] *The Closing Circle*. It is the *quality* or *kind* of growth rather than the *magnitude* of growth that may be important.

with the proportion of GNP spent on defence (2.9 to 8.2 per cent), residential building (3.5 to 6.9 per cent), education (3.5 to 7.8 per cent) and health (two to seven per cent) in the developed countries, and concluded that anti-pollution expenditure 'will have only a relatively modest effect on the ability of a nation to satisfy any other urgent needs of a society'.

While the costs of environmental control should therefore not be exaggerated, these costs will compete with the resources that might have been used to aid the poorer countries. But these countries might derive some benefits too, for example, by attracting some pollution-prone industries. In a report to the Santiago Conference, the UNCTAD[9] Secretariat acknowledged that environmental controls could bring some economic *advantages* to developing countries and concluded that 'it is very difficult to assess the precise magnitude and character of this complicated series of impacts'.

At the Stockholm Conference on the Environment in 1972, there were three main theses. The McNamara (World Bank) thesis, shared by the LDC's,[10] was that even allowing for environmental costs, it was 'simply beyond credence' that the wealthy countries 'cannot spare for the poor countries the miniscule percentage (1.5 per cent) of that incremental income' (from rising GNP) necessary for concessionary aid to reach the United Nations target of 0.7 per cent of GNP. The Mansholt (EEC) thesis was that the rich must limit their growth, while the poor should continue theirs within resource limits. The van Lennep (OECD) thesis was, in effect, to reject both the McNamara and Mansholt approaches and to say that we shall have to establish priorities, within the context that a better environment will have to be paid for by 'a reduced growth of personal consumption'.

[9] United Nations Conference on Trade and Development.
[10] Less Developed Countries.

While we can derive some reassurance from some of these views, some possibly substantial competition for limited resources seems likely, even in the richest countries. If this is so, he would be a brave man who would deny that improvement in economic welfare, including the environment, would loom larger in the public mind in the coming years than foreign aid. We must bear in mind that, so far, nearly all donor countries have failed to reach an aid target of one per cent of GNP, except for limited periods. If environmental control is going to cost something round about and perhaps even in excess of one per cent of GNP, it would seem unlikely that—*under currently orthodox economic policies*—countries will be able to shoulder that burden and at the same time provide increasing international aid of the order sought in the United Nations Second Development Decade strategy.

The question therefore becomes: Can we devise economic policies that *will* allow all these burdens to be borne simultaneously?

Governments seem already to be lurching in a direction that could make it possible—if the political will is there. So far they have done no more than to grope their way towards new policies—much as they did in the 1930's and 1940's. The movement is still ambiguous and has no widely accepted doctrinal support in economic theory. Governments are simply acting in certain ways—in some ways contrary to orthodox theories—because they see that they *must*. As the most dramatic example, the disastrous consequences of restrictive economic policies in Britain during the 1960's and early 1970's and in the United States especially between July 1969 and January 1971, have turned thinking in economic policy away from restrictionism and towards expansion (although demand rather than production expansion).

All of the OECD countries have until recently been embarked on expansion (the oil crisis might reverse this in 1974). However, expansionist policies are still adopted rather nervously: governments and treasuries, having broken their orthodox economic codes, worry especially about upward movements in prices and wages. But policies aimed, not merely at expansion of demand but, more importantly, at more complete utilisation of valuable human and other resources in the economy will nevertheless have to be accepted by reputable governments, as well as by international institutions such as the OECD if production is to be reasonably related to the various demands on it. Given the grave disruptions to the world economy already caused by the failure of obsolete policies, and the time which must necessarily be taken to correct these disruptions, governments will need a good deal of courage to persist with expansionist policies in the difficult period ahead, now made much more difficult by the energy crisis. But if governments *do* have the courage to persist and to expand production rather than demand, then the rewards will make it all worth while. In a pragmatic way, we shall have gone a great distance towards solving our most pressing economic problems. We shall still need to know why the pragmatism of governments succeeded better than the theories of economists. But a big step forward will have been taken.

So the wheel has, in a sense, come full circle. When the United Nations was established in 1945, we had to solve—or know we had solved—the problems of unemployment and economic stagnation that had cursed the 'thirties. As the problems faded, economic conditions were established that enabled a great outflow of aid to the developing countries. In time, the very success of Keynesian policies brought new problems that made those policies unsuited to the new situation that they themselves had created. So now we must, in a sense, return to 1945. We must again understand and accept new ways of maintaining stability and growth in the rich countries. When we do that, we shall also, *inter alia*, improve our capacity to control the environment and to help the poorer countries. We shall have a world that is better managed and disciplined economically and that offers promise of a world more stable politically, attending to its own welfare and active in the protection of the welfare of future generations.

VI
The myth of heavenly leisure

When the Industrial Revolution was not far from its beginning, Thomas Malthus, writing of chronic food shortage, said that 'this constantly increasing source of misery has existed ever since we have had any histories of mankind, does exist at present, and will for ever continue to exist, unless some decided change takes place in the physical condition of our nature'.[1] The view of H. G. Wells, when the Industrial Revolution had thrust its achievement well into our century, was much more optimistic. 'Never since life first appeared on this planet,' he wrote, 'has there been so great a proportion of joy, happiness and contentment as there is about now, nor as bright an outlook. . . . For the first time in history, over large parts of the earth, the beating of inferiors has disappeared. For the first time in history the common worker has leisure assigned to him as his right. Never have common people been so well clad or well housed. Never have they had so much freedom of movement. There is a horror of cruelty to men and animals more widely diffused than it has ever been before. There has been an extraordinary increase in social gentleness. There has never been so small a proportion of sickness and death in the community. . . . The common man today is happier

[1] *An Essay on the Principle of Population*, p. 124.

than he has ever been, and with a clearer hope of continuing betterment'[2].

'The common worker has leisure assigned to him as his right'. It was a joyful, skin-tingling thought. Across the countless generations of man, the goal of comfortable leisure was perhaps at last in sight or was Wells saying even that it was already a reality? For so long man had lived with the myth that the heaven to which he aspired was one in which as much nectar and as much ambrosia as he could use would be eternally available to him without effort, that it was perhaps difficult to believe that that glorious day had already arrived. Could he at last, his heaven achieved, really take his rest and end the turmoil of his struggle to win an existence from a Scrooge-like nature? He might indeed not be entirely inert. He might, for example, watch dancing girls (if they were still denied *their* right to rest); but he would labour no more. 'We would', said Dr Samuel Johnson, 'all be idle if we could'.[3]

Of course, Wells did not mean that, in 1928, the 'common worker' had the pure constant idleness of the hereafter. He meant only that significant progress had been made, by shorter hours, recreation leave, a somewhat greater opportunity for earlier and not dreadfully miserable retirement, towards giving the 'common worker' time and energy to be free from the tyranny of toil and to be idle sometimes if he wished.

This myth of leisure—of rest from toil—although it has not been peculiar to industrial man, has been a matter of peculiar preoccupation for him. The millenia before the disciplines of the Industrial Revolution were, for most men, years containing a great deal of unavoidable leisure

[2] *The Way the World is Going*, Ernest Benn, London, 1928, pp. 192-8. Wells wrote this in 1928, just before the cataclysm of the Great Depression devastated the world economy. He could hardly have been so optimistic a few years later and yet, even from the much greater affluence and the 'joy, happiness and contentment' (if that is what we have) of the 1970's, we can understand what he meant and how he felt.
[3] *Boswell's Life of Johnson,* Vol. III, p. 13, 3 April 1776.

time, unwanted and often useless. Life may have been hard but disciplined effort was related to a relatively narrow range of needs and was often strongly seasonal. Periods of great effort at sowing and at harvest were followed by long periods of relative idleness. Indeed, there were, even for farmers, other things to do in the off-season: houses had to be built and maintained, cloth had to be woven, the society had to be kept together.

There were differences too in the sustained effort that had to be made by particular groups, in particular environments and at particular times in the pre-industrial era. Slaves in ancient Greece and Rome were probably intended to serve their masters more tenaciously than their masters were perhaps expected to serve either themselves or others. Those city-dwellers of the ancient world as well as of the immediate pre-industrial period in Europe probably worked with more sustained regularity than those in rural areas.

But there were clear limits to useful toil. The slaves whom we imagine to have put every ounce of their available energy into every cruel day of their oppressed existence, usually had a good deal of free time, whether they served in households or in the fields. Others too—the carpenters, the plumbers, the shop-keepers—worked more regularly than the peasants but the pressures were manageable, and leisure, if lacking in quality, was probably considerable.

The change came with the Industrial Revolution and especially with the factory system. Arrangements which preceded factory production, including even the intermediate putting-out system, still theoretically left the regulation of hours largely in the hands of the individual[4] and leisure could be taken with some individual freedom,

[4] In practice, the domestic system was as evil as the factory system that succeeded it, in terms of long hours, working conditions and the exploitation of women and children.

within the context of the economic imperatives of his means, his location and his enterprise.

The factory system changed all that. Workers were brought together in one spot to work in collaboration with each other in accordance with a harmonised productive performance. This happened within a society that was initially totally unable to cope with the new economic arrangements. This social incapacity meant that the strongest of the economic forces in the society was able to arrange matters according to its interests. This strongest force was the rising group of industrial entrepreneurs, a group that was staunchly defended by contemporary law. 'After the eclipse of the paternalistic system of domestic economy by the industrial revolution, the courts created a pattern of industrial law in the first half of the nineteenth century which inevitably reflected the postulates of contemporary individualism. Its basis was the optimistic belief that a free interplay of economic forces would enure to the welfare of society, for the sake of which it was prepared to ignore both the inequality in bargaining position between management and employee and the measure of economic compulsion which left the latter no realistic choice between acceptance of the conditions of work offered to him and starvation or equally hazardous employment elsewhere. With a view to encouraging and subsidizing burgeoning capitalistic enterprise, the standard of protection conceded to employees was the minimum which employers were regarded as capable of affording in the light of the unexacting standards of the time'.[5]

The supply of labour tended to outrun demand for labour in the eighteenth and nineteenth centuries partly for secular reasons such as the increase in population and partly for transitory (though long-persisting) reasons

[5] Fleming, John G., *The Law of Torts*, The Law Book Company Ltd., Sydney, 1971, p. 419.

such as (in England) the Inclosure Acts passed between 1760 and 1867. The new labour was almost completely unorganised to look after its own interests and, until about the middle of the nineteenth century, government did not adapt itself to regulating, even in the broadest and most superficial way, the new industrial system. On the contrary, governments tended to act ruthlessly in support of the master classes. 'Eighteenth-century riots', wrote Winston Churchill, 'were generally soon over. They were snuffed out by a few hangings and sentences of transportation to the colonies. The sore-pates who remained at home were more inclined to blame nature for their woes than either the economic or political system'.[6] After 1815, a tone of much more widespread radicalism was evident among the workers but the response of the British Government was much the same: the Peterloo massacre of 1819 demonstrated the authorities' preparedness to use violence against rioting workers and the subsequent legislation limiting the right of assembly, of the press and other rights demonstrated, despite some nominal Whig opposition, the ruling classes' preparedness to put traditional English liberties at risk for the sake of safeguarding the existing imbalance within the society.

The result was that men, women and the smallest children could be employed in industrial (and mining and other) enterprises under hours and conditions virtually of the employer's own choosing. A person's working life might begin at the age of 5 and continue until death or exhaustion of his potential for economic performance as defined by his employer. That working life might—except for involuntary and painful unemployment—not suffer the interruption of annual, sacred or secular holidays, long-service leave or even the intrusion of the Sabbath. It would ordinarily occupy the worker for

[6] *A History of the English-Speaking Peoples,* Vol. IV, p. 8.

ten or twelve or more hours a day of continuous work, for seven or at least six days a week.

It was in this context of disciplined, unremitting, co-operative toil that the concept of leisure degenerated into the concept of simply being at rest, of being idle. The Factory Acts of the nineteenth century and the labour and social legislation of the twentieth, especially since they tended to be passed in circumstances of a chronic or cyclical surplus of labour, tended to perpetuate this conceptual degeneration. The employment of children in certain occupations and below a certain age was outlawed. Compulsory education up to a certain age was introduced and, while this maintained a certain disciplined activity within certain time-schedules, it relaxed significantly the disciplines and compulsions that the industrial system had initially imposed on even the youngest workers. Hours of work were reduced first for children to seventy-two per week by the British Cotton Mills Act of 1819 and ultimately came down to forty in most (though not all) industrial countries by about the middle of the twentieth century for *all* workers. The long-continuing downward trend reinforced expectations that the hours of work would be further reduced—soon to thirty-five, later to thirty, and so on.[7] An accompanying trend—although the accompaniment has been highy uneven—has been for more people to be able to enjoy a comfortably paid retirement at an earlier age. The 'work-to-death' rule applied to most labour in the nineteenth century, with the refuge of the Poor Laws and private or family charity the only dreadful alternatives. The introduction of old-age pensions, the steady expansion of superannuation schemes

[7] Note that the actual hours worked (including overtime) in the advanced industrial countries tended to remain fairly constant after the Second World War and, in fact, showed a tendency to *rise* over fairly long periods.

and the gradual, though slow, reduction of the retiring age, have meant that most people can now limit their working life to the age of fifty-five or sixty or sixty-five and do so in a way that will enable them to live in modest comfort without further personal exertion for income.

In short, people now commence remunerative work between the ages of fifteen and twenty (often later), work for relatively high wages about eight hours a day for five days a week, with allowances for recreation, long-service and sick leave, and retire after a working-life of about forty years on a virtually guaranteed income for the rest of their lives. In this situation, as contrasted with that at the beginning of the Industrial Revolution, the opportunities for enjoyment of leisure are obviously considerable and both the tendency and the expectation are for these opportunities to multiply as time goes on.

So, coming back to what we referred to as the conceptual degeneration of leisure that occurred at the beginning of the industrial system, we must, first of all, distinguish between the attitude to work and leisure in the communities of some developed and some developing countries; and, secondly, we need to distinguish between what might be called the persistent *conventional* definition of leisure as freedom from toil and the expanding *practical* definition of leisure as freedom to do something other than the occupation that provides the primary source of income.

