

Western Economic Performance in the 1970s: A Perspective and Assessment*

I. The Deterioration of Economic Performance in the 1970s

In the "golden age" of the 1950s and 1960s economic growth in the advanced capitalist countries surpassed virtually all historical records. Growth performance in the 1970s deteriorated significantly, and the pace of inflation more than doubled, as table 1 makes clear.

TABLE 1
INDICATORS OF AVERAGE PERFORMANCE OF 16
ADVANCED CAPITALIST COUNTRIES

	1870-1950	1950-70	1970-79	1973-79
Annual average growth of GDP	2.3	4.9	3.2	2.4
Average annual rise in consumer prices	0.1 ^{a)}	3.8	8.7	9.5

a) Average for peacetime years.

Source: tables 12 and 13.

Whether one takes the 1970s as a whole, or the shorter period 1973-9, the change is very marked. The price acceleration started around the turn of the decade, the decline in the output trend occurred later, at the end of 1973.

The slowdown in growth rates and the acceleration of price increases raise three major types of question which this paper tries to answer:

(*) I am grateful for comments on an earlier draft by Simon Kuipers, John Martin, Jan Pen, and A.P. Thirlwall.

- (i) It leads first to a reexamination of the 1950s and 1960s. To what extent was favourable performance then due to luck or policy? In so far as it was due to policy, how did policies differ from those practiced earlier?
- (ii) What caused the deterioration in the 1970s? To what degree was it due to a cluster of accidents and policy mistakes, or to the inevitable termination of previously favourable circumstances?
- (iii) Given the new circumstances of the 1970s, what was the degree of success or failure of economic policy? What was the scope for doing better?

II. Characteristics of the Golden Age

Several special characteristics enhanced economic performance in the 1950s and 1960s. Some of these required enlightened policy, some are attributable to temporarily favourable circumstance. They were:

- (a) successful re-application of liberal policies in international transactions;
- (b) governmental promotion of buoyant domestic demand;
- (c) policies and circumstance which kept inflation relatively modest in conditions of very high demand;
- (d) a backlog of growth possibilities which made the supply response of the European and particularly the Japanese economy very responsive to high levels of demand.

The first three characteristics are analysed in this section, the last one I have dealt with elsewhere:¹

¹ See A. MADDISON, "Long Run Dynamics of Productivity Growth", in this *Review*, March 1979.

a) MANAGED LIBERALISM IN INTERNATIONAL TRANSACTIONS

Perhaps the least controversial assertion one can make about the golden age is that it involved a remarkable revival of liberalism in international transactions. Trade and payments barriers erected in the 1930s and during the war were removed and the new style liberalism was buttressed by an ambitious set of arrangements for articulate and regular consultation between Western countries, and for mutual financial assistance. Prior to 1914, the governmental role in the economy was minimal. Fiscal policy was concerned with balancing the budget and the major economic policy weapon was bank rate. International cooperation was limited to *ad hoc* bilateral measures.

Between the wars there was more conflict than cooperation. There were quarrels over war debts and reparations, no regular institutional arrangements for mutual credit or consultation except in the B.I.S., a shortage of liquidity, fundamental disequilibrium in exchange rates and pursuit of beggar-your-neighbour commercial policies after the 1929-31 crisis.

The postwar international payments system provided a workable mechanism for the promotion of freer trade. The adherence to virtually fixed exchange rates was a handicap in some respects, but there was an adequate supply of liquidity to ease countries over payments difficulties. Reconstruction was greatly eased by Marshall Aid which prevented quarrels over war debts and reparations and established the habit of organised mutual consultation and mutual financial support. Trade was freed by abolition of quantitative restrictions in O.E.E.C., reduction of tariffs on a regional basis in E.E.C., and, more globally, in G.A.T.T. International migration also revived, and after 1958 the increasing degree of convertibility of currencies led to a revival of the international capital market which had collapsed in 1930.

The results were impressive. In the twenty years 1950-70, the exports of these countries rose 4.5 fold. They were a major force sustaining demand and productivity growth and keeping prices in check. In 1938, by contrast, exports of these countries had been lower than in 1913. By 1970, the international money and capital market had been reestablished. The creation of the E.E.C.

attracted a greater amount of direct American private capital to Europe in the 1960s than the U.S. government had provided earlier in Marshall Aid. In 1950, the U.S. private direct capital in Europe was valued at \$ 1.7 billion, and by 1970 it had risen to \$ 24.5 billion. This investment helped to strengthen European productivity and competitiveness. It was a major vehicle for technological transfer from the productivity leader, the U.S.A. Between 1950 and 1970, there was net immigration of 7.5 million people into Western Europe, compared with an outflow of 4 million from 1914 to 1949. This eased supply constraints. It facilitated output growth, and moderated inflation.

Managed liberalism added greatly to the buoyancy and resilience of the Western economies. These policies of enlightened self interest and mutual support were not due only to intelligent digestion of the lessons of the 1930s, but to the urgency of cold war pressures and to the overwhelming power of the U.S.A. to enforce its views in the immediate postwar years.

b) GOVERNMENTAL PROMOTION OF DOMESTIC DEMAND BUOYANCY

A fundamental innovation in postwar policy aspirations was the commitment to full use of resources. In the U.S.A., the idea was enshrined in the full employment act of 1946, though it was not fully implemented until the 1960s. In the U.K. and Scandinavia, the Keynesian gospel of fiscal activism and the primordial commitment to full employment gained wide acceptance in academic, political and bureaucratic milieux. In France, the commitment to full use of resources was expressed in more dirigiste idiom with less explicit emphasis on full employment, but with an earlier and stronger commitment to growth as expressed in its planning process. Italy and Japan had not participated in the Keynesian tradition, but were also strongly committed to a rapid and ambitious rebuilding of their economies through government action and intervention whenever necessary. Germany gave greater emphasis to price stability than to buoyant domestic demand, but proclaimed the full employment goal in its Stabilisation Law of 1967. In any case it achieved fuller employment than most countries by export-induced growth.

There was a general move away from the prewar idea that the budget should be balanced irrespective of the state of the economy. In all these countries the national accounting framework was developed as an instrument for assessing the macroeconomic impact of government policy and at the beginning of the 1960s the O.E.C.D. countries set themselves an ambitious collective growth target.

Before the war, great importance was attached to price stability in many, but not all countries. In the golden age it was often cited as a rhetorical target, but in fact the aim was generally to keep the pace of price increase within limits which did not put too great a strain on international competitiveness. When the outcome of demand management policy was unclear the tendency was to take the upside risk. Lipsey stated a common view about the dangers of what might now be called "overshooting" in demand management policy: "I should regard anyone who opposed this policy because of fear of inflation as having either an insufficiently thought out position or a set of value judgements that were definitely perverse judged by any common standard. The possibility of incurring a once-for-all rise in the price level of one or two percentage points cannot be regarded as a high price to pay in order to discover by how much unemployment can be reduced by using the relatively simple tools of fiscal policy."²

There was a major increase in the proportionate size of government expenditure, which gave government a propulsive role in the growth of demand, and when combined with the commitment to use the budget for macro-economic policy objectives, transformed the nature of the business cycle which was often dominated by swings in government policy rather than movements in the private sector. The growth of government revenue and expenditure increased the leverage of government discretionary policy, added to the automatic stabilising effect of government, and strengthened the buying power of low income consumers who were covered by income transfers.

² See R.G. LIPSEY, "Structural and Demand Deficient Unemployment Reconsidered", in A.M. Ross, ed., *Employment Policy and the Labor Market*, Berkeley, 1965.

Government policy played a significant role in stabilising output,³ but there were enough errors, lags and uncertainties to prevent fine tuning. The main achievement was not the finesse of stabilisation, but success in nurturing a buoyancy of demand which had been created during the war and Marshall Plan period and which kept the economies within a zone of high employment. The clear bias in favour of growth and employment, the lowered attention to risks of price increase or payments difficulties, and the absence of crassly perverse deflationary policies were the most important features differentiating postwar demand management from prewar policy. The pay-off was much bigger than could reasonably have been anticipated. The absence of downside risks in terms of output, and the buoyancy which continuous price increases gave to profits, nurtured a secular investment boom, and given the favourable supply factors in Europe and Japan, growth performance reached unparalleled proportions.

There have been some dissenting views about the impact of policy on postwar performance. Robin Matthews was sceptical about its role in the U.K.⁴ and suggested that faster growth was due mainly to a spontaneous investment boom, sparked off perhaps by government wartime spending but sustained in peacetime by the backlog of wasted investment opportunities and by an assumed quickening in technical progress. He rejected the idea that postwar government policy had been stimulative because the budget was in surplus for most of the period he considered, and he rejects the increased size of government spending as a contributory influence, because increased government spending was offset by higher taxes. Although he admits that Keynesian attitudes may have prevented governments making deflationary policy mistakes in the postwar period, he does not give this much weight because he attributes interwar U.K. problems to structural changes in the pattern of world trade, rather than to British and foreign governments' policy mistakes.