Some communities in the developing countries have not yet faced the choice between leisure on the one hand and maximum growth and income on the other. The disciplines remain those of the seasons in an essentially subsistence economy. The intrusion of those economic values that have moved the developed world for a couple of centuries is only beginning and is sometimes stoutly resisted. For example, some essentially agricultural communities in Africa could increase their output by the use of new strains and methods and the sowing of a second crop of rice each year. Some communities have resisted changes in conventional methods; but, more importantly, they have resisted the extra effort where this has been unnecessary to produce a subsistence harvest. Why plant and harvest two crops of rice a year when one crop is sufficient to meet traditional subsistence needs? Here the choice tends to be for leisure rather than work for work's sake and it is only when the advantages of participation in a market economy make themselves manifest that the villagers move gradually with some show of enthusiasm to produce beyond subsistence needs. Once this choice becomes possible and is made however, the road which it begins is long and may indeed, so far as we can now judge, be unending. The choice will never again be between, on the one hand, a limited range of needs which can be fully satisfied by limited effort and, on the other hand, leisure; but between leisure and an infinite range of economic satisfactions constantly competing with and intruding on leisure. The apparent freedom of the former condition is in reality a stark straitjacket of subsistence with much involuntary idleness and extra effort rewarded only by unwanted and useless surplus. The apparent discipline and turmoil of the latter is, at its best, a choice between a variety of satisfactions of which the many forms of subjective or objective leisure may be part.

This, in itself, illustrates the degree to which conventional wisdom about leisure in the rich countries is invalid as contrasted with the individual's pragmatic definition that he means by leisure freedom to occupy himself in activities other than those associated with the primary source of income. This has been a gradual development, evolving with such glacial slowness that conventional wisdom had full opportunity to become entrenched. In the early days of the industrial system, when hours of work per week were as long as the human physique could sustain and the heavy physical burden would often have challenged the labours of Hercules, a simple release from toil was above all the leisure that the working man craved. For example, in the years shortly after the arrival of the First Fleet in Port Jackson in 1788, Governor Phillip allowed the celebration of New Year's Day and, in 1791, the King's Birthday, by the convicts being excused from all forms of labour and, for the King's Birthday occasion on 4th June 1791, 'to make it a cheerful day for everyone, all offenders who had for stealing Indian corn been ordered to wear iron collars were pardoned'.[8] The torments of those convicts who inhabited the eighteenth century seem to those of us who, two centuries later, inhabit a relatively rich, comfortable welfare state, quite unendurable. And yet those torments were not much greater than those of their fellows who had committed no crime, suffered no sentence, experienced no transportation. In some ways, the security of sustenance and shelter, even in a convict settlement with such an anxious foothold on an unknown continent, was better than that of free men. In the middle of the nineteenth century, one private organisation looked back and said, 'Fifty years ago, intellectual pleasures were participated in by comparatively few classes in the community. . . . the only refuge of the working man from the wasting irksomeness of his daily toil, was the skittle-ground and the pothouse, his ultimate asylum the poor-house or the gaol'.[9]

Conditions did not improve as rapidly as some of us would imagine. From the beginning of the Industrial Revolution, it took about two centuries for hours of work to be reduced to forty. But, as we have noted, hours of

[8] Diary of David Collins, first Advocate-General of New South Wales.
[9] Half-yearly report of the Sydney Mechanics' School of Arts 1852.

work were only one element in the burden of toil; the physical conditions of labour in the eighteenth and nineteenth centuries would have been monstrous even at forty hours per week and they changed only slowly. But change they did as better machinery was introduced, as factories became safer,[10] cleaner, airier places in which to work, and as facilities were provided in which employees could rest and eat and gather together for recreation. As the second half of the twentieth century advanced, the burden of work for a given length of time worked was a fraction of what it had been a couple of generations earlier.

Nevertheless, the concept of the burden remained and the desire to reduce it persisted. It persisted too in the imagined desire of the working-man (and his wife and children) simply to be free of their 'iron collars'. But, increasingly when his desire was met, he found that the iron collar had become a paper ruff, even decorative, agreeable, missed when it was not there. Increasingly, the released worker sought for other things to do, many of them no less laborious than those he had given up. So did his wife. Released from the drudgery of the eighteenth and nineteenth centuries, she found less satisfaction from her simple release than in seeking other ways of occupying herself. Idleness having become a new iron collar, she sought liberation in other, often highly energetic and satisfyingly remunerative activities.

This has happened—and it has been possible for it to happen—at a time when the economy has been undergoing fundamental change and adjustment. It could not

[10] The accident rate from *all* causes has steadily declined in the advanced countries and, in a fairly typical country, is now about one-half of the rate a century ago. In the United States the secular trend in the decline in the accident rate has been constant and even the motor-vehicle accident rate is said to have been declining since 1937.

have taken place in the 1930's and 1940's. The present propensity for aggregate (public and private) demand constantly to outrun aggregate (public and private) supply, together with the preparedness of labour to seek a highly acceptable alternative to leisure defined narrowly as to contrast with productive effort, creates an entirely new situation. Instead of seeking to spread excess labour heavily over a too-few-jobs situation and to release labour whenever possible into non-productive 'activities', the economy is now called upon to mobilise and apply all the available labour as efficiently as possible and to create job-situations that will allow the maximum utilisation of scarce labour.

This is not a matter of working for work's sake. It is certainly not the hole-digging-and-filling operation that we had in mind to create employment after the Great Depression of the 1930's. It is a matter of allowing utilisation of labour for ends that can be seen to be satisfying from both an individual and a community viewpoint.

So far as the former is concerned, an almost infinite variety of wants of the individual seems to remain to be satisfied even in the richest of our present societies. The range of consumer choice is constantly enlarging and so is the variety of satisfactions, especially in the field of services. People are still, in the richest of rich societies, running out of money to spend on the objects of their satisfaction and not out of things on which they may spend their almost constantly increasing monetary and real income. 'The ocean of man-made physical objects that surrounds us', wrote Alvin Toffler, 'is set within a larger ocean of natural objects. But increasingly, it is the technologically produced environment that matters for the individual. The texture of plastic or concrete, the iridescent glisten of an automobile under a streetlight, the staggering vision of a cityscape seen from the window of a jet—these are the intimate realities of his existence. Man-made things enter into and color his consciousness. Their number is expanding with explosive force, both absolutely and relative to the natural environment[11] . . . As affluence rises . . . human needs become less directly linked to biological survival and more highly individuated. Moreover, in a society caught up in complex, high-speed change, the needs of the individual—which arise out of his interaction with the external environment—also change at relatively high speed[12] . . . In 1966 some 7,000 new products turned up in American supermarkets. Fully fifty-five per cent of all the items now sold there did not exist ten years ago. And of the products available then, forty-two per cent have faded away altogether. Each year the process repeats itself in more extreme form. Thus 1968 saw 9,500 new items in the consumer packaged-goods field alone, with only one in five meeting its sales target. A silent but rapid attrition kills off the old, and new products sweep in like a tide[13] . . . the society of the future will offer not a restricted, standardised flow of goods, but the greatest variety of *unstandardised* goods and services any society has ever seen. We are moving not toward a further extension of material standardisation, but towards its dialectical negation[14] . . . We have reached a dialectical turning point in the technological development of society. And technology, far from restricting our individuality, will multiply our choices—and our freedom—exponentially'.[15]

If this is true, then the consumer in the modern society is unlikely to end up in the same position as the peasant in a subsistence system, with a clear limit to use-

[11] *Future Shock*, pp. 51-2.
[12] Ibid., p. 70.
[13] Ibid., pp. 71-2.
[14] Ibid., p. 265.
[15] Ibid., p. 282.

ful production because there is a clear limit to basic subsistence. There will, in the foreseeable future, be a range of choice which will present individuals with a range of alternatives of productive activity or of unproductive leisure.

But, apart from individual satisfactions, there will, in many ways, be a projection of community needs that we already know: highways and bridges, education and research, defence and law and order. There are others, comparatively new and rapidly expanding, such as maintenance and improvement of the community environment. That, in turn, requires not only local and national effort but universal international co-operation. The need for world-wide co-operation extends beyond the environment to such things as economic development, improvement of human welfare in the developing world, epidemiological and population control, the maintenance of social and political stability, the enlargement of human rights and so on. There will be some inherent conflict between some of the objectives of this co-operation. Although it is not necessarily so, there may seem to be conflict between action to improve the environment and action for economic development as traditionally understood.

In promoting community satisfactions, the concept of private property or its legitimate exploitation is likely to be modified. This is not new. Some of the least sophisticated economic communities have insisted on the communality of property and have severely limited personal title, especially in land. Where private property has come to be a major element in economic advancement, most communities have quickly come to place some restrictions on the exercise of property rights. This has not been intended to place arbitrary and erratic restrictions on the rights of the individual. On the contrary, it has been in most countries an expression of good public sense by protecting the individual in his use of property through community safeguards intended to benefit all (or all property owners in any event so long as the society remains organised essentially as a private-property system). But there are dangers in seeking to strike this balance between private property and community control.

'Societies built on private property', wrote Harold Laski, 'have gone farther towards the control of their environment than societies of a collectivist type; and they have been able to achieve a greater margin of freedom for individual personality than collectivist forms of social organisation. This does not mean, at least necessarily, that individualist societies attain a greater degree of happiness than is possible under alternative forms; we know too little of the mentality of backward peoples to generalise so far. But it does mean that Western civilisation is far less subject to the tyranny of Nature than is true, say, in Melanesia, or India before the British conquest. But the historicial argument is fallacious if it regards the regime of private property as a simple and unchanging thing. The history of private property is, above all, the record of the most varied limitations upon the use of the power it implies. Property in slaves was valid in Greece and Rome; it is no longer valid today. . . . The regime of private property, indeed, means that a man may do as he wills with his own only to the point that the civil law permits him to will; and though the ambit of that will is, in all conscience, vast enough, the history of the rights of property is most largely the record of its circumscription'.[16]

The question is where the balance will be struck. We have already moved far in the direction of circumscription

[16] Laski, Harold, *Grammar of Politics*, George Allen & Unwin, London, 1937, p. 176.

in the last few decades. It is difficult now for us to believe that United States social legislation of the 1930's was disallowed by the Supreme Court on the grounds that legislation limiting the working hours of children was unconstitutional because it was an interference with the rights of property. The Court has since reversed that position and accepted the view that property is a creature of law, justifiable only in so far as it advances the public interest. The indications are that this later view will continue to prevail and expand; but it will carry some obvious economic burdens with it. The results will not be entirely burdensome, of course. There will be both economic and non-economic advantages. In 1927, after an open season was declared in Queensland on koalas, half a million of the delightful little animals perished and their skins were sold for sixpence (five cents) each. We shall enjoy a non-economic benefit if such an atrocity never occurs again. On the economic side, in today's situation, with persistent, perhaps not wholly justified uncertainty about the continuing adequacy of many of the earth's non-renewable resources to the world's present and future needs, there could be both community and individual advantages from more community control of the exploitation of mineral and other non-renewable resources. Prices could be brought nearer to long-term requirements of the world community.

The present price mechanism cannot deal adequately with social or environmental values nor can it deal adequately with conservation and management of resources which might briefly be supplied vastly in excess of demand and might shortly thereafter disappear from the market forever. For example, copper could be supplied from mines already existing around the world to bring the price down to disaster levels much below the present rate; and yet, at present use and discovery rates, if we are to believe the doom-watchers, the world could have mined its last ounce of copper within a few decades.[17]

However, if community objectives, including preservation of the environment and conservation of resources become paramount, the pressures on available skills and manpower will intensify. Not only might consumers be faced with 'overchoice' in seeking alternative satisfactions, but societies and economies might need to husband human as well as other resources to enable both community and individual demands to be met.

This means that there might need to be a fundamental modification of our attitudes to employment and the use of labour in relation to capital facilities in the future. Industry, including the service industries, should no longer be organised on the basis of a single 'team' of

[17] 'In much the spirit in which environmentalists worry about food, unnecessarily as events have shown . . .', wrote John Maddox in *The Doomsday Syndrome*, 'so too they worry about natural resources. In the United States, at least, this is an honorable tradition going back to the end of the nineteenth century. Then, Governor Gifford Pinchot was wringing his hands over the prospect that timber in the United States would be used up in roughly thirty years, that anthracite would last for only fifty years and that raw materials such as iron ore and natural gas were rapidly being consumed. Sixty years later, the same complaints are to be heard in the United States. The environmentalists have coined the phrase "our plundered planet" to express the anxiety they feel about the possibility that petroleum will be much less plentiful a century from now than it is at present and that the time will come when high grade copper ores are worked out. The truth is, however, that society is by no means uniquely dependent on the raw materials now in common use. If copper becomes scarce or merely expensive, aluminium will have to be used instead. If natural diamonds are expensive, then make them synthetically. In any case, although supplies of raw materials like these are known to be limited, the point at which they seem likely to be exhausted recedes with the passage of time so as to be always just over the horizon'. An even more striking example of raw-materials exhaustion being just over the horizon is given by W. S. Jevons writing in 1865 on *The Coal Question* with concern that the fast rate of growth in the use of coal by Britain would entirely exhaust Britain's reserves within a century. The 1974 coal strike and the oil crisis have reminded us dramatically that coal is still there in Britain, it is still vitally important and it is an alternative still for an energy source whose exhaustion is also still just over the horizon.

employees, working identical hours spread throughout the week in such a way that they prevent or make much more difficult the engagement of any members of the team in any other form of work or other systematic activity (such as attendance at a university, a college of higher education, a trade school or other educational institution leading to higher or different qualifications). Instead, industry should be organised so as to utilise its own capital installations to the fullest extent and to make the smallest and the least monopolising demands on the labour force.

An ideal situation would be one in which labour would be permitted to choose absolute mobility. We do not suggest that this ideal can necessarily be attained. Indeed, it seems unlikely that, in the foreseeable future at least, it will be attained. But, despite its present impracticability, it is useful to set down the ideal as something to which, in determining our economic organisation and deciding our labour and industrial policies, we might seek to approximate. We should bear in mind that, in seeking this approximation, we would not be aiming to satisfy any particular sector of the economy or any particular group in the society; nor would we be seeking to establish the rights of the community as overwhelmingly superior to those of any group within it and therefore having some divine right to seek major sacrifices from one or other or any combination of these component groups. There would be no attempt to give workers the right irresponsibly and disruptively to move from one job to another but rather to enable them to make the most of their energies and talents and to give as much (or as little) of either as they wished to community output, for appropriate reward. Equally, there would be no intention to permit employers to use labour ruthlessly in order to maximise profits from capital installations and to subordinate human freedom and convenience to maximising or concentrating output within an unconventional time-schedule. Finally, the community would not be intended to squeeze the energies of labour and capital simply in order to achieve an arid increase in GNP.