³ There is evidence that governmental budget activity stabilized output growth in 6 of the 7 countries analysed by B. HANSEN and W.W. SNYDER, *Fiscal Policy in Seven Countries 1955-1965*, O.E.C.D., Paris, March 1969, p. 69, the only exception being the U.K.

⁴ See R.C.O. MATTHEWS, "Why Has Britain Had Full Employment Since the War?", *Economic Journal*, September 1968.

TABLE 2 (a)

NET FIRST ROUND IMPACT OF BUDGETARY CHANGES AS PERCENT OF PREVIOUS YEARS G.D.P. AT CONSTANT PRICES

	Average of annual impacts over period specified		
	1955-65	1965-73	1974-79
Canada	n.a.	0.49	0.37
France	0.71 ^{a)}	0.12	0.45
Germany	0.55	0.32	0.56
Italy	0.96	0.95	0.52
Japan	n.a.	0.24	0.92
Netherlands	n.a.	0.34	0.60 ^{b)}
Sweden	0.80	0.55	-0.28 ^{b)}
U.K.	0.00	0.52	0.08
U.S.A.	0.25	0.28	-0.12

a) 1958-65; b) 1974-7 average.

Source: B. HANSEN and W.W. SNYDER, *Fiscal Policy in Seven Countries 1955-1965*, O.E.C.D., 1969, p. 58; O.E.C.D. *Economic Outlook*, No. 26, p. 35, December 1979, No. 25, p. 44, July 1979, and *Occasional Studies* (supplement to *Economic Outlook*), July 1978, p. 31.

TABLE 2 (b)

GENERAL GOVERNMENT CURRENT EXPENDITURES ON GOODS, SERVICES AND TRANSFERS AS PERCENT OF G.D.P. AT PURCHASERS' PRICES

	1950	1977
Austria	21.2	39.8
Belgium	19.6	43.5
Canada	19.2	37.0
Denmark	18.0	42.8 ^{c)}
Finland	19.7	35.6
France	26.7	40.9
Germany	28.3	41.3
Italy	20.7 ^{a)}	42.5
Japan	14.6 ^{b)}	22.3
Netherlands	23.9	52.3
Norway	21.9 ^{a)}	46.2
Sweden	23.6	55.6
Switzerland	19.4	30.4
U.K.	30.1	40.8
U.S.A.	20.0	32.6
Arithmetic Average	21.8	40.2

a) 1951; b) 1952; c) 1976.

Source: *National Accounts of O.E.C.D. Countries*, 1960-77, 1950-68 and 1950-61 editions, O.E.C.D., Paris; and *Statistics of Sources and Uses of Finance 1948-58*, O.E.C.D., Paris, 1960.

In fact the postwar role of budgetary policy was generally supportive of growth, and the U.K. situation which Matthews analysed was exceptional, as table 2 (a) makes clear. In the second place, I feel that Matthews dismisses too lightly the influence of the greatly increased size of government spending on goods, services, and transfers in the postwar period (see table 2b) which has strengthened expectations of high and expanding demand in many ways. Thirdly, his structuralist interpretation of the problems in the interwar period understates the role of errors in domestic and international economic policy in that period.

Harry Johnson went much further than Matthews in rejecting any role for activist fiscal (or other) policy in postwar Western performance as a whole. It needs no explanation because it is alleged to be typical capitalist performance. He said, "there are good reasons, rooted both in the 'real' analysis of the economic historians and in monetary theory, as to why capitalist economies should be expected in normal circumstances both to maintain a high level of employment and to enjoy some non-negligible rate of economic growth".⁵ He quotes Matthews as representative of the economic historians even though Matthews never suggested that in normal circumstances the U.K. had maintained high levels of employment. Quite the contrary, he pointed out that U.K. unemployment averaged 10.5 per cent in the interwar period, and 4.5 per cent before 1914. For the U.S.A., Lebergott's estimates suggest that in the "normal circumstances" of 1890-1914, U.S. unemployment rates were about 7 per cent of the labour force. On monetary theory Johnson states simply that "monetary analysis assumes as a matter of empirical fact that the economic system tends towards a rational full-employment allocation of resources so long as the management of money is well behaved and can only be thrown off course by severe monetary mismanagement". However, this hypothesis does not correspond with the facts. In the world of well-behaved money from 1870 to 1914, economic growth rates were half of these for 1950-70, and unemployment rates were twice as high.

Not all monetarists would go as far as Harry Johnson did, but they often seem to assume that because Friedman showed perverse

⁵ See H.G. JOHNSON, *Inflation and the Monetarist Controversy*, North Holland, Amsterdam, 1972, p. 6.

monetary policy to have made the U.S. slump worse in the early 1930s,⁶ this single one-country error of monetary policy was the only cause of the world slump of that epoch. There is well documented evidence of more complicated causality, including the deflationary fiscal policy errors of the Laval, Brüning and McDonald governments in France, Germany and the U.K. and of counterproductive animosities in international economic relations.⁷

It was this kind of instinctively deflationary official policy which was successfully discredited by Keynesian type ideas. But there is now a clear tactic by monetarists and some Keynesian revisionists to suggest that such deflationary views were not influential in the prewar period,⁸ and that Keynes was attacking a straw man!

c) THE ROLE OF POLICY AND CIRCUMSTANCE IN MODERATING PRICE INCREASES

Those who had contemplated the possibility of achieving full employment in the postwar period had predicted serious inflationary problems,⁹ and the outcome was indeed quite different from the previous peacetime price record. But in most countries, inflation fell within bounds felt to be acceptable, and there was no very firm attempt to achieve stable price levels. "Demand management" was widely conceived to be working a Phillips curve trade-off between levels of demand and unemployment.

In retrospect, one can identify several reasons why price increases in the golden age were so modest in conditions of such high

⁶ See M. FRIEDMAN and A.J. SCHWARTZ, *A Monetary History of the United States 1867-1960*, Princeton, 1963.

⁷ See C.P. KINDLEBERGER, *The World Depression 1929-1939*, Allen Lane, London, 1973, and A. MADDISON, "Economic Policy and Performance in Europe 1913-70" in C.M. Cipolla, ed., *Fontana Economic History of Europe*, vol. 5 (2) Collins, London 1978, for alternative views of the world crisis and its causes.

⁸ See A. LEIJONHUFVUD, *Keynes and the Classics, Occasional Paper 30*, I.E.A., London, 1969, p. 9 "It is understandable that the infamous 'Treasury View' looms large in British accounts of Keynes' efforts in this period, but it may be questioned whether it was held anywhere outside London", and D. PATINKIN's critique of Friedman's revisionist intellectual history, in "The Chicago Tradition, the Quantity Theory and Friedman", *Journal of Money Credit and Banking*, February 1969.

⁹ See W.H. BEVERIDGE, *Full Employment in a Free Society*, Allen and Unwin, London, 1944, R. NURKSE, *The Course and Control of Inflation*, League of Nations 1946, and A.J. BROWN, *The Great Inflation 1939-1951*, Oxford, 1955.

demand. Some of these are related to the exceptional supply factors operative in that period, some to policy-institutional features that will not be easily repeatable.

The causes are as follows:

- (i) the fixed exchange rate system operated to impose a certain price discipline in countries where export prices tended to rise most. It was not as strict as that of the gold standard system operating before 1914, because devaluation was not entirely ruled out, and fairly large credits were available to countries in payments difficulty, but balance of payments crises and speculative capital outflows led governments to restrictive action and were also felt as constraints by business and trade unions in fixing prices and wages. This discipline was least operative in Finland and France which did not stick to the fixed exchange rate protocol, and devalued several times. The system's constraints worked in the opposite direction in Germany which imported inflation by not revaluing often enough to offset its low domestic propensity to price increases. However there were enough important traders in the low export price league (e.g. Italy, Japan, Belgium, Netherlands and Switzerland) to ensure that the world market trend was modest. A number of smaller countries, and particularly Scandinavia, tended to drift with world price trends;¹⁰
- (ii) from 1952 to around 1966, the economy of the biggest country, the U.S.A., whose currency was the lynchpin of the international payments system, had com-

¹⁰ For an interpretation of the Scandinavian inflationary mechanism under fixed exchange rates, see L. CALMFORS, *Swedish Inflation and International Price Influences*, Institute for International Economic Studies, Stockholm, March 1975. In a small country in a fixed exchange rate system, the sector producing tradeables is a price taker. Both employers and unions accept that wage increases should equal the sum of the world price increase plus domestic productivity growth. Wages in the non-traded sector follow those in the sector producing tradeables. This structuralist explanation of the Scandinavian inflation mechanism was developed simultaneously in Norway and Sweden, see O. AUKRUST, "Inflation in the Open Economy: A Norwegian Model", in L.B. Krause and W.S. Salant, eds., *World-wide Inflation*, Brookings, Washington, 1977 and G. EDGREN, K.O. FAXEN, and C.E. OHDNER, *Wage Formation and The Economy*, London, 1973.