Within these qualifications, what is the ideal for the use of labour to which we should aspire?

The ideal situation would be one in which the individual worker would have complete mobility in terms of location, time and even, to some extent, the nature of work performed. He could work a forty-hour week, if he wished, in three or four days, a thirty-five-hour week in perhaps three days rather than four. He could use the remaining three or four days in each week:

(i) In idleness or in what we might euphemistically call unproductive recreation;
(ii) In doing another job or jobs, generally on a part-time basis;
(iii) In obtaining additional training in his present speciality or training in an entirely new skill.

He could, of course, do all three of these in any combination that suited him.

He should also have maximum mobility in jobs and location. The old conception of the worker remaining with one establishment most or all of his working life has already passed away. The worker, even though highly skilled, should be free to move about easily and, if appropriate, frequently from one establishment to another. This would be a natural additional flexibility to that implied in working a more concentrated working week, preferably with variable hours.

A study undertaken a few years ago said that 'the desire for continuous growth and the right of all sections of the population to work were the two streams of thought which we met in all the countries studied. The system of part-time employment meets these requirements from both the economic and the psychological points of view. . . . The part-timer is always slightly more costly to the firm than a full-timer, and, contrary to the generally accepted opinion, part-time employment is not "a factor of flexibility" for the employer. We have defined it as having the same characteristics as full-time employment with the same job guarantees. The system which provides a factor of flexibility for the employer is casual labour, which he can take on and dismiss according to his production needs. However, part-time employment may provide a factor of flexibility in cases where shorter than normal service meets a specific need, e.g. in the retail trade and in other branches of the service sector which is in constant expansion. If part-time employment is not always beneficial at firm level, from the point of view of the national economy it contributes to growth whenever it attracts into the labour market previously inactive population groups. The standard of living of a nation is measured not only by the level of private expenditure of each worker, but also by the public services available; and the volume of investment which can be devoted to these services will largely depend on the proportion of active and non-active persons. If the number of active and of non-active persons increases proportionately, the effort required of the whole body of workers will remain the same. If, on the other hand, the number of active persons increases, and at the same time, the number of non-active persons remains stable or rises more slowly, growth will be facilitated, and the burden on the active population will be lightened. This is indeed the goal of Sweden and the United Kingdom which are trying to attract inactive groups into the labour market by adopting the system of part-time employment. This argument was put forward by a trade union representative at an international seminar organised by the OECD in May, 1966: "If we were limited purely to people who could work full-time . . . the standard of living we enjoy would be much lower than it is today" . . . The system of part-time employment also enables each worker in each sector of activity to adjust his daily or weekly working hours to the effort he can make, or to his needs. We should endeavour to avoid the setting of an inexorable age limit after which everyone would, in practice, be denied "the right to work". In this way, part-time employment could be not only a factor in economic progress but also, and above all, a factor in social progress . . . certain safeguards . . . should protect not only part-time but also full-time workers, so that the part-timers do not in any circumstances compete with them on the labour market. . . .This leads us to ask whether the part-time system can be considered as a factor in social progress if part-time workers are vulnerable to the hazards of the economic cycle. Do part-time workers form a labour reserve which is taken on in booms and dismissed in slumps, and thus really equivalent to casual labour? The experience of the past six months, both in Germany and the United Kingdom, which are passing through a period of economic recession, indicates that not only have part-time workers not been the first victims of the depression, but they have actually been a balancing factor. Economic depressions usually attack certain sectors first and then gradually reach others. The affected sectors of activity dismiss their part-timers, cut down the working week and then dismiss some of their full-timers. However, other sectors of activity continue normally. In the United Kingdom, for example, the difficulties of some of the motor workers were allayed because their wives were working in other sectors, such as electronics or textiles. When husband and wife are working in different sectors, even if one of them is working part-time only, they are less vulnerable to the extreme penalties of the economic cycle. It is even argued that this risk-spreading enables wage-earners to be tougher in their claims, since the loss of one wage during a strike does not mean that the whole household income dries up'.[18]

The part-time 'system' is scarcely a fully developed system yet; but it is gradually emerging from practical developments in the economy of the past few years. As it emerges, it is only part of a trend towards greater mobility of labour generally. This trend to greater mobility at all levels of skill and management seems to have made a good deal of progress already, at least in the most advanced economies. 'One of the most persistent myths about the future envisions man as a helpless cog in some vast organisational machine. In this nightmarish projection, each man is frozen into a narrow, unchanging niche in a rabbit-warren bureaucracy. The walls of this niche squeeze the individuality out of him, smash his personality, and compel him, in effect, to conform or die. Since organisations appear to be growing larger and more powerful all the time, the future, according to this view, threatens to turn us all into that most contemptible of creatures, spineless and faceless, the organisation man. . . . The kinds of organisations these critics project unthinkingly into the future are precisely those least likely to dominate tomorrow. For we are witnessing not the triumph, but the breakdown of bureaucracy . . .the organisation of the future (is) "Ad-hocracy". . . . instead of being trapped in some unchanging, personality-smashing niche, man will find himself liberated, a stranger in a new free-born world of kinetic organisations . . . his position will be constantly changing, fluid, and varied . . . professional loyalties turn into short-term commitments, and the work itself, the task to be done, the problems to be solved, begins to elicit the kind of commitment hitherto reserved for the organisation. . . . These men of the future already man some of

[18] Hallaire, Jean, *Part-time Employment, Its Extent and Its Problems*, OECD, Paris, 1968, pp. 97-9.

the Ad-hocracies that exist today. There is excitement and creativity in the computer industry, in educational technology, in the application of system techniques to urban problems, in the new oceanography industry, in government agencies concerned with environmental health, and elsewhere. In each of these fields, more representative of the future than the past, there is a new venturesome spirit which stands in total contrast to the security-minded orthodoxy and conformity associated with the organisation man . . . what is happening today is a resurgence of entrepreneurialism within the heart of large organisations. The secret behind this reversal is the new transience and the death of economic insecurity for large masses of educated men. With the rise of affluence has come a new willingness to take risks. . . . Thus we find the emergence of a new kind of organisation man—a man who, despite his many affiliations, remains basically uncommitted to any organisation. He is willing to employ his skills and creative energies to solve problems with equipment provided by the organisation, and within temporary groups established by it. But he does so only so long as the problems interest *him*. He is committed to his own career, his own self-fulfilment. . . .'[19]

In an economy in which supply is always inadequate to individual and social demand, labour should never be in surplus supply and restraints on the use of labour to ensure that as little as possible of it is unemployed would be unnecessary. Inducements should be held out for more labour to be offered. Arrangements should therefore be made for it to be offered freely at whatever time. The capital equipment necessary for its most effective use should be available to be used with it at any time.

Projecting these principles to their logical conclusion some time in the future, we can conceive of factories,

[19] Toffler, Alvin, *Future Shock*, pp. 124-5, 148-9.

banks, public offices, retail stores, places of entertainment being open up to twenty-four hours a day seven days a week. The objective would be both to give the consumer maximum service and to give the working-man maximum freedom. An arrangement whereby economic establishments work round the clock can be one of the major means towards 'Workers' Liberation'.

We need to speculate a good deal and look far ahead to see how it would work. But essentially Joe Smith could decide himself whether to work on Sundays and Tuesdays or Wednesdays and Fridays or to work different days in different weeks or not to work at all some weeks. He could decide to work during the day or—if he wanted to play golf during the daylight hours—he could work at night. He could work as many or as few hours each day, as many or as few days each week and as many or as few weeks each year as he felt were necessary to support the standard of life and leisure he needed.

There would have to be some incentives at certain points. For example, with a factory or a retail store that never closed, it might be discovered that everyone or anyway too many people wanted to work on Sunday evenings (when, say, the television programmes were poor). In that event, no incentives would be needed to attract staff at that time and the 'no labour needed' sign would have to be used frequently to turn potential workers away. But too few workers might offer regularly on Monday mornings, so that there might have to be a ten per cent pay loading for that period and perhaps a fifty per cent pay loading for Saturday nights.

Who would work in any given establishment? Until our conditioning of the last couple of centuries is modified, there would tend to be a large fixed labour nucleus in any establishment with a relatively small peripheral labour force that would move into and out of the establishment on a 'part-time' (if that expression continued to be relevant) and probably rather random pattern. As our present conditioning becomes less decisive, the fixed nucleus would tend to decline and the peripheral labour force would tend to increase.

The components of the labour force would vary tremendously. Just as now, most would consist of adult men in the age-groups of greatest skill and vigour, that is, probably between about twenty and sixty years of age. But there would also be women of equivalent age-groups, whether single or married and there would be older people of both sexes probably joining the work-force for shorter periods each day and week. There would also be younger people, many of whom might still be at school or university who could adapt their times and the extent of their work to their educational commitments. In all cases, they would need to have established their suitability for the work they were performing and, just as now, be subject to rejection for particular jobs as they failed to acquire necessary skills or their earlier skills (and perhaps energies) declined. Within the limits of these skills and energies, the whole of the workforce—men and women, young and old—would be available for and free to apply themselves to any work at any time in a twenty-four hour day, seven day a week economy.

There would be no reason that any particular person should not be engaged in half a dozen different types of work over a period of time. For example, over a six-months period, a man might work as a taxi-driver, a domestic servant, an auto-assembler, a barman and a gardener. If he had a special and valuable skill, he would have less incentive to move from one occupation to another but his mobility and choice could still be expressed through working in different establishments, at different times and, of course, in different geographical locations throughout the year.

Some special arrangements could be made for annual leave and overtime. If a worker had several jobs, none of which qualified him for full annual leave of four or more weeks, this liability might be taken over by the government which could make a direct payment for leave or allow a deduction of income tax to the value of the leave. The leave payment would be calculated on average earnings throughout the year, taking account of overtime.

The approach to overtime would be governed by the current balance between demand and production in the economy. When demand tended—as it mostly would—to excess, then overtime should be encouraged both by tax concessions to those employers who paid it and tax concessions to those who earned it. Instead of earners of overtime moving as they do now into a higher tax bracket, they would move into a *lower* tax bracket for the amount of their overtime. Some arrangement would also need to be made for those who worked at a number of jobs and whose total hours of work exceeded the current norm, whether forty or thirty-five or whatever the working week might be at the time. In the case of the two-job or three-job man, his employers would be unlikely to receive tax concessions for payment of overtime but, whenever they did pay overtime, they would receive a tax concession as a reward for extra production achieved and an incentive for further production.

At those times when production tended to exceed demand, opposite policies would be applied. Disincentives would be used for the overtime worker and for the two-and-more-job worker. These disincentives might normally amount to no more than withdrawal of the previous tax concessions applying in the excess-demand period; but the employer might sometimes be confronted with a ten per cent or more 'loading' of tax that would be achieved by reducing his cost-deductions for overtime payments. It would seem ordinarily unjust to increase the tax-rate on income of the overtime and two-or-more-jobs workers in view of the different wage rates for different occupations: it would seem unfair to tax a man who spent fifty hours a week earning $10,000 annually at a rate higher than a man who spent only forty hours earning the same amount.

It should be emphasised that a full living wage would be paid for the standard week's work. There should be no compulsion, either economic or other, for anyone to work any more than the standard week. However, he would be free to strike the balance he wished between income and work and leisure. If, during a certain period, he wanted increased income to improve material satisfactions for his family and himself, then he could work longer at one job or take on two or more jobs. Later, he might decide to work only thirty hours a week for forty weeks a year and enjoy the rest of his time in 'unproductive leisure'. Desirably he would have such flexibility in the way he might spend his time that there should be a true 'Workers' Liberation' for everyone.

So far ahead into the future as we can see, there would be exceptions to this 'liberation'. Cabinet Ministers and Chiefs of General Staffs might find it difficult to move as freely from job to job, work as flexible hours or achieve the same free choice of balance between work and 'unproductive leisure' as the more humble worker. Senior executives of large private corporations might also experience less 'liberation'; although we might bear in mind what Alvin Toffler said in the quotation above about the 'new kind of organisation man . . . who . . . remains basically uncommitted to any organisation. . . . He is committed to his own career, his own self-fulfilment'. But, if full 'Workers' Liberation' will not apply to all workers and will be modified in certain ways for others, a prospect is opening up that it will or could apply to a high proportion of the workforce.

As well as the advantage that this trend can give to the worker and to aggregate production, it could also have great benefits in terms of productivity through the more efficient use of fixed capital installations. A retail store or a factory or a city office that operates for twelve or fifteen or twenty-four hours a day for seven days a week uses its fixed capital much more fully and reduces the unit cost of its overheads compared with working time of ten hours or less for five or six days or less a week. An economy with a tendency to a chronic excess demand should use its productive capacity, if not to the full, then more fully than we have recently been accustomed to. But the rules of fixed capital exploitation could be varied over time and, like the varying incentives for labour, could operate to move capital-use sometimes nearer to a twenty-four-hour, seven-day week and sometimes draw it back from that ultimate frontier of exploitation. It would thus become a useful instrument of economic management, operating through aggregate production and unit productivity to achieve a better balance with current demand.

Perhaps we may go back again to the point at which we started. Few people really like being completely idle for any length of time. Few people even like an unmitigated diet of golf or fishing for any length of time. Most people like to feel that they are integrated members of their society and that they are engaged in a reasonable variety of activities, a good proportion of which give them pleasure or satisfaction. If certain activities give neither of the latter, at least they might be expected to offer material rewards and thus pleasure or satisfactions at one remove. It is a long time since the average hours worked by the average worker went down to any marked extent, despite reductions in the standard working week. As the modern economy moves to a thirty-five-hour week and then a thirty and twenty-five-hour week, it is unlikely that the hours actually worked will be reduced significantly; rather will the amount of overtime tend to be higher. We should accept and, in most circumstances, encourage this trend. We no longer have any need to ration out the total work available; rather do we need to ration, by price or other means, the amount of the production that our labour and our capital produces. If we can increase production, the strictness of the rationing can be relaxed. At the same time, if we organise our economy correctly, we can continue high productivity with a degree of freedom for most workers that has never been known before. By and large, of course, this will involve no revolutionary reversal of current trends but rather a compliant submission to trends that are already well established. As a bonus, we should have much more stable national economies and a much more stable world economy, as well as a greater prospect for continuing peace and welfare within the limits of the resources available to us than we have known in recent years.

VII
The two rates: (1) Exchange

Two of the most important elements in almost any exchange economy are, and are rightly thought to be, the price of other people's money and the price of one's own. The former is normally referred to as the rate of exchange and the latter as the rate of interest.

The importance of both can be exaggerated. Certainly exaggeration occurs from time to time. Sometimes a whole towering multitude of economic disasters is seen to be due to a wrong rate of interest. Usually the allegation is that interest rates are too high; but sometimes high interest rates—or, in any event, rates that are high in the historical context of a generation or so—can be tolerated, almost without public criticism, as though cheap money has not only gone out of fashion but is no longer something that can be seriously contemplated.

The same is prone to happen with exchange rates, although their importance is more likely to be exaggerated and/or misunderstood than their level be subject to inadequate public debate. Perhaps this is because we have had a relatively shorter time to play with them than we have had with interest rates; and, of course, the complexities of our financially sportive indulgences in the matter of exchange rates are now so much greater than they were and grow apace almost every year.

Once upon a time—and it was not so very long ago—

we valued our national currencies in gold and it was in gold that we settled our international transactions. In effect, the gold standard was something that applied both nationally and internationally. Whether you were a sheep farmer back of Bourke or a steel-fabricator in Birmingham, you could pay your jackeroo and steelworker or your supplier anywhere in the world with lumps of gold. That you called these lumps of gold pounds or dollars or francs or marks made little difference. It was a simple, stable, reliable world which rested on a reliable, relatively unchangeable store of value and everyone was content.

Of course, the world of the exchange economies never quite as thoroughly conformed to the text-book requirements of the gold standard as that. Nor was the gold-standard world as comfortably full of contented adherents as we have implied. Relatively, it was a stable world—a world of stable exchange parities—but for many that exchange stability was bought at a dreadfully high price, often of poverty and constant uncertainty in their personal and family lives.

External stability of the economy (and that meant the maintenance of the existing rate of exchange without undue pressure on the national stocks of gold) was managed through instability of the domestic economy. An inflow of gold could permit an expansion of activity and imports until price rises reversed the flow and compelled a reduction of activity, of imports, of employment and of living levels. If you didn't have enough gold, you starved enough people to get a sufficiency of gold restored to the national coffers.

Gradually this came to be unacceptable; in the end, the 'Grapes of Wrath' torment of the 1930's made it intolerable. Even before that, the link with gold had been broken internally in most countries and, more slowly, it was broken externally.[1] One of the things that Keynesian theory and the resultant policies did was to emphasise the significance of domestic stability as contrasted with stability on the foreign exchange markets. Of course, it would be better if you could have stability everywhere; and, indeed, domestic stability vastly improves the chances of external stability. But in an imperfect world and one in which change was increasingly large and constant, instability was bound to intrude or threaten with pretty considerable frequency. Then, if the choice had to be made between internal and external stability, the Keynesians said the choice was clear: maintain full employment and a high rate of economic activity and, if need be, let the value of the currency slip. Full employment with depreciation was much to be preferred to long lines of people on the dole tempered by the knowledge that the pound (or the dollar or what-have-you) was robustly looking every other currency in the face.

If this approach were adopted, then earlier conceits about the value of the national currency would become outdated. Churchill's calamitous attempt in 1925 to have the pound look the dollar in the face would no longer be a tenable or acceptable policy. We might note, however, that, while this has generally been true, national pride in a strong, highly-valued currency has never entirely disappeared and such a currency tends still to be regarded, both internally and externally, as more 'moral' than its weak, lowly-valued fellows. Citizens' chests swell with pride to know that their currency is 'strong'.

But, having said this, it is still true that there are now more important objectives than a highly-valued currency and stability of the exchange rate. The early Keynesian

[1] There have been a number of departures from and returns to the gold standard, going back. for example, to the departure by Britain during the Napoleonic Wars in 1797 and the return to the gold standard, after those wars were over, in 1819. Some say the 'true' gold standard started in 1821.

doctrine contemplated that a movement downward in the exchange rate could maintain external equilibrium at full employment. It could do this by restoring the competitive position of exports—which devaluation would make cheaper to overseas buyers—and reducing the competitive position of imports which would now be dearer in terms of the depreciated currency. However, this would not do much good if full or too-full employment, which had caused the external disequilibrium, were maintained so as to leave too little of domestic production available for export, soak up too many imports even at high prices and quickly force up the price level. So governments generally accompanied depreciation with an attempt, not to create large-scale unemployment—which was the very thing depreciation was designed to avoid—but to create a sufficient decline in domestic demand to take the economy off the boil and enable the competitive advantages of depreciation to have their effect.

All of this was splendid so long as a situation in which demand outran supply was the exception rather than the rule. Historically, in the development of the modern industrial economy, this had been the case. The problem had been to sustain the boom, or to sustain the level of economic activity and employment at something approaching the level of the boom. Except for brief periods, and in special situations, the problem had not been to sustain supply at a sufficient level to meet continuing demand. So the human mind and government policies became conditioned to this situation. You could almost never do too much to ensure that the level of demand remained high; and when, in the exceptional case, you did too much, it was the simplest matter in the world to cut demand so that it slumped below supply. A carefully controlled deflation was, against this background of theory and conditioning, an appropriate accompaniment to devaluation and enabled a government to take advantage of an adjustment of the currency which, it was felt, should not occur too often. Policy-makers and economists came to respond to such situations with nicely pre-packed remedies like a Pavlovian dog to a breakfast bell.

Perhaps at one time, all of this would have been sound. At the beginning of the Keynesian period, at least, devaluation and modest deflation might have worked happily together to achieve a common objective. But if they harmonised like twin souls in those early days, the one became a Samson drained of his force by a Delilah later on.

The problem came from the ever-growing inbuilt stabilisers. That is the nutshell way of putting it. But 'inbuilt stabilisers' must be taken to cover a whole host of things. Sometimes they were not meant to be 'stabilisers' at all or they were not introduced with that purpose primarily in mind. Sometimes they were quite simply intended as humanitarian, social-welfare measures. The Beveridge Plan, conceived in Britain during the Second World War and implemented afterwards, was intended primarily to put a floor to poverty, especially for the exposed sections of the population; but of course it had stabilising effects too and these were explicitly seen to be extremely valuable for economic management.

Other policies were less readily identifiable as inbuilt stabilisers. As we have said earlier, the expansion of the public service, the need for governments, willy nilly, to embark on huge public-works projects especially in road and other transport fields, in power and public utilities and to embark on education programmes which dwarfed anything known before 1945 were hardly conceived as inbuilt stabilisers at all. They involved no obvious and direct transfer of income; they were not deliberately or consciously or continuously related to the trade cycle; but, in the event, they earned their certificate of merit as inbuilt stabilisers much more thoroughly than many of those stabilisers explicitly identified as such.

Many of these measures operated very quickly to change the character of the economy in particular countries. This was especially true of Britain, which carried through the Attlee Labour economic and social revolution in the short period of six years between 1945 and 1951. Other countries proceeded more slowly and some have still not achieved as complete a social revolution in some ways as that realised in Britain more than twenty years ago. Some other countries were also more advantageously placed in terms of their traditional economies and economic attitudes to graft on Keynesian arrangements and implement them smoothly.

But we have dealt with these matters elsewhere. The important thing to note at the moment is that the explicit or de facto 'inbuilt stabilisers' that most developed countries introduced into their economies after 1945 destroyed the basis on which the downward management of the economy had been intended to be set; and, at the same time and as part of this, it destroyed the old concepts of the nature of the impact which devaluation or (upwards) revaluation of the currency could have on the economy.

Let us now examine in a little more detail what these impacts are.

The experience of the United States with devaluation of the dollar between 1971 and 1973 illustrates that devaluation, far from being able to solve *all* external, trade and payments problems, can introduce some serious problems that were not there to start with.

To understand the limitations on the extent to which devaluation can be a solution, we must first understand the *character* of any advantage that devaluation can offer to a modern economy. In a situation in which demand is already outrunning supply and a market already exists for *all* goods that are saleable in a buoyant situation, devaluation has little advantage in improving the *competitive* position as such of the devaluing country. What effective competition can there be in a gold-rush situation in which the potential gold-diggers outnumber the available picks and shovels by a substantial margin?

In this situation, the only advantage conferred by devaluation is in *stimulating production* so that supply will be brought more nearly into balance with demand. In so doing, devaluation also improves the competitive position, in so far as it allows the exporter (or the producer for the domestic market competing with imports) to maintain his profit margin at a lower (or—for the producer competing with imports—constant) price or (what is more likely after some time lag perhaps in an excess-demand situation) to increase his profit margins without suffering any loss of competitiveness.

Devaluation seems to provide an incentive which, if large enough, offsets the disincentives of high interest rates, high wage costs and other profit-reducing elements in the producer's situation. The effect may be temporary. The duration of the effect will depend on what other policies are adopted by the government to reinforce devaluation or (as often happens because governments have not fully understood the impact of devaluation on the cost and production structure) to offset what are often believed to be its inflationary effects.

The margin of incentive that devaluation, by itself, provides will tend to move economic activity back into direct production of goods and services, including investment in the production of those goods and services. It will tend to move investment funds away from consumer credit and mortgage lending and into enterprise investment (including both direct and portfolio investment). To take a concrete and simple example, the grazier who has accumulated some surplus capital will, after devaluation, be more inclined to put this capital into increasing wool and meat production from his property and less encouraged to lend it out, on fixed-interest mortgage terms, for other, including consumption and high-interest production purposes. Precisely what impact on the cost structure the substitution of effectively low-interest direct productive investment will have is difficult to evaluate but its general thrust will be to reinforce the moderating effect on the cost structure that will be derived from increased production (and, indeed, improved productivity).

But it must be remembered that, in a situation of excess demand, a devaluation will, at least for a short period, reduce the proceeds won by exports and increase the costs of imports, so that the trade and payments deficit will, during this period, become larger instead of smaller. It will only be when the stimulus to production has worked through to increasing output both for exports and for import-replacement that the deficit will begin to decline (from the newly-inflated deficit level).

If one devaluation has already achieved a marked stimulus to production but has not yet achieved external balance in overseas payments, the United States experience suggests that a second or subsequent devaluation might have only marginal or even adverse effects. That second devaluation might so further unbalance trade and payments (at least in the short term, as indicated above) that it will compel the adoption of extreme measures, including the adoption of Keynesian orthodoxies, in an attempt to bring about balance through reducing demand. This will only recreate the cycle of disequilibrium at a faster pace and with greater magnitudes.

The better course may therefore be (except for an initial devaluation, although even that is debatable) to adopt measures other than devaluation to stimulate production. These would be fiscal and monetary measures having their immediate impact on the vigour of the domestic economy and that enhanced vigour would then, in its turn, have its impact externally. This might be a further illustration of the desirability, wherever possible, of tackling economic problems directly rather than indirectly. The latter almost inevitably involves uncertainties—or a greater range and scale of uncertainties than direct measures. If therefore the problem—and it is the basic macro-economic problem of the developed economies at the present time—is of a short-fall in production, then measures to increase production should be applied with as much directness as possible. The trade and payments imbalance is essentially a *derived* problem and, while a stimulus to production through devaluation can help towards a solution of the production problem, it carries with it such disabilities and acts with such uncertain indirectness that it probably should be eschewed or used only with great caution and taking account of the peculiar circumstances of the particular economy at the time.

In the modern economy experiencing an excess of demand over supply therefore, devaluation will tend to stimulate production but this stimulus will take some time to have full effect so that, in the short term, devaluation will make the external payments balance not better but worse. This is particularly so if devaluation is not accompanied by direct domestic measures to stimulate production in the economy. (Note that production and *not demand* should be stimulated). The effect that devaluation has on the economy is better achieved by these direct domestic measures to stimulate production and it is better to leave the external value of the currency alone unless there is a 'genuine' fundamental disequilibrium that requires adjustment.

That then seems to be the effect of devaluation. What is the effect of its opposite—revaluation or appreciation?

The way in which appreciation of the currency contributes to inflation may, at first sight, seem obscure. Indeed the concept that it does so contribute is so new that it deserves further study. We can only set out here the way in which we believe, elements and events fall into place; but, while this general outline will, we believe, remain valid, it will need refinement as the basic concept becomes better understood.

We must start from the position in which, in a modern economy, aggregate demand is tending always to outrun aggregate supply. Even if aggregate demand falls in absolute terms, it tends—in the very nature of the modern economy—to remain higher or, in other words, to fall less, than the decline in aggregate supply. In this situation, competition between suppliers loses a great deal of its sharpness and, indeed, for certain products in certain circumstances, competition not only becomes less sharp but it changes its quality and, in terms of a struggle between rival competitors each trying to force the others out of the market through price superiority, it virtually disappears. In a market which, in aggregate terms, is perennially under-supplied, competition becomes a balancing of margins and incentives. If the profit margins and thus the incentives are too low, the product can still, for the most part, be marketed but production tends to be restricted to its present level or even to decline somewhat; any resources of that company which then would have been available for increased production and which are now surplus to needs in that production are diverted to other purposes: investment in other enterprises, placement in mortgage or other fixed-interest lending, reduction of existing debt and so on.

Now we must just take this a little further. Where one enterprise in an economy, though still able to market its products, has suffered a severe drop in profit margins and incentives to produce, that enterprise might well go out of business completely and the resources which it formerly used will be applied to other purposes. This is part of the normal process of change and development in a healthy, competitive economy. But now let us postulate a position in which not one or a small number of enterprises, in defiance of the trend of the economy as a whole, goes to the wall but the profit margins and incentives of the generality of enterprises in the economy are reduced. Here we have no failure of management, no failure of judgement about demand in the economy for a particular product, but a trend in the economy as a whole (probably caused by the national economic management of the government) towards a reduction in margins and incentives and thus of production. But aggregate demand in the economy, perhaps absolutely but certainly relatively, stays up. What is produced can be marketed and sold. The only question is whether the incentives are sufficient to maintain existing or, preferably, increase production in this tight aggregate demand situation. It is competition of a kind; but it is not that competition in terms of rivalry between more efficient and less efficient producers that economists have traditionally talked about and that the layman usually has in mind when he thinks in terms of benefit to himself as a consumer.

Now let us apply this model of the modern economy to the situation when there is an appreciation (which means a depreciation somewhere else unless there is a universal change in the value of gold or other measure of value) of the currency.

The current theory is that a country that appreciates its currency should experience some modification of inflationary pressures; constituent raw-material imports should be cheaper as well as imports competing with local products. In the case of some products, incentives to export should be reduced, making them more available to the local market. Does this theory remain valid in the modern economy?