- paratively high rates of unemployment and low rates of resource utilisation, which led to low rates of price increase. This happened because of the hypercautious demand management policies of the Eisenhower administration. The slack was reduced in the Kennedy administration, but it was not until the Johnson administration with its social programmes and the war in Vietnam that the economy came under strain in 1967. The Eisenhower caution was inspired by domestic aspirations to price stability, but its balance of payments consequences prolonged the viability of a fixed dollar exchange standard in a period when other countries became increasingly more competitive with the U.S.A.;
- (iii) The removal of trade barriers and reopening of these economies to international trade after the autarky of war and prewar years, was a significant factor in promoting postwar productivity growth in the manufacturing sector of these countries. The fastest expansion of exports was achieved by countries whose export prices were rising modestly or actually falling. The average rise in export prices for 1950-70 was only 1.5 per cent a year — less than half the rise in domestic prices;
 - (iv) Some key commodity prices were remarkably stable from 1950 to 1970. U.S. agricultural policy kept international food prices low or falling because of a domestic support system that created huge domestic stocks. World petroleum prices were also stable in spite of the massive expansion in consumption. This was due to the large reserves of cheap oil in Arab countries, and U.S. regulations to protect its domestic oil production, which delayed the upsurge of imports into the U.S.A. By the end of the 1960s, it was clear that the countries which had formed OPEC in the 1960s had acquired considerable bargaining power, which was likely to be used once the Arab countries had shed their semi-colonial status. The price of non-ferrous metals was not as stable as those for wheat and oil, but sales from the U.S. strategic stockpile put a damper

on price movements. Finally the gold price was stable for most of the period. There was a flurry in 1960 when the London gold market reopened, but the major countries fed the free market with gold to 1968, which kept the price near the official \$ 35 an ounce, and helped keep down pressure in speculative markets generally. For this reason, the 1952-70 period was remarkably free of external price shocks;

- (v) an important factor in price stability was the easy expandability of the labour supply both by using immigrants and by running down the excess stock of labour in agriculture. Countries in this situation were able to ease bottlenecks in particular sectors which might otherwise have given trade unions much greater power. The countries which made most explicit use of migrant labour as a cyclical stabilisation device were Switzerland and Germany. In Switzerland, unemployment was zero and in Germany less than 1 per cent of the labour force in the 1960s, and yet wage pressures were modest. In several other countries, immigrant labour was a lesser but significant factor in easing inflationary pressures. Italy and Japan were the two countries in which the large domestic supply of surplus rural labour performed the same function as immigration in Germany and Switzerland;
- (vi) the climate of wage bargaining in the 1950s and most of the 1960s was rather mild. By prewar standards, there was a very low level of social tension. Several reasons contributed to this — the unprecedented increases in real income, the effect of East-West tensions in consolidating Western societies internally, the solidaristic feelings promoted by wide social security provisions and income transfers. The climate can be best recalled by citing some of the social critics of that epoch whose judgements now seem so inappropriate. In books published between 1956 and 1960, Crosland, Galbraith, Bell and Myrdal all proclaimed the unimportance of distributive issues, the increasing internal har-

mony of Western societies, the rise of legitimate meritocratic elites etc.¹¹ The welfare state was in its heyday, there was no New Left, no neo-Marxist renaissance, Hayek was quiescent on current issues, Harold Macmillan said we'd never had it so good, and was believed;

- (vii) A final factor damping price increases was the fact that institutions and expectations had not properly adjusted to the fact of continuous inflation. People were suffering from "money illusion" which in the long run would be eroded. Friedman suggested in 1968 that such a phenomenon could well last for a couple of decades, after which expectations would become more rational and decidedly more explosive unless unemployment increased.¹² Indeed it is rather surprising that money illusion was not broken by wartime experience and by the Korean war boom of 1950-51.

iii. The Breakdown of the Golden Age System

The golden age system broke down for a complexity of interacting reasons which are not easy to disentangle. Four major elements are distinguished here which go a good way towards explaining the acceleration of inflation and the reasons why growth potential came to be underutilized in the 1970s:

- a) the rather messy collapse of the Bretton Woods fixed exchange rate system and its replacement by *ad hoc* floating currency arrangements and by the EMS;

¹¹ See C.A.R. CROSLAND, *The Future of Socialism*, Cape, London, 1956, p. 211; J.K. GALBRAITH, *The Affluent Society*, H. Hamilton, London, 1958; G. MYRDAL, *Beyond the Welfare State*, 1960; and D. BELL, *The End of Ideology*, Free Press, New York, 1960.

¹² See M. FRIEDMAN, "The Role of Monetary Policy", *American Economic Review*, March 1968, p. 11. E.S. PHELPS made essentially the same point about adaptive processes in inflationary expectations at about the same time as Friedman. See "Phillips Curves, Expectations of Inflation and Optimal Unemployment Over Time", *Economica*, August 1967.

- b) the erosion of price constraints, and the emergence of strong inflationary expectations as a prime element in wage and price determination;
- c) the various kinds of shock deriving from the more than ten-fold rise of oil prices in the 1970s which was heavily concentrated on 1973-4 and 1979. This had adverse effects on the price level, the trade balance, the terms of trade, problems of structural adjustment, consumer and investor confidence;
- d) a weakening in governmental commitment to Keynesian type demand management when faced with a spontaneous weakening in demand outside the range of previous postwar experience and in conditions of great price pressure. This was further sapped by the increased influence of monetarist economic theories, which like prewar economics, have little concern for growth and full employment.

It should also be added that some of the exceptional factors on the supply side, which permitted such high growth in Europe and Japan in the 1950s and 1960s, waned in the 1970s.

In my view, the first three of these changes which came in the 1970s were not a cluster of accidents or policy mistakes which are reversible.¹³ Rather, it seems probable that the factors influencing growth and inflation in the advanced capitalist countries have undergone permanent modification for the worse.

a) THE BREAKDOWN OF THE BRETTON WOODS INTERNATIONAL MONETARY SYSTEM

In the Bretton Woods international monetary system, the dollar was the unit in which other countries kept their reserves, and

¹³ A more optimistic view of the 1970s is reflected in P. McCracken, *et al.*, *Towards Full Employment and Price Stability*, O.E.C.D., June 1977, p. 103, "A key conclusion we draw from this assessment of factors underlying recent experience, is that the most important feature was an unusual bunching of unfortunate events unlikely to be repeated on the same scale, the impact of which was compounded by some avoidable errors in economic policy... this upheaval is not necessarily a sign of permanent change to an inevitably more unstable and inflationary world."

to which they pegged their exchange rates. The U.S.A. started the postwar period with a gold reserve very much bigger than all the other countries combined, and this, together with its strong balance of payments, was the basis of their confidence in the dollar, because ultimately the U.S.A. was willing to give gold in exchange for dollars to foreign central banks. Between 1949 when most countries devalued against the dollar, and August 1971 when President Nixon ended its convertibility into gold, there were very few changes in exchange rates, so that investment and marketing decisions concerning international trade faced little uncertainty on this score.

In the course of time, the increasing competitiveness of the European countries and Japan in trade led to a weakening of the U.S. payments situation, particularly as the U.S.A. also had major payments abroad for military purposes, aid and foreign investment. As a result, the international reserve position changed totally. In 1950, Germany, Italy and Japan together had reserves of only \$ 1.4 billion. By 1970, they had \$ 23.8 billion. In the same period, U.S. reserves fell from \$ 24.3 billion to \$ 14.5 billion.

This change in the reserve asset position meant that the rest of the world had more than adequate liquidity, but the long run vulnerability of the reserve currency country with fast growing obligations and steadily declining gold reserves became increasingly clear. Its capacity to supply gold for dollars was obviously not going to last, unless there was a significant change in exchange rates. However, if the U.S.A. had taken the initiative by devaluing the dollar, it would have reduced the gold value of other countries reserves, which both the U.S.A. and the other countries would have considered a breakdown of the system, creating too much tension to make the outcome predictable, because the other countries might well have followed an American devaluation to preserve the value of their reserve assets.