Clearly, the simple observance of events in the last few years reveals that it *does not* remain valid. The inflation rate for countries with overvalued currencies does not seem to be noticeably lower than those with undervalued currencies. A country that appreciates does not subsequently seem to achieve a lower inflation rate than those currencies against which it appreciated or other countries which depreciated. On the contrary, there seems to be at least some evidence based on simple observance of trends that a country that devalues reduces its inflation-rate, while a country that appreciates moves its inflation-rate upwards.

Is there any corroborative evidence to support these somewhat ambiguous conclusions based on superficial observation? It seems that there might be. First of all, we must remember that we are dealing with a modern economy that tends to experience a chronic insufficiency of supply. Second, we must bear in mind that competitiveness in an economy in this supply-shortage situation is not greatly affected by comparatively small changes in price. There is nothing new in this; the simplest situation of pure competition envisaged that in a supply-shortage situation the price would move up far enough to ration the available supply among those who could continue to make their demand effective. There is no commercial point in anyone selling below this level. So, if a currency appreciated by ten per cent allows imports to be marketed at ten per cent less than their pre-appreciation price, the resultant reduction depends on the extent to which exporters and those who import from them are prepared, for no commercial reason, to forego the windfall profit that appreciation has offered them. Incidentally, the exporters have enjoyed an incentive to their production that the depreciation of their currency (deriving from the appreciation of the importing currency) has given them; if they refuse to accept this incentive, then any benefit from the adjustment between the currencies would be entirely dissipated.

By and large, the price of imports in terms of the appreciated currency will remain the same in the domestic market of the appreciated currency. There will be no dampening of inflation from that circumstance. Will more become available? That is possible, though with some delay, if the incentive to the exporting countries from the derived depreciation is sufficient. There will probably be some delay, unless large-scale diversion of supplies from other markets is possible. Much will depend on a whole complex of factors in the individual producer/exporter country and in the world economy more generally; but, if the derived depreciation (that is, not the appreciation itself) succeeds in increasing production at some point or points in the world economy, the net result could be a reduction of that part of inflation (and it is a large part) that flows across national frontiers. In other words, we come back to the point that an increase in production is the solution to the modern economy's problem of inflation. An increase in production can be stimulated by depreciation of the currency, although, as we have suggested earlier, it may not be the best means of providing incentives to production.

Whether, overall, the derived depreciation raises aggregate production entering world trade depends on the effect of the original appreciation and the extent of the disincentive it provides to the economy of the appreciated currency. The intention of appreciation is to hold down prices in the domestic economy by forcing them to be competitive with newly advantaged imports. If the prices of the latter remain high, then the increased competition is, immediately and directly, nil. If it tends to hold prices to a lower level when costs would dictate an increase, then either domestic producers put their prices up (and competitive imports follow) or they keep them down and accept the disincentive to production that this entails, with probably reduced investment for future production and lower intensity of use of existing capital and labour (the latter perhaps by cutting overtime). There may be some combination of these two alternatives, with for example local producers letting their prices rise and losing some part of their market to competitive imports.

Apart from the domestic market situation, export markets for the products of the economy of the appreciated currency will be either more difficult or—and this is possible in our recent situation—the supply/demand situation will be so buoyant that prices will remain steady in terms of the appreciated currency so that prices will rise to the extent of the appreciated currency in other currencies. In the latter event there will be an intensification of inflation in the world economy, with all prices of equivalent exports tending to move up to those of the appreciated currency. In the former event, the drop in supply from the economy of the appreciated currency would tend both to increase inflation in the domestic economy through loss of production and productive income in relation to demand; and to increase inflation in the world economy through a drop in supplies moving to satisfy international demand. The impact of the latter would depend upon the extent of the drop in supply from the appreciated-currency economy relative to any gain in supply from the derived-depreciation economies.

In so far as we can form a conclusion at this stage, the conclusion must be that both depreciation and appreciation of the currency are doubtful weapons against inflation in the domestic or the world economy. Of the two, depreciation would seem more likely to reduce inflation than appreciation but, even with depreciation, it would seem better to use other means to stimulate production. Appreciation or depreciation of the currency should be used only to correct a fundamental disequilibrium. Admittedly, this raises the difficult question of what is a 'fundamental disequilibrium' and, in the best of circumstances, there may be genuine differences of analysis between competent economists whether a fundamental disequilibrium exists or not. However, while there may be these genuine differences and while mistakes may sometimes be made, changes in the value of a currency should be made only for the purpose of correcting a fundamental disequilibrium, and never for reasons of reducing or attempting to reduce inflation. The only exception to the latter may be the case of a country like Brazil where the inflation rate has reached astronomical levels and the easiest way to bring it down is to stimulate production by *all* available means, including a whole series of 'creeping peg' devaluations. However, even this might mean no more than that a fundamental disequilibrium exists which can be corrected only by a careful series of devaluations aimed at promoting domestic and external stability of the economy by encouraging production to continue to move up in relation to a buoyant demand.

VIII
The two rates: (2) Interest

I do not think we have any very clear idea of the nature or the extent of the impact that the other rate—the rate of interest or the price of one's own money—has on the economy. The past is studded with sometimes highly esoteric theories about the rate of interest. Keynes, in one of his more lucid passages, wrote that 'when there is a change in the prospective yield of capital or in the rate of interest, the schedule of the marginal efficiency of capital will be such that the change in new investment will not be in great disproportion to the change in the former; i.e. moderate changes in the prospective yield of capital or in the rate of interest will not be associated with very great changes in the rate of investment'.[1]

When this was interpreted into simple, practical requirements of policy, it meant that investment—and consequently employment—would be maximised if money were cheap; the lower the rate of interest the greater would be the range of profitable investment.

This was obviously a very satisfactory *theory* for an economy suffering from a deficiency of demand. The derived *policy* was equally satisfactory. Cheap money therefore became one of the key elements in the Keynesian policies of full employment and economic stability intro-

[1] Keynes, J. M., *The General Theory of Employment, Interest & Money*, Macmillan & Co., London, 1942, p. 250.

duced into most of the developed countries after the Second World War. And, by and large, the cheap-money policy worked. Private investment—generally fully supported by public investment—remained high. Productivity and output increased. A high demand for labour was partially offset—or so it was thought—by more capital-intensive production.

Even so, as we have seen, demand tended frequently and, as time went on, even chronically to outstrip supply, both of labour and of its products. The secular trend was for both prices and wages to rise at a rate of around 3 per cent a year and to threaten fairly frequently to rise above that rate. When demand became or threatened to become excessive, one of the solutions seen by most governments to be called for was a moderation in the cheap-money policy. In other words, interest rates were raised.

We need now to bear in mind Keynes' dictum that 'new investment will not be in great disproportion to the change' in the prospective yield of capital or in the rate of interest. At the height of the boom, therefore, a considerable modification of the cheap-money policy might be necessary to achieve a considerable reduction in the rate of investment that is thought to be a principal cause of the overheating of the economy. This is all the more so since Keynes would allege that the market, left to itself, would experience a decline in the marginal efficiency of capital before the supervention of a rise in the rate of interest. 'The later stages of the boom', Keynes wrote, 'are characterised by optimistic expectations as to the future yield of capital-goods sufficiently strong to offset their growing abundance and their rising costs of production and, probably, a rise in the rate of interest also. It is the nature of organised investment markets, under the influence of purchasers largely ignorant of what they are buying and of speculators who are more concerned with forecasting the next shift of the market sentiment than with a reasonable estimate of the future yield of capital-assets, that, when disillusion falls upon an over-optimistic and over-bought market, it should fall with sudden and even catastrophic force. Moreover, the dismay and uncertainty as to the future which accompanies a collapse in the marginal efficiency of capital naturally precipitates a sharp increase in liquidity-preference—and hence a rise in the rate of interest. Thus the fact that a collapse in the marginal efficiency of capital tends to be associated with a rise in the rate of interest may seriously aggravate the decline in investment. But the essence of the situation is to be found, nevertheless, in the collapse in the marginal efficiency of capital, particularly in the case of those types of capital which have been contributing most to the previous phase of heavy new investment. Liquidity-preference, except those manifestations of it which are associated with increasing trade and speculation, does not increase until *after* the collapse in the marginal efficiency of capital.'[2]

To precipitate a down-turn in investment (and presumably also in consumer credit) rather than to allow a down-turn to develop by natural process, the movement in monetary policy, in the form of an upward change in the rate of interest, must precede a downward movement in the marginal efficiency of capital or at least such a deterioration as would have a significant impact on new investment. The rise in the rate of interest might therefore have to be large. Moreover, it might be that new investment will carry along with it, perhaps for a considerable period, a large rise in the rate of interest, together with other costs of production, so that there will be a significant upward movement in the whole structure of prices, wages and incomes. This is particularly so if the demand-management elements in the Keynesian economy distort

[2] Ibid, pp. 315-316.

the downward movement in consumption, investment and aggregate demand which would otherwise—that is, in an unmanaged economy—continue to cause the rise in the rate of interest to have a direct and immediate impact on the marginal efficiency of capital.

Certainly, the rise in the interest rate will have some effect on the economy. Indeed, it will probably have a major effect. The greater the interest-rate rise, the greater—probably—the impact. In certain circumstances—although this needs closer investigation—the movement in interest rates might be the most thrusting element in increases of prices, wages and incomes and the major destabilising element in the modern economy. As the productive economy is largely based on various forms of credit, the rate of interest might be the most potent single force in changes in the balance between production and consumption and thus in changes in prices and, partly by derivation, in wages.

This may be especially true if the nature of the impact of changes in the interest rate at the peak of the economy is misunderstood. Keynes postulated that 'with markets organised and influenced as they are at present, the market estimation of the marginal efficiency of capital may suffer such enormously wide fluctuations that it cannot be sufficiently offset by corresponding fluctuations in the rate of interest. Moreover, the corresponding movement in the stock market may . . . depress the propensity to consume just when it is most needed'.[3] While this may have been valid in an economy affected primarily by market forces, its validity declined as government management of the economy tended to maintain aggregate demand at or above aggregate production. In these circumstances, the marginal efficiency of capital was principally related to the rate of interest and new investment declined or ceased as the

[3] Ibid., p. 320.

rate of interest moved closer to and above the schedule of returns expected on current installations.

Under Keynesian policies, the effort to dampen economic activity in the restrictive phase of government economic management is directed partly at investment; the Keynesian thesis being that consumption and investment are variables in the course of the trade cycle which together make up aggregate demand. Usually this effort is successful with private investment. Whether indirectly through the stock market or directly through purchases of capital equipment, buildings and so on, investment declines under the pressure of restrictive fiscal and monetary measures.

But while this decline *is taking place* (those three words are significant) certain other things are happening. Public and private final consumption are maintained; sometimes both or one of them will actually increase and, if there is any reduction in either of them, it *has to be* small. Moreover, the policies reducing private investment have effect only over a period: existing investment commitments are carried into effect and it is only newly contemplated investment that undergoes a reduction. During this time, the secular expansion in public and private consumption and, in most circumstances, even in public investment continues. It is only the future capacity of the economy to meet this continuing increase in consumption and public investment that declines through the decline in new private investment. Thus the decline in the latter takes effect just at the moment when it is most needed to meet the continuing expansion of demand in the economy. This decline therefore makes its contribution to further inflation.

In the modern economy, does the marginal efficiency of capital decline at all, in the Keynesian sense, at the peak of the boom?

In some ways, the marginal efficiency of capital *increases*, because higher prices can be maintained in the conditions of high consumer demand and the return *rises* on already installed capital. The marginal efficiency of capital tends to decline only in relation to capital installations to be made now and in the future: the upward movement in the rate of interest and the entrepreneur's hesitancy to be fully convinced that the consumer will tolerate further large price increases tends to make new capital installations much less attractive as compared with earlier capital installations for the entrepreneur. (Essentially, this is what Keynes was thinking of). Thus, he tends to rely on his past installations and to use them more intensively, largely perhaps with existing labour working increased overtime, rather than to install new equipment. At the same time, the investor—and this both reflects and is reflected by the higher interest rate—tends to look to the high returns of fixed-interest lending largely in the consumer-credit field, rather than investment in production where the marginal return on new capital has fallen or is thought to have fallen relative to the interest rate. This two-way squeeze on production tends to intensify the imbalance between supply and demand and the orthodox Keynesian policies of restraint then call for a further rise in the interest rate as part of the accepted monetary and fiscal measures to stabilise an overheated economy. The process is thus constantly repeated and a self-reinforcing spiral pushes prices and wages ever upward (while consumer demand remains high) and tends to depress the level of production, in some circumstances in absolute terms but almost always relative to demand.

If this is so, then inflation and the attempt to cure it by raising the rate of interest would operate to slow if it did not halt new entrepreneurial investment. 'Inflation, inflation everywhere and not a drop of solace for the sharemarket', said one commentator in the middle of 1973. 'If there is one single factor which investors around the world can consider as having suddenly become the bugbear of the sharemarket, it is the persistent—now almost accepted—high levels of inflation . . . Investors . . . are starting to realise the depressing impact that rip-roaring inflation has on sharemarket values. For rather than providing a hedge against inflation, sharemarkets around the world are proving strangely unable to cope with the situation and are going into sad declines in the face of higher prices all round. Inflationary disease shows many symptoms—not the least of which is a trend towards higher interest rates as lenders demand higher returns, and borrowers more willingly put up with the higher interest charges. It also shows up in higher consumption levels as income earners hurriedly spend their money today rather than tomorrow. They not only spend their savings but go heavily into debt . . . (A) lender . . . is hardly likely to be satisfied with an interest rate return of only seven per cent when the rate of inflation is in the eight to ten per cent range now common among leading Western economies . . . As interest rates go up, so will the yields that investors will require from the sharemarket to make them at least as attractive as those offered by the fixed-interest sector. And as yields go up, share prices come down—as markets around the world have already witnessed over the past six months'.[4] In the first few days of 1974, another commentator said that 'the performance of the Australian sharemarket in 1973 was determined by the steep rise in interest rates during the middle of the year. To that extent, the market's performance was completely traditional, and although other factors influenced various classes of stock they are to be seen against this background.'[5]

A rise in the rate of interest became, in these circumstances, not a curb on demand and thus an element of

[4] *The National Times*, Sydney, 21-26 May 1973, p. 58.
[5] *The Australian Finance Review*, January 1974, p. 8.

balance within the economy but a curb on production and thus an added element of *im*balance. This was both illustrated and accentuated by the effect of the rise in the rate of interest on the flow of money into the stock market and thus into avenues traditionally operating in support of entrepreneurship.

Let us have a slightly closer look, in simple terms, at how these things might work.

A man, with some capital, is contemplating starting an enterprise. This enterprise might be as simple as building a house which he will let to tenants or as complex as producing electrical components for a rocket headed for the moon. But, if he has less than the full amount of capital required for the enterprise, he will have to borrow some to get it under way. If he has to pay ten per cent for that money, then he will have to make ten per cent at the very least from his enterprise or he will be losing money.

He will be using some of his own capital so we can say that this can be averaged with the borrowed funds to give the rate of interest over the whole of the funds employed in the enterprise to lower the return which must be realised if the enterprise is not to lose money. However, if the return on his own capital is nil or less than he would be able to get on it on the market at a comparable risk, then he is sacrificing income in undertaking his enterprise. Of course, there may be other benefits: he may look forward to growth of his enterprise and higher returns later or he may be simply an enthusiast for what he is trying to do. However, while this may sometimes be true, most entrepreneurs, whether using their own capital or borrowing funds or applying a combination of the two, will need generally to obtain a return from their enterprise at least covering the rate that they have to pay for borrowed funds and the return that they would be able to get on their own money if they employed it in some alternative use. There will have to be some added margin for risk and for effort; if they can get a secure ten per cent by simply lending money, it would be an unbusinesslike undertaking to seek no more than ten per cent from an enterprise with doubts about its security which demands a considerable mental and/or physical effort in its management.

We seem to have reached a point therefore at which we need to re-appraise the role of the rate of interest in the modern economy. Its significance has always been a matter of some mystery. It can be—or has seemed to be—a simple agency for equilibrating the demand for and the supply of money. Or it can be, as Keynes saw it, a price for overcoming liquidity preference: 'the rate of interest at any time, being the reward for parting with liquidity, is a measure of the unwillingness of those who possess money to part with their liquid control over it.'[6] The rate of interest can be a means of reversing trends in the trade cycle and of mitigating its effects. It can be a stimulus to the flow of short-term funds internationally and thus a destabilising element in the balance of payments. Through its domestic and international effects it can, ultimately, destroy the stability of a high-employment economy and undermine the international monetary system.

If it doesn't do all of these things, it can perhaps do

[6] *The General Theory of Employment, Interest & Money*, p. 167. He went on to say that 'the rate of interest is not the "price" which brings into equilibrium the demand for resources to invest with the readiness to abstain from present consumption. It is the "price" which equilibrates the desire to hold wealth in the form of cash with the available quantity of cash;—which implies that if the rate of interest were lower, i.e. if the reward for parting with cash were diminished, the aggregate amount of cash which the public would wish to hold would exceed the available supply, and that if the rate of interest were raised, there would be a surplus of cash which no one would be willing to hold. If this explanation is correct, the quantity of money is the other factor, which, in conjunction with liquidity-preference, determines the actual rate of interest in given circumstances' (pp. 167-8).

some of them. But several things can certainly be said about it:

(1) The rate of interest has a significant role in the modern economy.
(2) Its role in the economy now is different from that which it had twenty-five years ago, because the economy in which it operates is different.
(3) A rise in the rate of interest will have a depressing effect on those parts of consumer spending (such as purchase of houses) which, because they involve large outlays, are therefore dependent on credit.
(4) But other consumer spending will remain high and might even be increased, *inter alia*, by the transfer of expenditure from the interest-dependent objects.
(5) On balance, therefore, a rise in the rate of interest is likely to have a relatively small net effect on consumption but it is likely to have a relatively large net effect on production and could cause unemployment or move employment away from production to, for example, consumer marketing.
(6) Through its effect on production and employment, a rise in the rate of interest will therefore tend to intensify inflation and a fall in the rate will tend to reduce it.
(7) More directly, the rate of interest will have an effect on production costs, especially on those industries that are heavily dependent on borrowed funds and this impact on costs will again intensify inflation if the movement in the interest rate is upwards and reduce inflation if the rate moves downwards.

Some industries will be affected more than others by movements in the rate of interest. But outside some special categories, inefficient economic establishments are likely to be preserved along with the efficient when the interest rate rises. Because new investment is likely to flow at a reduced rate to the production of primary and secondary commodities, the profitability of *all* producers, efficient and inefficient, of a wide range of products might improve, perhaps dramatically, in a situation of high interest rates, with private and public consumption sustained at high levels.

A rise in the rate of interest probably moves the whole schedule of firms, efficient and less efficient, up a notch or two in the scale of profitability. The marginal efficiency of *existing* capital is improved. If all producers are deterred from making new investments in installations, then all producers who survived under the old conditions survive more easily under the high-interest, high-demand, low-producing conditions that have supervened. Thus, the decline in production (or in the rate of increase in production) relative to demand, because of a diversion of funds from productive investment, ensures that the inefficient producers, instead of being eliminated, are protected. The rise in the rate of interest might mean that *all* producers across the spectrum are obliged to cut productive investment. The marginally profitable enterprises might be deterred earlier because interest rates might rise higher and more quickly for them; but, at the point at which all producers are priced out of the new investment market by the rise in the interest rate, profitability will improve for all surviving producers and the inefficient might get a larger share of the market than they had before. (They might increase use of overtime labour with existing capital to a level closer than before to that used by the efficient producers).

But all of this applies to some consumer-goods production. Some industries will be adversely affected by a rise in interest rates. These include consumption-goods industries dependent on credit[7] and, above all, those producer-goods industries that depend heavily on new investment in productive capacity.

The movement of the rate of borrowing up to a point close to or beyond the expected margin of profit will cause a slowdown in the installation of productive capacity. Just what industries and what establishments will be hit first by this development will vary with particular economies. But certainly the machine-tools industry, which is always most susceptible to trade-cycle fluctuations, will be hit quickly and hard. In fact, it will be hit before a slow-down becomes evident in the economy generally—and perhaps before the government, with an urge to maintain stability, adopts restrictive economic policies to damp down what it regards as a continuing boom.

The decline in the production-goods industries will make recovery of production and recovery from inflation slower; but, as we have already noted, the decline in production or in the rate of increase of production will not be confined only to the production-goods industries. When pressure for a revival of production sets in, the capacity of the production-goods industries will have to be restored but so also will the capacity of industries right across the economy. The constantly moving belt of consumer demand, though its rate of movement might vary, will meantime have moved well beyond the point it had reached when production began to flag. Production will therefore have to be restored not merely to that point but to a point of aggregate production much further on. The achievement of this expansion of production will involve a

[7] This will not always be the case. Special arrangements might be made to ease the interest-burden for 'home-buyers' because of the social values involved. For other durable-consumer goods, much will depend on the psychology of the consumer. If both prices and wages are racing upwards, the consumer might buy more durable-consumer goods now so as to 'save' money compared with what he will have to pay later. He might do this to the limit of his rapidly increasing money income.

substantial time-lag during which inflation will continue to intensify and shortages will persist.

The situation then is one in which investment is and/or has been low and any attempt to increase production involves using more labour in relation to existing capital equipment or in relation to capital equipment inadequately increased relative to the production level sought. The result seems to be a shortage of labour[8] while output remains too low to meet the buoyant demand. One of the primary causes of this is the failure of investment to flow into the production sector and the unduly large flow of credit funds into the consumer sector.

We then get a situation in which strains on production seem to represent a limit to productive resources. All is at full stretch. Nothing can be done to increase production. Labour is working overtime at an all-time high. Yet there are some curious features. For example, unemployment sometimes tends to persist or even increase, investment levels off, declines or increases at too slow a rate.

So it appeared to be in the Australian economy towards the end of 1973. 'The economy continues to exhibit signs of severe strains on productive capacity—stocks are low, shortages appear to be unusually widespread and there is intense competition for labour in most categories', the Treasury reported in the summary preceding the December 1973 round-up economic statistics. 'Spending continues very buoyant, a particular feature of recent figures being the strong pick-up of private capital expenditure in the September quarter. The labour market remained under

[8] As will be apparent from what we have said already, there will tend to be a shortage of labour in those sectors of the economy meeting the demand of the final consumer (retail stores, a wide range of final service industries, etc.) and in the public sector; and this will tend to cause an accompanying shortage of labour in the rural and secondary industries. The latter will tend to use more labour-intensive methods because of the inadequacy of capital installations, thus accentuating the labour shortage.

strain at end-November despite some apparent easing during the month.'[9] This was the sort of description of a modern economy in difficulties that had become very familiar. What was also very familiar was the failure of modern policies of economic management to deal effectively with these difficulties.

If the existing interest-rate policy does not work, what then should be done? It is of little help to tell policy-makers that one very important aspect of their monetary policy is unproductive and even harmful if we cannot tell them what to set in its place.

The first thing to do is to recall the objectives at which interest-rate policy should be aimed. The objectives at the recessional end of the 'trade cycle' are clear enough: they are to stimulate production and employment and to get the economy moving up to full use of the economy's labour and capital resources again. That is clear enough and the value of low interest rates, for both investment and consumption, is sufficiently agreed and accepted in most or all of the modern developed economies. It is in the boom phase of the 'trade cycle' that our difficulties occur. Again there is agreement and acceptance but it seems to be on a policy that has a fatal flaw.

One very simple way of explaining this fatal flaw is that it is human to believe that if you want to reverse a certain movement you do the opposite of that which created it in the first place. Push is the opposite of pull. We have a 'what-goes-up-must-come-down' syndrome. So if we need low interest rates for both consumption and investment in the recession phase, it seems natural to the human mind to assume that we need high or higher interest rates for both consumption and investment in the boom phase, to reverse what we started at the bottom. The flaw is that especially as modern economies have developed in the

[9] *Round-up of Economic Statistics,* The Treasury, Canberra, No. 11, December 1973.

last quarter century, the simple application of this syndrome does not work.

What needs to be done in the boom phase to maintain stability is to temper consumption but to maintain or expand production. In terms of the interest rate, therefore, the objective should be to have a relationship between the rate of interest for consumption spending and the rate of interest for production which stabilises or reduces the former and which stimulates and increases the latter. The flow of available finance should be less to consumption and more to production.

How is this achieved? In its simplest terms, the rate of interest for production should be kept low, say around the five per cent mark, while the rate of interest for consumption expenditure should be allowed to move substantially upwards, say to eight or ten or fifteen per cent. However, the creation of a margin of this kind (assuming it goes beyond a reasonable margin for risk and other factors) would move funds *into* the consumption sector and out of the production sector. Thus the movement which now occurs under orthodox policies of moving the whole schedule of interest rates up by equal amounts or proportions would be exacerbated.

What is therefore needed is an arrangement whereby the consumer must pay more for his borrowed funds and the producer must pay less, but the lender must receive a greater or no less a profit by lending or making funds available by other means to the producer rather than to the consumer.

A number of devices would be available to governments to achieve this. One would be to require those who borrowed for certain purposes to make interest-free deposits with the Reserve Bank up to a certain proportion (say twenty-five per cent) of the amount borrowed, and to charge lenders for these purposes a 'Usury Tax'. Borrowers for other (that is, productive) purposes would have all their borrowed funds freely usable for those purposes and the lenders would be exempt from 'Usury Tax'.

The simplest device might be to move the rate of interest for productive purposes down and the rate of interest for consumption up and to impose a tax that would be equal to or greater than the margin between the two rates so established. There would be no greater profit for the lender to lend to the consumer rather than to the producer, in fact, preferably somewhat less and the producer would enjoy low interest rates while the consumer would have to pay high interest rates (and increase government revenues from which government expenditures could more easily be met).

As supply and demand in the economy were brought more nearly into balance, the margin between the producer rate and the consumer rate of interest would be reduced (always bearing in mind differing risk and other factors). If the economy despite the best efforts of economic management went into recession, then the margin would be eliminated entirely (again bearing in mind differing risk and other factors) and both production and consumption would be stimulated by low rates of interest.

This is the sort of conclusion towards which we should work. Demand in the modern economy will always be high. Therefore, production must be kept high to meet it. When they get out of balance, they should be treated, distinctively if necessary, to bring them back into balance. In the recessional phase, demand should be stimulated and production should follow. In the boom phase, production should be stimulated and demand curbed. The schedule of rates of interest should play its part in this and should be constructed by the government and the monetary authorities with the appropriate differentials to enable it to do so.

IX
Conclusion

A century and a half ago Lord Byron found that 'the inflammation of his weekly bills' was 'the climax of all human ills'. Of the good many 'inflammations' since, probably none has been so widespread and sustained as that experienced by most countries in the last few years. During that time, governments have struggled with varying degrees of elegance but with fairly uniform incapacity to beat inflation. Though the origins of the inflation lie more deeply both in time and causation, the unremitting but unsuccessful struggle against it has had its most dramatic episodes since the United States tried to dampen a boom in its domestic economy by restrictive economic measures in July 1969. Future economic historians might see the Nixon measures of that month as setting off worldwide inflation in something the same way as forty years earlier the Great Crash on the New York Stock Exchange had tumbled the world into depression.

Since 1969, the winds of inflation have swept everywhere. No one has been able to control it. Whether in North America, Europe, Japan or anywhere else, the more governments have tried to stop it, the worse it has become. What is wrong?

Across the world, the academic economists have no answer. Nor do bankers or businessmen. Economic writers and journalists are able to tell us what *was* wrong with economic policies (such as those embodied in the last American or European budget, the last revaluation or the last devaluation but one), *after* they have shown themselves to be unsound; but they are quite unable to suggest the right policies in advance. In all countries, Finance Ministry officials, relatively inflexible in their well-meaning conservatism, apply their known rules and remedies and, however many times they fail, return forever hopefully to them as the only springs of their inventiveness. Every government struggles to make a selection of the non-remedies that are offered to it.

The Ministerial meeting of the OECD, held in Paris in June 1973, recognised the gravity of the economic situation and, in particular, acknowledged world-wide inflation as a problem that had to be solved. But the Ministers and their impressively expert delegations were unable to offer any real solutions. The Committee of Twenty established by the International Monetary Fund to try to reform the international monetary system has, despite the great competence of its members and of the IMF staff, made little progress. In any event, it seeks to treat the symptoms rather than the causes of the world's monetary problems. Dollar and other currency crises follow in rapid succession. Central bankers and treasurers meet. Confident assertions of success in stabilising the currency situation are followed by frank confessions of failure. The confident assertions have diminished as the succession of crises has grown.