A better solution would have been a revaluation of all the surplus countries against the dollar, combined with a much bigger upvaluation of gold, which would have increased U.S. reserves. In fact, Germany revalued twice by a total of 15 per cent and the Netherlands once by 5 per cent in the 1960s, but the willingness to go further was inhibited by the refusal of other strong currency countries and, particularly Japan, to revalue. The possibility of an official revaluation of gold was not seriously considered in the U.S.A.

In the absence of any convincing evidence of reform in the system, there were a whole series of speculative crises against existing exchange parities. These were all the easier to mount because of the dismantling of exchange controls in Europe and the huge growth in the Eurocurrency market. From negligible levels in the 1950s, the net short term foreign lending of banks in Europe rose to \$ 57 billion by end 1970.¹⁴ It was easy to borrow in this market for speculative purposes, and speculation was not risky in a fixed rate world because the penalty for mistakes, i.e. misjudgement of the date of devaluation, was very small, and the potential gain very large.

Until its 1967 devaluation, speculation was concentrated mainly on sterling, which deflected attention from the dollar. After that it became increasingly clear that a realignment of the dollar would be necessary particularly as the U.S. economy was no longer operating below potential. The reluctance of the strong currencies to revalue significantly made it clear that the change was unlikely to be achieved by international agreement.

The Bretton Woods system eventually collapsed by unilateral action on the part of the U.S.A. which refused to defend its weak payments situation in 1970-71 in the standard deflationary way. It allowed a huge accumulation of dollars by other countries, and as a proxy devaluation, imposed a 10 per cent import surcharge in 1971.¹⁵ The rest of the world was thereby compelled to accept the U.S. devaluation against gold in August 1971. The Smithsonian agreement of December 1971 patched up the fixed exchange system with agreed currency realignments but this broke down again finally in 1973, because the repeated and perceived inadequacy of fixed rate realignments in a world where international speculation was so easy made it impossible to defend a fixed rate without having a crisis every few weeks.

Given the present freedom for international payments transactions and the differences in national growth and price performance it is clear in retrospect that the Bretton Woods system of pegged

¹⁴ See BANK FOR INTERNATIONAL SETTLEMENTS, *Forty-Third Annual Report*, June, pp. 167-171.

¹⁵ See S.E. ROLFE and J.L. BURTLE, *The Great Wheel: The World Monetary System*, McGraw Hill, New York, 1973 for a lively description of U.S. policy in this period.

rates could not survive. One could imagine a prolongation of the system, given more good will.¹⁶ There might have been less strain if the French had tried a persuasive rather than a patronising tone about revaluing gold early in the 1960s, and if the strong currencies had been more willing to revalue.

b) THE EROSION OF PRICE CONSTRAINTS

The tactics the U.S.A. was obliged to use to enforce the devaluation of the dollar had inflationary consequences for other countries, particularly those such as Germany and Japan which had the option of revaluation at an earlier stage, which would have reduced their export surplus, reduced their import prices, and curbed the influx of foreign capital. The German situation is described by Otmar Emminger, President of the Bundesbank, in an excellent analysis of the breakdown of Bretton Woods: "As one who participated in (and was partly responsible for) the decision of West Germany to go over to floating in March 1973, I can testify that the main reason for this decision was the effort to shield the German monetary system against further inflationary foreign exchange inflows, after the central bank had to absorb a dollar inflow worth more than DM 20 billions within five weeks, equivalent to more than double the amount of new central bank money required for a whole year".¹⁷

But, as Emminger points out, the system in its breakdown phase was also inflationary in the deficit countries. The U.S. was forcing the realignment by benign neglect, including an expansion of its domestic money supply, and in the U.K. there was an almost beserk feeling of liberation from the old constraints of stop-go: "for two years beginning in September 1971 control over the stock of money in the United Kingdom was non-existent. Bank credit to the private sector rose by 50 per cent, most of it financing either consumer outlays or real-estate transactions. Simultaneously,

¹⁶ The official attempts to reform Bretton Woods were mainly concerned with liquidity problems and the change in the nature of reserves. They had minor success in creating special drawing rights (SDRs) which augmented reserves somewhat, see J. WILLIAMSON, *The Failure of World Monetary Reform, 1971-74*, Nelson, London, 1977 for an analysis of official attempts to reform the system.

¹⁷ O. EMMINGER, "The Exchange Rate as an Instrument of Policy", *Lloyds Bank Review*, July 1979, p. 4.

on the fiscal side, total borrowing by the public sector moved from a small negative figure to an annual rate of 6 per cent of G.D.P.¹⁸

The increase in international liquidity in the early 1970s and the consequent easing of demand management constraints had a sizeable role in the unusually large and synchronized boom in world output in 1972-3. This was the fastest two year period of expansion since 1950-1 in the aggregate G.D.P. of the advanced capitalist countries,¹⁹ and thanks in part to the easy availability of credit to finance imports, the boom was even bigger in the communist countries and parts of the third world. In 1973 Soviet G.D.P. rose by 7.6 per cent, Chinese by 10 per cent and Brazilian by 13.9 per cent.

The boom in output put the normal type of cyclical pressure on the price of manufactured goods which were in such high demand. But a deeper change had occurred. The exceptional forces which in the 1950s and 1960s had kept the rise in export prices well below domestic price rises, were no longer operative. The once-for-all efficiency gains of trade liberalisation were now much smaller, and the pressures to shave profit margins which the fixed exchange rate regime imposed had greatly eased with its demise. This is clear from tables 3 and 13 which show an average increase in export prices of 1.5 per cent in 1950-70, compared with 3.8 per cent in domestic prices. In the 1970s, the average increase in export prices (8.4 per cent) was about the same as the domestic price increase (8.7 per cent).

The price pressures in primary commodity markets were even bigger than for manufactures, again for both cyclical and longer term reasons. The gold price was now free and its spectacular rise contributed to speculative fever. The world food price situation also changed drastically after twenty years of stability. During the late sixties U.S. policy had changed and its stocks dropped.²⁰ Be-

¹⁸ P.M. OPPENHEIMER, "Why Have General Anti-Inflation Policies Not Succeeded?", in F. Lundberg, ed., *Inflation Theory and Anti-Inflation Policy*, MacMillan, London 1977.

¹⁹ The 1973 boom did not have the same intensity in all Western countries. The U.K. was the most extreme case with a rise in GDP of 8 per cent - almost three times its postwar norm, whereas in Germany, 1973 was a year of normal expansion.

²⁰ See D.E. HATHAWAY, "Food Prices and Inflation", *Brookings Papers on Economic Activity*, No. 1, 1974.

TABLE 3
MOVEMENT IN EXPORT PRICES (IN NATIONAL CURRENCIES)

	Annual average compound rate of change	
	1950-70	1970-79
Australia	-1.5	12.2
Austria	1.7	3.6
Belgium	0.7	2.7
Canada	1.8	10.7
Denmark	1.6	7.7
Finland	5.2	13.1
France	3.5	8.9
Germany	1.6	3.6
Italy	-0.1	15.1
Japan	-1.0	4.9
Netherlands	0.9	6.3
Norway	1.7	8.5
Sweden	2.5	10.5
Switzerland	1.1	3.2
U.K.	2.9	14.4
U.S.A.	2.0	9.7
Average	1.5	8.4

Sources: *Yearbook of International Trade Statistics 1972-1973*, U.N., New York; U.N. *Monthly Bulletin of Statistics*, and O.E.C.D., *Economic Outlook*, No. 26, December 1979.

TABLE 4
KEY COMMODITY PRICES
(Yearly Average)

	Gold (London) \$ per fine ounce	Petroleum (Saudi Arabia) \$ per barrel	Wheat (U.S.A.) \$ per bushel
1950	35.00	1.75	2.23
1960	35.00	1.87	1.99
1970	35.98	1.95	1.48
71	40.97	2.34	1.58
72	59.14	2.46	1.90
73	100.00	3.29	3.81
74	102.02	11.58	4.90
1975	160.96	11.53	4.06
76	124.82	11.51	3.62
77	147.72	12.40	2.81
78	193.24	12.70	3.48
79 (December)	512.00	24.00	4.90

Source: I.M.F., *International Financial Statistics*.

cause of detente, the U.S.S.R. was able to buy large amounts of cereals from the U.S.A., and did so in 1972 when it had a poor harvest. As a result the price of cereals doubled in 1973. After twenty years close to or under \$ 2 a bushel, wheat rose to \$ 3.80 in 1973 and \$ 4.90 in 1974. All agricultural prices rose in sympathy, and the impact on cost of living indices around the world was more or less immediate.