The long series of crises and the long series of false remedies have produced a nightmarish feeling that, in terms of our lack of control of the situation, we are back in the 1920's and 1930's. Then we had a succession of—or abortive proposals for—world economic conferences, world financial conferences, devaluations, currency manoeuvres; and everything we did only made things worse. The present crises are *not* the same as those of forty years ago. There are not the millions of unemployed, the long dole queues and the terrifying prospect that seemed to confront us in the early 'thirties that the modern economy, deficient in aggregate demand, would slow to a cataclysmic halt.

But, if there are differences, there are also similarities. Moreover, there *is* a solution to our present problems that, like the solution that Keynes outlined to us in 1936, is very simple. Someone recently said of Keynes' theories, 'no one supposes that such inspired simplifications, these "jumps" in thought, are the work of simpletons, though simpletons may grasp them once they have been done'.[1] So at the moment, we are passing the obvious solution by, not because it is so complex that we can't grasp it, but because we have become so conditioned to a particular framework of economic thinking that we never really turn our minds to it. Again, the similarity to the conditioning of the classical economists in the 1920's and 1930's is striking. So we need to do two things.

The first is to acknowledge that we are dealing with a new economic situation. The world's developed economies are at one of their major turning points. Indeed, they have already reached and gone well into the turn; what remains is to steady, straighten up and head off in the new direction. This change now being negotiated is comparable in significance with, though different in kind from, that of the 1930's. The change is not necessarily any more complex in terms of economic concepts, but the magnitudes and the rate of change are much greater than in any earlier period. We are reminded of Alvin Toffler's statement that, under the impetus of to-day's 'accelerative thrust', 'high technology societies . . . *are* experiencing supernormal rates of change'.[2] This change calls for

[1] Castles, Ian, *New Directions for Growth*, paper presented to the 45th ANZAAS Congress, Perth, 1973, p. 24.
[2] *Future Shock*, p. 19.

other consequential changes. Just as the theories of the classical economists were utterly unable to cope with the circumstances of the Great Depression, so Keynesian theories and policies[3] cannot cope with the problems confronting the advanced economies in the 1970's. 'It requires but little knowledge of history', wrote Leonard Woolf, 'to recognise that there is . . . a psychological law of the dead hand . . . at every particular moment it is the dead rather than the living who are making history, for politically individuals think dead men's thoughts and pursue dead men's ideas'. If we persist in applying in the 1970's dead men's ideas through the policies that served us so well 20 and 30 years ago, then we are headed for certain failure and possible disaster. The record of failure of Keynesian policies is now so extensive that it is puzzling that serious economists still persist with them. So tied to these outmoded policies are they that they seem almost to be bent on economic self-destruction. We are not in control of our fate because we are not in control of our economists and they, in their turn, hardly seem to know exactly what our problems really are, let alone how to handle them. Their attitudes are embedded in the past. Their theories of economic stability and growth, once a life-raft on to which millions around the world clambered to safety, have now disintegrated into unstable fragments at which as many millions now clutch and sink.

[3] It is the very *success* of those policies that has now made them inapplicable. A world afflicted with a chronic insufficiency of demand has been transformed by Keynesian policies into a world afflicted—happily in some though by no means all ways—with a chronic insufficiency of supply. We have got back to a shortage situation which is historically more characteristic of the human condition. Keynes himself would have recognised this. If he were still alive, he would probably be proposing remedies to make his own system consistent with the new economic order that it has created. The sad feature of recent years is that no new Keynes has emerged—no one who can see through the fog of his preconceptions to the penetrating simplifications that Keynes was able to make. Since Keynes' passing, no one has emerged to follow him who—whatever his 'Keynesian' training—could truly claim the Keynesian tag.

The cluching has a nightmarish *déjà-vu* quality. We seem almost to be back in 1929 again, watching the unfolding of an inevitable tragedy, with Presidents and Prime Ministers being drawn to an abyss into which they will, in their turn, drag their people. Just as the obsolete theories of the 1920's plunged a world into disaster, so the obsolete theories of the early 1970's threaten us with no less a tragedy. The dole queues may not be so long this time and those who suffer on these (in the developed countries, anyway) may be better fed, but the ultimate political, economic and social distress throughout the world may in the end be even greater. The first thing that we must do therefore is to recognise that we are in a period of major economic change.

The second thing we need to do is to identify the nature of the change that has taken place and then to determine the changes in economic theory and policy appropriate to these changed economic conditions.

Broadly, the cause of the change is easy to see. The policies that flowed from Keynes 'General Theory' and that were so successful twenty years or so ago were directed to a situation of chronic insufficiency of demand. If we still had a chronic insufficiency of demand, they would still be effective. When the demand insufficiency was enough to cause serious unemployment, the Government could apply policies to move demand up. When demand was too great, the Government could apply policies to move it down.

Unfortunately for the economists, but most fortunately for you and me and all our friends, this simple mechanism no longer works. For one thing, it is based on the belief that, at the top of the boom, stability can be restored through suffering. Politically and socially, this is just not on any longer. We will no longer tolerate mass unemployment—indeed, we won't tolerate much unemployment at all for very long—and we properly insist on the unemployed and very nearly everyone else being looked after by the society that might otherwise seem to have rejected them. Consequently—but not wholly for this reason alone—we never have an insufficiency of aggregate demand; we nearly always have an insufficiency of *aggregate* supply.

Therefore, the basic solution to the current inflationary instability must be to seek an equilibrium upwards by increasing production. The solution lies in throwing the weight of policy behind measures that will mitigate the pressures of orthodox economic theory and that will give worker and entrepreneur alike greater rewards for greater effort and enterprise. We must give consideration to such measures as substantial cuts in interest rates for productive enterprise, cuts in income tax for the working man, including cuts in tax on overtime and on second-job earnings; cuts in company tax including special cuts for expansion of employment, payment of overtime, employment of women, older and handicapped people and second-job workers; income-tax concessions for working wives; more liberal concessions for new machinery investment.

If we can manage things like this, everyone will benefit. That includes the old, the invalid and the unemployed to whom we will at last have a lot more *real* income to transfer. Perhaps we would have enough real income to retire every practising economist in the country—certainly we would at least be able to afford their recurrent follies better than we can now.

Let us put three broad but simple questions, as follows:

(i) What initiates the chronic or constantly incipient instability in the modern economy?

(ii) What sustains, reinforces or intensifies this instability?

(iii) Is there some way in which the forces tending to instability can be reversed or, in other words what policies should be adopted to remove the instability?

Let us take each of these in turn.

What causes the instability? The gradual but persistent growth of social or community expenditure has built up a chronic tendency for social demands to outpace the expansion of the productive base. Even though, in modern conditions, production can increase enormously over quite a short period, this expansion itself stimulates social expenditures that might increase at a rate in excess of the rate of increase in production. Social expenditures cover much more than social-service expenditures (which are normally tranfer expenditures from one group to another within the society and therefore add to strains between supply and demand only in so far as funds are transferred from a group with a lesser to a group with a greater propensity to consume). Other social expenditures add directly to demand, irrespective of any differences in propensities without, for the most part, adding to supply. These expenditures cover defence, education, some forms of communication (such as roads) and public facilities (such as parks and police and national monuments) and a whole wide range of small and large expenditures growing and diversifying with every budget. The impact of these social expenditures is most strikingly evidenced by society's recent efforts to improve the environment by, *inter alia*, controlling pollution. An executive of a major United States company has been reported to have said that 'Our company's spending for environmental purposes alone this year will be about sixty million dollars. That will be roughly fifteen per cent of our total capital spending—and none of that sixty million will contribute anything to our total revenues'.[4] Nor, we might add, will it contribute anything to direct satisfaction of traditional consumer needs. The result of all these community outlays has been to convert the 1930's situation of a chronic relative insufficiency of demand into a situation of a chronic relative insufficiency of supply.

What intensifies the instability? When consumer, investment and social expenditures produce inflation through outrunning the existing level of production, governments have tried to cut aggregate demand to bring it into balance with production. This has been based on a series of associated beliefs that any society tends to be afflicted with a chronic insufficiency of demand; that demand can readily be reduced below that of production; and that stability of wages and prices will be restored by the enforcement of those disciplines belonging to an earlier age.

What should be done to remove the instability? At the point at which supply is outrunning demand so as to produce inflation, measures should be adopted to increase production (and to hold demand relatively steady). Only when, through these means, production begins to outrun demand, should production and employment be allowed to decline while demand should be (according to circumstances) maintained or stimulated.

The significance of government expenditure in the equation of economic instability can in some measure be quantified. As the years have passed, government outlays have constantly increased, both absolutely and proportionately to national income and they have increased with a ratchet effect so that the peaks are rarely lowered (and never lowered *much*) and all that we achieve in terms of slowing the mounting trend is to level out on a plateau before the next alpine climb. Government outlays are of such political and social importance that, in practical

[4] Jack K. Horton of the Southern California Edison Company, as reported in *U.S. News and World Report*, 12 June 1972, p. 39.

terms, they cannot be reduced. They are for such things as education, transport, communications, welfare, defence (which can sometimes be reduced a bit), foreign affairs (which is a high-growth industry everywhere), external aid and a host of other things, very few of which can be cut very much either in absolute terms or proportionately to national income. Sometimes, in a period of 'recession', certain government outlays actually *in*crease. Indeed, and necessarily, unemployment means, not a decline in government expenditure, but an increase in outlays on unemployment benefits.

In Australia, for example, most government outlays have increased dramatically even over such a short period as the four years between 1968-69 and 1972-73. Expenditure on law, order and public safety increased from $193 million in the earlier financial year to $361 million in the later—an increase of 87 per cent. For education, the increase was from $743 million to $1,528 million—an increase of 105 per cent; health and welfare from $432 million to $815 million, an increase of 90 per cent; repatriation from $76 million to $117 million, an increase of 54 per cent; development of resources and assistance to industry from $244 million to $457 million, an increase of 87 per cent; and all other government *final consumption* expenditure from $652 million to $1,018 million, an increase of 61 per cent. Only defence showed a modest increase from $1,018 million 1968-69 to $1,177 million in 1972-73, an increase of only about eleven per cent. *Total* government final consumption expenditure increased from $3,351 million to $5,501 million over the four-year period, or by just about sixty-six per cent. Excluding defence, the increase was more than eighty-five per cent. At the same time, national disposable income increased from $24,121 million to $36,835 million or just over fifty per cent.

Despite a government-induced recession in the midst of the four-year period in 1971-2, private consumption expenditure increased markedly each year, by 9.6 per cent in 1969-70, by 9.6 per cent in 1970-71, by 9.9 per cent in 1971-72 and by 11.4 per cent in 1972-73. Private consumption expenditure thus tended—perversely, some would say—to increase at an accelerating rate during the recession and the increase over the whole period, at 47 per cent, was about as great as the percentage increase in national disposable income. The part played in this by an increase of eighty-three per cent in cash benefits paid by governments to persons (from $1,432 million to $2,621 million) was obviously significant.

In part, Keynesian policies themselves have helped to enlarge government outlays and to give them an anti-cyclical bias that enhances the ratchet effect. Keynesian 'in-built stabilisers', intended to bolster demand and embracing unemployment and other welfare benefits as well as 'public works', helped to create an attitude of mind in which government outlays came to be not merely constant but constantly increasing. Over the years, Keynesian policies thus helped to create a situation that foreshadowed their own demise; they made themselves, by and large, unnecessary to maintain a sufficiency of aggregate demand because that demand became automatic or self-sustaining. But, more than that—and not nearly so wholesomely—they became devastating when they continued to be used to try to get demand down below supply in an inflationary situation.

Put more summarily, rapidly expanding government outlays, the ratchet effect inhibiting downward changes in their rate of expansion and the tendency for some of these outlays to expand more rapidly in time of a recession in production, created a situation in which a chronic insufficiency of demand was supplanted by a chronic and unstable insufficiency of supply. Any attempt then to reduce aggregate demand by traditional Keynesian methods reduced consumer demand or the *rate of increase* in consumer demand only marginally but almost necessarily reduced production much more. The effect was therefore to intensify the inflation that the attempt to curtail aggregate demand was intended to remedy. A timid mouse of three per cent annual price rises becomes a raging tiger of eight or ten or twenty per cent inflation.

In saying this, we must bear in mind two things. The first is the conditioning of Keynesian policies by which we have come to think almost always in terms of broad *aggregates*. We deal with *aggregate* supply and *aggregate* demand. When there is a shortage of the latter, we apply policies to move *all* demand up. That may be fair enough. But, just as simplistically, an excess of aggregate demand has been tackled by trying to move *all* demand down. As Keynesianism has changed societies, it is this that has led to disaster. The attempt to bring all demand down results in bringing down *investment* demand and, more generally, demand for *production* but, for reasons that we have described, in keeping consumer demand up. The solution to this problem is one that, like the Keynesian solution to the problems of an earlier period, a simpleton will ultimately be able to understand. But, as in that earlier period, we need first to break down the conditioning to which the Keynesian model has for so long exposed us.

The second thing to bear in mind is that, quite apart from the persistence of high levels of public outlays, there are other elements that reduce the economy's productive capacity (at least in the short-term) and that limit a government's capacity to suppress demand. For example, the vast and continuing expansion of educational opportunities in the last 20 years, principally at public cost, has meant not only that public outlays on education have increased by hundreds or thousands of millions of dollars, but that a large proportion of the working population has been withheld from productive employment for an additional period, often of many years. Additional manpower is diverted to train and serve them. This is one outstanding example of a frequent cost effect of government outlays which operate in two ways both to increase aggregate demand and reduce aggregate production.

There are other inflexibilities in government policies that necessarily sustain demand whatever the level of production. In particular—and here we touch those tragic problems of the Great Depression that Keynesian policies were designed and served so well to solve—no government can any longer impose substantial unemployment on its people for very long. The social and political costs are too high. Even the United States, which has traditionally been more tolerant of the human tragedies of a 'free' economy, has modified its attitudes to unemployment and to social welfare generally so that recent policies have moved closer to those of other developed countries. Anyway, in terms of maintaining stability of the economy, high unemployment benefits make unemployment ridiculous: if the unemployed are able to maintain their consumption levels, there can be no benefit but only loss if the objective of policies subsuming unemployment is to reduce consumer demand in an inflationary situation. So that what we then come to is this: if it is socially unacceptable to move demand down far enough to balance supply, then the only way of achieving balance in an inflationary situation is to move supply up or, at least, keep it up to meet demand.