Given the way in which the Bretton Woods system collapsed, the ending of the special golden age price constraints, the impact of the 1972-3 boom, and then of the oil shock, it is not surprising that wage-price expectations changed in the 1970s. The processes of wage bargaining and price fixing were no longer dampened by money illusion, but were geared much more explicitly to take account and correct for recent inflationary experience. Thus when demand weakened in 1974-5, very strong pressure for price increases continued, dominated by inflationary expectations which now acted as a fan instead of a dampener. This was quite different from the situation after the Korean war boom of 1950-1, when expectations quickly relapsed to "normal".

Monetarists explain this change in expectations rather simply and technocratically as a predictable adaptation to a continuous process of exposure to inflation. More complex explanations seem necessary to explain the big intercountry differences in the pace of wage and price advance which emerged in the 1970s. These differences had been greatly narrowed in the days of fixed exchange rates.

There are in fact quite a number of ingenious theories to explain this change in socio-economic climate.²¹ It is clear that any explanation which is to deal satisfactorily with the differences between countries is bound to be complex and eclectic.

²¹ W.D. NORDHAUS, "The Worldwide Wage Explosion", *Brookings Papers on Economic Activity*, No. 2, 1972 for a succinct and sophisticated review and testing of 10 different hypothetical causes of what by the standards of those days appeared, to be a wage explosion. They included monetarist, naive Phillips curve, expectations augmented Phillips curve, real income frustration, critical threshold, trade union militancy, demographic, increased labour reservation price, Scandinavian, and devaluation types of causality. See also M. SCOTT and R.A. LASLETT, *Can We Get Back to Full Employment?*, Macmillan, London, 1978 for a more recent analysis of "marksman, militants and mixers" theories. For more sociological explanations of these phenomena, see C. CROUCH and A. PIZZORNO, *The Resurgence of Class Conflict in Western Europe since 1968*, London, Macmillan,

c) THE OIL SHOCK

Most of these causes were more or less endogenous to the Western economies, though not all of them were purely economic. Then at the end of 1973 came the exogenous shock of the OPEC oil price increases. In 1974 the price of crude oil was 4.7 times as high as the average for 1972. This was a commodity on which the Western countries had become increasingly dependent in a quarter century of rapid growth during which the price of oil had been remarkably stable. In 1973, oil imports of the Western countries were more than 17 times their 1950 level. Oil in 1973 represented half of energy consumption compared with a quarter in 1950. Part of the price stability was due to the low cost of extracting oil in the Middle East, and the fact that Saudi Arabia and the Persian Gulf countries producing oil were in a semi-colonial status with pricing policy fixed to a large extent by Western oil companies. It is likely that this situation would have changed in the long run in any case, but the big increases were sparked off by Arab irritation at U.S. policies in support of Israel. For this reason, the oil price rise was backed by a partial embargo on oil supplies, which greatly increased its economic repercussions; particularly in Japan, which was most dependent on imported oil.

The oil price increase had a significant direct impact on the general price level, and contributed considerably to inflationary expectations, coming as it did at the high point of what was already an inflationary boom.

The oil shock had several other important repercussions. Its adverse effects on trade balances were a major reason for the stringency of restrictive policies in 1974 in most Western countries. Even though it was clear that the OPEC countries would accumulate reserves on a large scale and not use a good part of their extra income on imports, it was not clear at first how efficiently these OPEC surpluses would be recycled by the international capital and money markets. In 1974 and 1975 there was a

1978, and F. HIRSCH and J.H. GOLDTHORPE, *The Political Economy of Inflation*, M. Robertson, London, 1978; A. GLYN and D. SUTCLIFFE, *British Capitalism, Workers and the Profits Squeeze*, Penguin, 1972, is an interesting example of the burgeoning academic Marxist literature of the 1970s, which analyses the possibility that union militancy may squeeze profits and hence destroy capitalism.

considerable shift in the terms of trade which further lowered real incomes in Western countries at a time when domestic output fell for the first time in the postwar period. This exacerbated tension in wage bargaining particularly in Italy and the U.K. where wage indexing (under the *scala mobile* and phase III respectively) arrangements made no exceptions for changed terms of trade.

The oil shock was a major reason for the depth of the 1974-5 recession. Its immediate impact was to draw off purchasing power into OPEC reserve accumulations and the big structural change in prices also had a deflationary impact on demand. Automobile demand was badly hit, and the investment outlook became very uncertain particularly where the price rises were accompanied by embargoes on oil shipment. The oil situation induced both an important spontaneous recessionary element, and a deeper restrictiveness in official fiscal and monetary policy by governments worried about inflation, the oil-induced deficit in their current balance of payments, and the unpredictability of OPEC policies for locating their huge new foreign exchange reserves. The consequence was much deeper spontaneous forces for recession than had been previously experienced in the postwar period, and a simultaneity of recessionary trends which was more pronounced than the synchronisation of the 1972-3 boom.

Given the rather special situation, it is not surprising that 1974 and 1975 were years of both recession and of very high price increase. Over the two years, the combined real output of these countries fell by 0.3 per cent and the terms of trade loss reduced real income by another 1.3 per cent. Thus the total real income loss was 1.6 per cent over the two years. The average price increase for the 16 countries was 13.2 per cent in 1974 and 12.1 per cent in 1975.

d) CHANGED POLICY ASPIRATIONS

Because of the change in expectations and the major payments problems created by the oil price rise, virtually all governments have changed their policy aspirations and tactics. Virtually all of them have had much more cautious policies than they would otherwise have had in face of such a slackening in the use of resources. Most of them did in fact pursue contracyclical budget

policies to counteract the impact of the 1974-5 recession, though not enough to offset the large spontaneous recessionary forces at work. In the "recovery" period 1976-9, the average fiscal posture was one of restraint in spite of the obvious weakness of demand. Monetary policy was also tighter than in the early 1970s, with a rather self-conscious adoption of targets for monetary aggregates. The overall economic effect of budgetary measures is shown in table 5 which aggregates both discretionary and automatic budgetary impacts. In fact, budget outcomes were often more expansionary than governments would have wished because of the wide coverage and high benefit levels of unemployment pay and other types of income support, the indexing of civil service pay and social benefits.

Although the adjustment to payments difficulties was eased by floating rates, and easy possibilities of borrowing in international markets, the developed countries generally made much less use of these borrowing possibilities than developing countries did,²² and in some cases deficit countries have followed more deflationary policies than their internal situation would suggest in order to keep their exchange rate from deteriorating too far, most notably the U.K. in 1976 when it borrowed from the I.M.F. and engaged in an austerity programme, in spite of the social contract agreements to mitigate wage increases and the early prospect of oil self-sufficiency.

This cautious policy stance was adopted in the hope that slack in domestic labour and goods markets would help break the expectational momentum that was pushing up wages and prices, and would permit exports to rise to meet payments deficits. There was also a hope that collective restraint would ease pressure on primary commodity markets, which it did.

During the 1960s, various experiments had been made to supplement the macropolicy armoury with direct appeals to mitigate wage/price pressure by price/incomes policies. There was a great variety of experiments with such policies in the 1960s, both mandatory and voluntary, and on the whole their success had not been too great. In the early 1970s, they had been discredited in

²² Between 1973 and 1979, developing country indebtedness rose from \$119 to \$366 billion, see O.E.C.D., *Development Cooperation, 1979 Review*, Paris, 1979, p. 259.

TABLE 5

NET FIRST ROUND IMPACT OF BUDGETARY CHANGES AS PERCENT OF PREVIOUS YEARS' G.D.P. AT CONSTANT PRICES

	1973	1974	1975	1976	1977	1978	1979
Canada	-0.3	-0.1	2.6	-0.9	0.6	0.5	-0.5
France	-0.0	0.6	2.2	-1.0	0.5	0.6	-0.2
Germany	-0.7	2.0	2.6	-1.0	-0.7	0.2	0.3
Italy	1.3	0.0	3.4	-0.6	-0.7	0.7	0.3
Japan	-0.5	0.9	2.2	1.0	0.3	1.2	-0.1
Netherlands	-0.4	0.4	0.9	1.1	-0.0		
Sweden	0.5	1.5	-0.1	-2.7	0.2		
U.K.	1.3	0.6	0.1	0.5	-0.4	0.3	-0.6
U.S.A.	-0.3	0.3	3.4	-2.0	-1.1	-1.0	-0.3

Source: As for table 2(a). Positive figures indicate a supportive effect, negative ones a restrictive impact.

the U.K. and U.S.A. by the mandatory controls imposed by the Heath and Nixon administrations. Rather little use was made of this policy instrument in meeting the oil shock, except in Canada and the U.K. In the U.K., the voluntary social contract arrangement between the government and the unions lasted three years from August 1975 to August 1978 and deserves a good deal of the credit for reducing U.K. inflation rates from Latin American levels to 8 per cent in 1978.