Our failure to try to do this explains why we have so often had 'stagflation'. When insufficiency of supply started to cause inflation, we have applied—and, indeed, we still do apply—monetary and fiscal policies that curtail certain areas of demand, including investment demand, and that curtail production. This reduction of supply while demand necessarily stays up under the pressure of government as well as of private outlays, achieved those twin evils of more unemployment and higher prices.

When we have reached that point of ultimate frustration, we have then—just as we did in the 1930's—flailed around desperately for remedies roughly *within* the confines of our existing economic orthodoxies. Wage levels are said to be too high (that was a favourite in the 1930's too); therefore, wages should be frozen or cut. Others say we need an incomes policy and price control. Or we should revalue the currency or cut tariffs. Most governments have tried some of these; some have tried them all. None really works. Having tried them all, governments and people then start almost to reconcile themselves to inflation. Again, the analogy with the 1930's is instructive: so many dispiriting years killed the hope that 'prosperity is just around the corner' and substituted a wry resignation that 'it is a long lane that has no turning'. People in the 1930's had to stiffen their resolve to endure unemployment and poverty as best they could. Inflation is less difficult to endure than depression and so our resolve to endure it emerges more easily.

This is the sort of situation that we have to try to deal with. Somehow, we must get back our confidence, our determination and, above all, our capacity to manage our economic fortunes. If we can't apply traditional Keynesian methods, what methods can we apply? Is there any solution at all to a situation in which demand has outstripped supply and caused inflation? If an attempt to bring demand down brings production down more, can anything at all be done at or near the 'full-employment' level?

The answer is a clear affirmative and the solution is to move production up (*even from the 'full-employment' level*), while keeping consumer demand steady or moving it gently downwards *relative to producion.* At least, consumer demand must not be allowed to expand as fast as production. Funds should be directed into production and productive investment and not consumer financing. Incentives should be provided for production. Bonuses should be given for additional work and for providing additional and perhaps more costly and less efficient employment opportunities.

Given that we want to get production up and, at the same time, keep consumer demand steady or at least not have it rise too much, what specific things should we do?

First of all, let's see what we should *not* do.

In general terms, we must *not* discourage production in a situation of actual or threatening inflation. *Inter alia*, we must *not*:

- (i) Revalue the currency upwards;
- (ii) Raise interest rates for productive enterprise;
- (iii) Increase company taxes;
- (iv) Increase payroll or other employment taxes;
- (v) Reduce *working* migrant intake;
- (vi) Discourage entry of women, older persons, students and others into the work force;
- (vii) Discourage overtime work;
- (viii) Abolish investment, depreciation or other incentives to production or introduce any *dis*incentives to production;
- (ix) Fix prices or wages or incomes.

If we do any of these things, the tendency will be to reduce the productive base—or reduce the rate of expansion of the productive base—on which government outlays have to be raised and, of course, government revenues collected. Whatever their motives, plans or intentions, governments which introduce measures of the kind listed above will, in fact, be intensifying inflation.

What we *should* do is the opposite of what we should not do. Therefore, we should:

- (i) Use our skills, our labour and our plant capacity as fully and efficiently as we can;
- (ii) Stimulate production through a co-ordinated series of fiscal, monetary and other economic measures;

and

(iii) Increase incentives and rewards for the working elements in the population, so that they will achieve a larger output for both the working and the 'dependent' elements to enjoy.

Those more particular things that we should do within this framework would include, although they would not necessarily be restricted to:

(i) Maintaining the value of the currency or devaluing as a means of increasing incentives to production;

(ii) Lowering interest rates for production and productive investment;

(iii) Cutting company, payroll and other taxes on employment and enterprise;

(iv) Giving concessional reductions on income taxes for overtime beyond a certain limit or on some of the money earned from a second job;

(v) Allowing tax concessions (subject to limiting conditions, where necessary) for married women, older persons, students and other special groups entering the work-force;

(vi) Allowing tax concessions to employers who pay overtime beyond a certain limit and who employ irregular labour on conditions tending to raise cost per unit of output;

(vii) Giving investment, depreciation and other allowances that will stimulate productive investment and raise production in the short or longer term;

(viii) Increasing the migrant intake of people in the working age groups;

(ix) Allowing market forces, within the existing political and social framework, to determine prices, wages and incomes.

No single government need do all of these things at once. Some of them will suit a particular economy better than others. For example, a country can't convert itself from an emigrant to an immigrant country overnight, although Germany (and others in Europe) managed a fairly rapid transformation some years ago, with greatly beneficial results. Low interest rates will be a boon to everyone (except those seeking usurious gains, especially from consumers) and no one should ever revalue its currency upwards except in circumstances of 'fundamental disequilibrium' (which takes a good deal of identifying) or as the necessary obverse of a depreciation by another country that desperately needs to increase incentives and that can find no better means of doing it.

The complexities of exchange and interest rate variations have already been acknowledged. First, so far as exchange-rate variations are concerned, the advantage of depreciation (in an inflationary situation) seems to be not that it removes a competitive disadvantage, so much as that it provides the producer and exporter with an enhanced incentive. The most characteristic world trade situation in recent years (except, until the last year or so, for agricultural and raw-material commodities) has been one in which almost all consumer goods[5] entering international trade have been snapped up and variations in price are of comparatively little consequence. Currency depreciation cannot mean that more than 100 per cent of production will be sold, but it *can* mean that the export element in that production will, temporarily at least, provide a higher profit margin and thus an incentive to increase production to meet it. So also the higher price of imports on the domestic market provides an incentive for production to take advantage of a suddenly improved margin of profit. But this process means that prices tend to shoot up further until increased production achieves a

[5] Producer goods have sometimes had a tough time, for reasons which, of course, emerge from the argumentation that has been put forward.

better equilibrium; and, perversely, the balance of payments tends to get at least temporarily worse, because the increased *volume* export performance has to catch up with the reduced proceeds resulting from the depreciation. The obverse is that the balance of payments of the countries which revalue gets, temporarily at least, not worse but even better so that the payments disequilibrium is intensified all round. In brief, depreciation provides incentives but it is better usually to provide these incentives by other means.

The effects of interest rates are again complex. But certain it is that a rise in the interest rate means a necessary narrowing of that range of enterprise that will be profitable without a further escalation of prices. The deterrence that this provides to maintaining or increasing production will itself cause an increase in prices through pressure of sustained demand on static or reduced supply. If an increase in interest rates is combined with some price-fixing or price-justification arrangements, the effect on production, and ultimately on the price level, will be all the greater.

Higher interest rates will also cause a diversion of investible funds from direct investment in production (including that through stock exchanges) into mortgage and consumer lending. Why should an investor take the risks of enterprise when he can get ten per cent or more clear on a safe mortgage or about as much on finance-company notes? There will thus be increased pressure from the consumer demand side just at the time that there is a weakening of incentive on the supply side to meet it.

That brings us to the need to apply policies to restrain, or restrain the growth of, consumer demand at the same time as incentives are provided to increase production. We have said that government outlays are of such a nature that consumer demand cannot readily be reduced or reduced relative to production under existing Keynesian policies, but, at least in the short term, its growth can be curbed if we apply these policies with a more sensitive touch. Some levelling out in the rate of government outlays on public works, defence, education and on welfare services might be managed. Some radical ideas on free public transport might not only cut costs but save precious labour. Especially if incentives are provided to increase employment of groups not now fully employed, it might be possible to hold the rate of increase in welfare outlays and, at worst, the real income on which those outlays can be based will simultaneously be enlarged. At the same time, we must be careful, for example, not to apply a means test (or a higher means test) to older people in such a way as to deter them, *if they wish*, from working.

Above all, measures to reduce consumer demand should include some limitation of consumer credit, though a sensitive touch will be needed. If interest rates are reduced, as they should be, for production and productive investment, the *same* or *any* reduction should not apply to the rate, for example, for hire-purchase. Action would be needed to ensure that investible funds were not diverted from productive investment, at a relatively low rate, into consumer credit, at a relatively high rate. To ensure this, any difference between the rates for productive and consumer credit should, after allowing for difference in risk and other orthodox factors, need to be eliminated by some fiscal device. For example, if the margin between productive and consumer credit were two per cent, a tax to this amount levied on consumer credit should remove any profit advantage and ensure that funds were not moved unduly in that direction. Other well-established devices such as minimum deposit requirements and time-limits on repayment could provide additional consumer-credit curbs.

We stress that government policy should not aim to rush production fiercely up and push consumer demand fiercely down. The former should be unmistakeably stimulated; the latter should be eased down, held stable or allowed to expand less rapidly than production. By and large, we are dealing with narrow margins. Mr. Micawber said, 'Annual income twenty pounds, annual expenditure nineteen nineteen and six, result happiness. Annual income twenty pounds, annual expenditure twenty pounds nought and six, result misery.' We are rather like this in determining our national (and international) economic stability. The touch needs to be sure; it certainly does not call for management beyond our means; but it needs a skilled hand.

The main thing is that stability can be achieved only by moving production up; and that, when we control demand, we must distinguish between consumer and productive demand and, in an inflationary situation, we must brake or hold the throttle back on the former and let it have full power on the latter. Perhaps there is a further cautionary note to strike. That is that the productive capacity of an economy cannot be *infinitely* enlarged. A persistent attempt to do more than the economy's capacity allows will cause inflation. All that can be said at that point is that you won't cure the inflation by cutting production along with consumption; the odds are you'll make it worse. If you hold production up and seek to curb demand within practicable limits then, even though you might still have inflation, it should get no worse and, with continuing consumer restraint, might even get better. Anyway, it is the only way of solving or limiting your inflationary problem. To do anything else is to court disaster.

Finally, we should make four points, the first being that, if we are to beat inflation, we shall have to reverse some well-entrenched attitudes of mind. Just as, after 1945, we had to get used to the notion that we had to *increase* and not decrease government spending to get out of a depression, so we will now have to get used to the idea that we must *stimulate* and not discourage production, while controlling demand, to get out of inflation. The threat of 'national insolvency' deterred governments from doing the sensible thing in the 1930's; the threat of ever-greater inflation deters governments from doing the sensible thing today. Governments always need a lot of courage to break the shackles of conventional wisdom; but, in the end, they will do it—pragmatically, if not deliberately—because they must.

The second point is that one government will find it hard to beat inflation alone. It must be an international effort, certainly involving the major economies. Much, although not all, of the present world-wide inflation had its origin in the long boom in the United States during the 1960's, the concurrent adoption of Keynesian policies and vastly expanded welfare, and the attempt by President Nixon to control the boom by restrictive measures in July 1969. He persisted with that restrictive 'solution' until January 1971 with the United States domestic and foreign situation getting dramatically worse almost all the time. After January 1971, he instituted a reflationary policy aimed at reducing unemployment and getting the economy moving again. For much of the time since, the United States economy has improved in terms of output, employment and, in some and varying measure, in its external position. But expansionary measures have been accompanied by restraints, particularly interest rates and price control measures, and forced devaluations have gone beyond the provision of export incentives to reducing earnings and improving the foreign balance less than should have been the case. During part of this period, the United States 'exported' inflation and its own rate of inflation declined. More recently, a renewed bout of inflation has developed around increases in food and raw-material prices and this, with other elements such as rapidly rising interest rates and more recently the oil crisis, has built on inflationary conditions already existing in the United States and elsewhere. No country can control inflation (any more than it could satisfactorily control depression) alone; instead, we must work for the implementation of sound policies everywhere, especially in the United States and the other major economies. In saying this, we need to acknowledge that problems with the international monetary system and with exchange rates are *derived* problems. You can't solve these problems until you solve the problem of domestic economic stability. Helmut Schmidt, German Finance Minister, was reported[6] to have said in January 1973, that 'the United States did not recognise that many of its balance of payments problems were the result of domestic causes and that the United States concentrated excessively on looking for the causes of its problems abroad. At the same time, he said, Europeans showed very little understanding of American economic difficulties. "For example", the minister said, "to talk of world monetary reform without a really healthy dollar is simply academic nonsense. If the dollar were healthy, then half the international monetary reform problems would disappear. If the dollar, however, remains sick, then it is idiotic to talk about creating a new world monetary system"'.

The third point is that left-of-centre governments are usually more effective than their conservative rivals in carrying through an economic or social revolution when that revolution has been prepared for them. When the revolution is not prepared, their clutching at radical solutions within existing orthodoxies, while at the same time trying to carry out their own economic and social reform programmes, can lead to disaster. But one other thing might be said. A solution to the present inflationary insta-

[6] In *The Times* London, 26 January 1973, p. 19.

bility calls for a more deliberate matching of individual and social demand, both nationally and internationally, with individual and social supply. It does not mean a 'planned economy' but it does mean more planning of needs and resources and generally of where we are going than we have had in the past. Left-of-centre governments might be able to establish a basis for this which more conservative governments would eschew. Whatever governments do it, we can only hope that it will be done soon.

Finally, we must clearly make the point that we must solve our problems of economic stability if we are to tackle effectively the much broader social, political and strategic issues within the 'human predicament'. In many respects, the 1970's seem almost to be a repetition of the 1930's. The economic breakdown forty years ago caused political and social changes and produced a radicalism that led to one of the most widespread and devastating wars in history. The dangers confronting the world in the 1970's could be even more terrifying. Preoccupation with economic stability now means a much less satisfactory attention to the world's environmental problems. Instability in the advanced countries has reduced the attention given to developing the poorer countries; the old problems of population, disease, food supply, inadequate technology and capital are still there and the prospects of solutions less. The oil-producing developing countries have acquired financial resources to meet their development needs, some of them more than they can immediately use; and improvement in food and raw-material prices has brought benefits to many other developing countries, although these gains are now more than offset by oil-price increases. All is not therefore bleak but the future of most of the world's population still depends more on the chance of the market than on the planned and assured betterment of their condition.

If the tribulations of the Third World might cause a political and strategic eruption on our planet, the distraction that economic instability causes might also undermine more generally the attention that governments give to their own security and world peace. The last few years have seen great changes in the relationships among the major and other powers. In some ways, these changes might be beneficial: *détente* is, in principle, much to be preferred to cold war. But *détente* is a dangerously attractive policy in a period of economic uncertainty. In the 1930's, governments purported, whenever they could, not to see the dangers, because they did not know how they could deal with those dangers anyway. If we fail again now because of economic breakdown and *détente* deteriorates into neglect of political necessities, the penalties could be much greater even than 30 to 40 years ago. For a number of associated reasons, therefore, the peaceful continuity of life and its improvement on earth will depend on our capacity to solve our current problems of economic stability. And we need to solve them quickly.

Index