As the British government did not use this opportunity to follow more expansionary policies, the trade unions dropped their cooperation in 1978.

At the same time as they followed cautious macropolicies to break inflationary pressures, many governments also stepped up labour market and industrial intervention to mitigate the unemployment and bankruptcy which macro-policy necessarily involved if it was to achieve its purpose. Thus the U.K. government subsidised British Leyland and Chrysler and provided various kinds of wage subsidy, the Japanese government helped firms in difficulty, Germany and Switzerland encouraged immigrants to leave, Sweden and France encouraged workers to withdraw from the labour force. Most of these interventionist measures were in flagrant contradiction to the avowed aims of macropolicy, and it would have been more sensible to have dispensed with them and to have been more expansionary on the macro level.

A major problem was the greater uncertainty about the impact of particular measures, and about the objectives of policy itself. The explosiveness of wage price expectations and the uncertainty about the exchange rate are important examples. But there was also greater uncertainty about the degree of labour slack now that cosmetic devices were concealing unemployment, uncertainty as to how much the huge rise in energy prices had reduced the effective capital stock, or was likely to affect consumer demand for cars. The meaning of international reserves was blurred in a floating system where the private short term foreign assets were so large in relation to official holdings. Governments were giving top priority to reducing inflation and the payments deficit, but it was not clear what inflation target was reasonable, or what payments deficit was acceptable.

All of these uncertainties enhanced the legitimate margin of caution, but with almost all countries being cautious at the same time it is not surprising that the recovery from the 1974-5 recession was a faltering one.

To some extent the caution at policy making level has been enhanced by the theoretical challenge to traditional Keynesian demand management from monetarists, Keynesian revisionists, the new micro-economics and the Hayek resurrection. The monetarist challenge has been the most far-reaching. Having successfully criticised early postwar neglect of monetary policy, predicted an acceleration of inflation and the viability of floating exchange rates, Friedman and his disciples have a much better hearing than was the case in the golden age, and have had some impact on both the rhetoric and reality of policy, particularly in the U.K., which has been the most ardent and least successful practitioner of fiscal activism and the country where official rejection of the importance of monetary policy was most total in the 1950s. Extreme monetarist views about the efficacy of simple monetary guidelines and the impotence of fiscal policy have not prevailed in official circles in most Western countries, but the relative indifference to real output, the suggestion that small errors in an expansionary direction are likely to lead to hyperinflation, and that a good deal of unemployment is voluntary, have certainly had an impact.²³

²³ For Friedman's views on policy, see "The Counter Revolution in Monetary Theory", and "Unemployment Versus Inflation?", *Occasional Papers*, I.E.A., London, Nos. 33 and 44 respectively, 1970, and 1975; see also *The Optimum Quan-*

IV. Adequacy of the Response to the New Challenges

The main new policy problems of the 1970s were:

- a) living with the new international payments arrangements;
- b) living with OPEC;
- c) trying to break inflationary expectations.

Here we attempt to assess the degree of success in meeting these problems and the costs in terms of unemployment and output foregone.

a) VIABILITY OF THE NEW PAYMENTS ARRANGEMENTS

The major change in payments arrangements since 1973 is that, with the exception of rates between the seven members of the EMS, countries do not commit themselves to defend a particular exchange rate, but rather use floating rates as an instrument of balance of payments adjustment. As there have been major balance of payments disequilibria and great scope for international capital movements, this system has been less harmful to real output than any attempt to stick to pegged rates would have been.

tity of Money and Other Essays, Aldine, Chicago, 1969. For a refutation of monetarist theories of fiscal impotence, see A.S. BLINDER and R.M. SOLOW "Analytical Foundations of Fiscal Policy", in A.S. BLINDER, *et al.*, *The Economics of Public Finance*, Brookings, Washington, 1974; see also A.T. PEACOCK and G.K. SHAW, "Is Fiscal Policy Dead?", in this *Review*, June 1978. For a reply to the monetarist views on the inevitability of hyper-inflation, see F. MODIGLIANI, "The Monetarist Controversy or Should we Forsake Stabilisation Policies?", *American Economic Review*, March 1977, p. 12. Modigliani quotes the Friedman argument "An attempt at stabilizing the economy at full employment is bound to be destabilizing because the full employment or natural rate is not known with certainty and is subject to shifts in time; and if we aim for the incorrect rate, the result must perforce be explosive inflation or deflation. By contrast, with a constant money supply policy, the economy will automatically hunt for, and eventually discover, that shifting natural rate, wherever it may be hiding", and replies thus: "This argument, I submit, is nothing but a debating ploy. It rests on the preposterous assumption that the only alternative to a constant money growth is the pursuit of a very precise unemployment target which will be adhered to indefinitely no matter what, and that if the target is off in the second decimal place, galloping inflation is round the corner. In reality all that is necessary to pursue stabilization policies is a rough target range that includes the warranted rate, itself a range and not a razor edge."

Furthermore the private international capital market has greatly expanded. Short term foreign lending in the Eurocurrency market totalled \$ 475 billion by the end of 1979, and the total of Eurobond issues was also very large. Finance from this market was another new source of payments adjustment which reduced the need for official payments financing. In any case, official reserves have risen very fast in the 1970s. The gold, foreign exchange and IMF resources of these countries rose from \$ 68 billion at end 1970 to \$ 576 billion at end 1979 (see table 6).

The essential elements of postwar trade liberalism have been kept intact with none of the developed countries using beggar-your-neighbour commercial policies, and with world trade recovering fairly well after the 1974 setback. There have been some blemishes in the shape of steel quotas, subsidies to exporters etc., but there is no comparison with the catastrophic collapse of world trade in 1929-33. The spirit of mutual cooperation and the degree of mutual consultation have also remained unshaken, again in sharp contrast with 1929-33.

Nevertheless there remain major problems with the working of these arrangements. They have had to operate in such inflationary conditions and with such a large deficit vis-à-vis the OPEC countries that the exchange rate changes necessary to achieve significant adjustment had to be very big. A change in the rate has a substantial feedback on the internal processes of wage and price formation, and floating rates have therefore tended to exacerbate the dichotomy between countries with slow and fast inflation rates. At the same time the degree of payments disequilibrium between the developed countries themselves has been very large, larger than in the 1960s. Finally there are greater risks of financial collapse in the rapid and uncontrolled growth of private international capital markets where some of the borrowers are not too creditworthy. There are, of course, possibilities of cooperation in the IMF and IBRD which did not exist in prewar years and which can help prevent or mitigate governmental default such as occurred in 1929-33, but greater joint regulation of international capital markets is desirable, and it would seem sensible to use gold more actively as an official reserve asset to dampen fluctuations in the gold price.

TOTAL INTERNATIONAL RESERVES
(\$ billion, end year position)

TABLE 6

	1950	1970	1973	1979
Australia	1.5	1.7	6.2	5.3
Austria	0.1	1.8	4.3	14.9
Belgium	0.8	2.8	8.1	22.9
Canada	1.8	4.7	7.3	14.2
Denmark	0.1	0.5	1.5	4.1
Finland	0.1	0.5	0.7	2.0
France	0.8	5.0	15.6	59.5
Germany	0.2	13.6	41.5	99.7
Italy	0.6	5.4	12.2	47.9
Japan	0.6	4.8	13.7	31.9
Netherlands	0.5	3.2	10.4	30.1
Norway	0.1	0.8	1.6	4.8
Sweden	0.3	0.8	2.9	6.4
Switzerland	1.6	5.1	14.3	59.1
U.K.	3.4	2.8	7.9	29.2
U.S.A.	24.3	14.5	33.7	143.2
Total	36.9	67.9	182.0	575.5

Source: I.M.F., *International Financial Statistics*. The figures include SDRs and IMF positions as well as gold and foreign exchange. The I.M.F. shows reserves in terms of SDRs with gold at 35 SDRs an ounce. In revaluing in dollar terms, the London end year price for gold was used here, i.e. \$ 112.25 in 1973 and \$ 512 an ounce in 1979. In 1950 and 1970 gold is valued at \$ 35 an ounce.

ENERGY CONSUMPTION PER \$ 1000 OF REAL G.D.P. 1960-1978
(G.D.P. in 1970 U.S. relative prices, energy in tons of oil equivalent)

TABLE 7

	1960	1973	1978
Austria	0.88	0.88	0.82
Belgium	1.15	1.11	0.98
Canada	1.86	1.77	1.67
Denmark	0.80	0.97	0.88
France	0.82	0.82	0.72
Germany	0.99	1.01	0.94
Italy	0.60	0.83	0.81
Japan	0.88	0.87	0.77
Netherlands	0.78	1.16	1.08
Norway	1.04	1.24	1.07
Sweden	1.24	1.31	1.34
Switzerland	0.71	0.80	0.85
U.K.	1.22	1.08	0.99
U.S.A.	1.51	1.55	1.46
Arithmetic Average	1.03	1.10	1.03

Source: Canada, France, Germany, Italy, Japan, U.K. and U.S.A. energy consumption from O.E.C.D. *Economic Outlook*, No. 25, July 1979, p. 63, other countries from *Energy Policies and Programmes of I.E.A. Countries, 1978 Review*, O.E.C.D., Paris 1979.

b) LIVING WITH OPEC

Until 1973, virtually all the major economic problems of these countries were responsive to their domestic policy or amenable to their international cooperation. But the OPEC problem is one over which they have little control given the heavy dependence on imported oil and the difficulty of finding a substitute for it. Political tension in the Middle East and Iran make it difficult to negotiate arrangements for oil supplies and pricing which might be more in the economic interest of all parties than what happened from 1973 to 1979.

In fact, the Western countries were successful in eliminating their deficit with OPEC by 1978, but the problem recurred again in 1979 with a doubling of oil prices, and this new rise can be expected to prolong the experience of slow growth and inflation for reasons already described in section III(c) above.

It can be seen from table 7 that energy use per unit of GDP has declined modestly since 1973, and rising prices have also stimulated the search for new energy supplies outside the OPEC area. The greatest scope for energy economy lies in the U.S.A. and Canada which have been slow in moving towards realistic domestic prices for energy in spite of their very high consumption levels. This procrastination has been a major shortcoming in Western energy policy.

Nevertheless, it has to be recognised that there is a substantial element of political conflict of a beggar-your-neighbour kind in the international oil situation which is likely to impose serious and erratic constraints on growth in Western countries of a type familiar in the interwar period, but absent in the period of *pax americana* which ended in 1973.

c) DECELERATION OF INFLATION

It is clear from table 8 that there has been appreciable success in moderating the pace of inflation, but the pattern of deceleration divides rather sharply between two groups. In the first six countries, price increases decelerated to rates within the norms of the 1960s. This A group includes Germany and Japan and four smaller

countries, Austria, Switzerland, Belgium and the Netherlands. The average price increase for these six countries was 3.9 per cent in 1978-9 — less than a third of the peak rates.

The other ten countries clearly fall into a different camp with some deceleration below peak rates, but with a rate of inflation in 1978-79 well above "acceptable" norms of the 1960s.

After six years of cautious policy, their average inflation rate was 9.2 per cent — more than twice as fast as the norms of the 1960s. This group includes all the Scandinavian countries, whose inflation performance in the 1970s has been true to form - drifting somewhere near the mode for the group as a whole. It includes Australia, Canada, and the U.S.A., with three big European countries, France, the U.K. and Italy in the extreme position, not able to decelerate below double digit inflation.

What is the reason for the difference in performance between these countries?

In the first place, it is clear from table 8, that group A had a bigger deceleration in economic growth than the second group. Their GDP growth rates in 1973-9 averaged 2.3 per cent a year, down from 5.8 per cent a year in 1960-73. Group B also experienced a major deceleration, but it was smaller.

To some extent this difference in growth momentum may be attributable to more cautious demand management as reflected in the impact of budgetary policy which was more cautious in group A at the height of the boom than in group B. But the subsequent budgetary impact as indicated in table 5 does not explain why growth should have slowed down more in group A than group B, because both groups followed expansionary budget policies in the 1974-5 recession years.

A more fundamental reason why group A was able to break the wage-price spiral is that these countries have a different socio-economic climate and different attitudes which come from a complex variety of historical factors. In Germany and Austria memories of hyper-inflation had a therapeutic effect on wage and price discipline, the Netherlands has a long postwar record of moderation in wage claims and a social compact atmosphere, Switzerland has a long history of price stability, and was willing to make greater sacrifices of output to achieve this goal than any other country. Japan has always had greater wage and price flexibility than the other countries.

TABLE 8

DECELERATION OF INFLATION AND OUTPUT GROWTH

	1978-79 average annual rate of price increase	1974-75 peak annual price increase	1973-79 annual average GDP growth	1960-73 annual average GDP growth
A: Countries Back to "Acceptable" Inflation Rates				
Switzerland	2.3	9.8	-0.7	4.4
Germany	3.6	7.0	2.3	4.5
Austria	4.0	9.5	3.2	5.0
Netherlands	4.2	10.2	2.5	5.1
Japan	4.3	24.5	4.0	10.4
Belgium	4.7	12.7	2.4	5.1
Average A	3.9	12.3	2.3	5.8
B: Countries Not Back to "Acceptable" Inflation Rates				
Norway	6.6	12.0	4.3	4.8
Finland	7.7	17.6	2.6	5.2
Australia	8.2	15.1	3.1	5.1
U.S.A.	8.3	11.0	2.3	4.0
Sweden	8.6	11.1 ^{a)}	1.6	3.9
Canada	8.8	10.9	3.3	5.6
Denmark	9.9	15.0	1.8	4.6
France	10.0	13.7	2.9	5.5
U.K.	10.3	24.2	0.8	3.1
Italy	13.5	19.1	2.3	5.1
Average B	9.2	15.0	2.5	4.7

Source: O.E.C.D., *Economic Outlook, Main Economic Indicators, and National Accounts of O.E.C.D. Countries.*

a) 1977.

TABLE 9

CURRENT BALANCE OF PAYMENTS AS PER CENT OF G.D.P.
IN CURRENT PRICES
(Average for Years Cited)

	1961-73	1974-78		1961-73	1974-8
Australia	-2.2	-2.3	Italy	1.6	-0.7
Austria	-0.4	-3.0	Japan	0.4	0.6
Belgium-			Netherlands	0.5	1.5
Luxembourg	1.6	-0.1	Norway	-1.9	-8.9
Canada	-0.8	-2.0	Sweden	0.1	-2.3
Denmark	-1.9	-3.0	Switzerland	-0.1	4.4
Finland	-1.5	-3.3	U.K.	0.1	-1.7
France	-0.2	-0.8	U.S.A.	0.4	-0.1
Germany	0.6	1.3	Arithmetic Average	-0.2	-1.6

Source: *Economic Outlook*, No. 26, December 1979, and *National Accounts of O.E.C.D. Countries 1952-1977*, O.E.C.D., Paris, 1979.

In the other group, the four Scandinavian countries have never set great store by price stability and their wage/price decision process tends to make them drift with the central tendency in their trading partners. In the U.S.A., the price peaks of 1974-5 were dampened by internal controls on oil prices, and removal of these in 1979 has hindered deceleration. The three worst performers are beset by a decidedly non-consensual atmosphere in wage negotiations, France and Italy being the only Western countries with important communist parties and the U.K. having labour relations problems of a unique kind.

Thus we have two groups of countries, in most of which governments have followed policies of cautious expansion. In one group, this has been crowned with success, in the other, the results have been mediocre.

The most extreme cases of divergence from the cautious demand management strategy were Switzerland and Norway. The former country had to follow a sharply deflationary policy to achieve its top position in the low inflation league, whereas Norway was the only country retaining a full employment strategy. As a result Norwegian economic growth scarcely faltered after 1973, yet its rate of inflation was the smallest of group B countries.

The Norwegian achievement was due partly to a solidaristic social atmosphere which kept wage claims relatively moderate and mitigated domestic inflationary pressures in spite of full employment. However, Norway was much less concerned than other countries about its external payments deficit both because it expected large future earnings from oil and had traditionally been a foreign borrower.

Table 9 shows the extreme positions of these two countries in respect of the foreign balance, Switzerland with an average surplus equal to 4.4 per cent of GDP in 1973-9, Norway running a deficit equal to 8.9 per cent of GDP.

Given the size of the OPEC current surplus over the six years 1974-9 (\$ 224 billion) the Western countries were obliged to have a payments deficit. However, no other country felt as relaxed as Norway about running a big deficit and the desire to improve the payments situation was a major reason for cautious demand policy.

In fact the cumulative collective net deficit of the 16 Western countries over these six years was relatively modest, at around \$ 48

billion and their foreign reserves actually grew by almost \$ 400 billion. In retrospect the policy stance appears over-cautious, particularly in the four countries which had a bigger payments surplus (Germany \$ 28 billion, Japan \$ 18 billion, Switzerland \$ 17 billion and the Netherlands \$ 5 billion) after the OPEC shock than they had had in the golden age (see table 9).

d) THE DEGREE OF UNEMPLOYMENT AND ECONOMIC SLACK

Since 1973, unemployment has risen steadily in this group of countries taken as a whole, though in some, most notably, the U.S.A., it has declined from its peak level. Compared with the 1929-32 depression, the rise in unemployment has been quite mild. From 1929 to 1932 unemployment in these countries rose from an average of 4.0 to 12.3 per cent of the labour force. From 1973 to 1975, it rose from 2.5 to only 3.9 per cent. The difference is due partly to the fact that recession in output was much milder in the 1970s than in the 1930s, but it is also true that unemployment is no longer a very good indicator of the degree of slack in labour markets. Contemporary governments do more to dampen the swing in the market for goods and services in recession than used to be the case, but they also do more to muffle the labour market repercussions of the demand swings which do occur. This accounts for the mildness of unemployment in the recession and also for its persistence in recovery. The labour slack diverted into other channels has to be reabsorbed in the recovery period and hinders the reduction of unemployment. The other reason for the persistence of unemployment is that the recovery has not been vigorous. It is clearly less vigorous than that of 1934-7 as table 10 shows.

There are three significant cushions which have reduced labour input and mitigated unemployment: curbs on immigration, reduction of labour force participation, and cuts in working time. These are not all of the same importance in different countries. In Switzerland and Germany a reversal of migration flows has kept unemployment low, the Netherlands has reduced activity rates by classifying people as handicapped, Sweden has reduced unemployment by keeping significant numbers in training schemes.

TABLE 10

UNEMPLOYMENT AND GROWTH RATES: PREWAR AND IN THE 1970s

	Average of Individual Country Unemployment Rates	Average of Individual Country G.D.P. Growth Rates		Average of Individual Country Unemployment Rates	Average of Individual Country G.D.P. Growth Rates
1926	5.1	2.9	1970	2.2	5.4
1927	4.8	3.9	1971	2.5	4.0
1928	4.3	4.0	1972	2.7	4.9
1929	4.0	3.5	1973	2.5	5.5
1930	6.1	-1.3	1974	2.7	2.5
1931	9.2	-4.7	1975	3.9	-0.7
1932	12.3	-3.0	1976	4.2	4.1
1933	12.1	1.9	1977	4.5	2.3
1934	10.2	4.7	1978	4.8	2.6
1935	8.9	4.1	1979	5.1	3.5
1936	8.6	3.7	1980	(5.5)	(2.1)
1937	7.2	7.1			
1938	7.1	2.2			

Source: Unemployment from Annex 1, except 1979 and 1980 (forecast) from *Economic Outlook*, No. 26, O.E.C.D., Paris, December 1979. G.D.P. from sources cited in A. MADDISON "Phases of Capitalist Development", in this *Review*, June 1977, and from O.E.C.D., *Op. cit.* In all cases except prewar unemployment rates the figures are unweighted averages of the rates for the 16 countries. For prewar unemployment, France and Japan are not included, Italy is not included for 1926-8 and 1935-6, and Switzerland is excluded for 1926-8.

TABLE 11

PHASES OF PRODUCTIVITY GROWTH (G.D.P. PER MAN HOUR) 1870-1978

	1870-1915	1913-50	1950-60	1960-73	1973-78
Australia	0.9	1.4	2.8	2.5	4.2
Austria	1.7	0.8	5.9	6.0	3.8
Belgium	1.2	1.4	3.1	5.4	4.3
Canada	2.0	2.3	3.1	3.0	1.4
Denmark	1.9	1.6	3.0	5.3	1.3
Finland	1.8	2.0	4.1	6.4	2.7
France	1.8	2.0	4.4	5.5	3.9
Germany	1.9	1.0	6.8	5.4	4.2
Italy	1.2	1.7	4.3	6.8	4.1
Japan	1.9	1.3	5.8	9.8	3.9
Netherlands	1.2	1.7	3.4	5.5	3.4
Norway	1.6	2.5	4.1	4.8	4.0
Sweden	2.4	2.8	3.5	4.5	1.4
Switzerland	1.5	2.1	3.0	3.8	1.4
U.K.	1.1	1.6	2.2	3.7	2.0
U.S.A.	2.1	2.6	2.4	2.6	1.1
Arithmetic Average	1.6	1.8	3.9	5.1	2.9

Source: This is an updated version of estimates presented in A. MADDISON, "Long Run Dynamics of Productivity Growth", in this *Review*, March 1979.

It is difficult to make detailed estimates of the slack in labour markets, because present methods of monitoring the situation are inadequate. My own detailed estimates for France, Germany, and the U.K. suggest that between 1973 and 1978, labour slack, other than unemployment, rose to 3 per cent of the labour force on average for the three countries combined.²⁴ If this experience is representative, and the other kinds of slack are converted to equivalent unemployment the rate in 1978 would have been 8 per cent rather than 5 per cent of the labour force.

Since 1973, growth of output per man hour has averaged about 2 percentage points a year below the performance of 1960-73. Some of the decline was an inevitable waning of the special growth opportunities in the 1950s and 1960s. These included the catching up with American productivity levels which had eased the growth process in Europe and even more in Japan, and the importance of structural shifts from agriculture and improved allocation of resources through trade liberalisation. Most of these special benefits were at their peak in the 1960s and have now faded. Low energy prices were also a feature of the golden age which facilitated productivity growth, particularly the catching up with American technological achievements which had been favoured by cheap energy supplies in the past. But the other reasons for faltering productivity have been cyclical in character, i.e. the reduced growth in capital stock which the recession has induced and the lower efficiency of resource allocation which has been deliberately promoted in some degree by government policies to prevent unemployment.

In the 1970s, policy has been primarily aimed at breaking inflationary momentum and restoring payments equilibrium. Employment and output considerations have not received the priority they did in the 1950s and 1960s. There is, of course, awareness of sacrifice in output, but as its magnitude is not clear and some decline was inevitable, there has been a tendency to legitimate these losses by structuralist explanations. Thus it may be argued that unemployment is voluntary because unemployment benefits are too high, because wages are too high, that there is a shortage of the right kind of capital, that there is no slack in the economies

²⁴ See A. MADDISON, "Monitoring the Labour Market", *Review of Income and Wealth*, June 1980.

of these countries. Such structuralist arguments always recur in periods of depressed activity, and there was obviously a new structural problem in the 1970s arising out of the huge increase in the relative price of energy. My own view is that the structural case is exaggerated²⁵ and that there has in fact been a significant loss of output and employment in the 1970s which could have been avoided by less cautious macropolicy.

It is not possible to give more than a very rough estimate of how much better policy might have achieved. Longer term factors may have reduced the underlying growth potential to around 4 per cent in the 1970s (compared with near 5 per cent in the 1950-70 period), and the inevitable cyclical losses in cooling down inflation, meeting the OPEC shock, and learning to live with floating exchange rates may be reckoned at one and a half year's loss of output. Thus I am talking of GDP growth rate for 1973-9 in the region of 3 per cent instead of the 2.4 per cent actually achieved, with the additional growth concentrated heavily but not exclusively on group A countries. This would have been enough to make unemployment decline in the recovery period, and would probably have meant somewhat higher inflation and higher payments deficits. But a somewhat slower pace of deceleration of inflation would have been tolerable, and bigger payments deficits could have been financed.

The degree of policy failure in the 1970s bears no comparison with that which occurred in the 1930s, either in the international or domestic area and my assessment of the growth loss through overcautious policy may seem fairly trivial. But there are substantial long run dangers in letting these economies drift into a situation of increasing underutilisation of growth potential. It means that in each recession the weakness of investment is greater, the pressure for structuralist activism and less liberal commercial policies will grow, and increasing unemployment will exacerbate social tension.

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²⁵ See A. MADDISON, "Economic Growth and Structural Change in the Advanced Countries", *Western Economies in Transition*, Hudson Institute, Croom Helm, London, 1980.

TABLE 12
GROWTH OF OUTPUT (G.D.P. AT CONSTANT PRICES)

	Annual average compound growth rates				
	1870-1913	1913-50	1950-70	1970-79	1973-79
Australia	3.5	2.0	4.7	3.6	3.1
Austria	2.4	0.2	5.4	4.0	3.2
Belgium	2.0	1.0	4.0	3.4	2.4
Canada	3.8	2.9	4.9	4.4	3.3
Denmark	2.7	2.5	4.0	2.6	1.8
Finland	2.8	2.4	5.1	3.5	2.6
France	1.7	1.0	5.0	3.8	2.9
Germany	2.8	1.3	6.3	2.8	2.3
Italy	1.5	1.4	5.6	2.8	2.3
Japan	2.5	1.8	9.8	5.3	4.0
Netherlands	2.1	2.4	4.9	3.1	2.5
Norway	2.1	2.9	4.2	4.4	4.3
Sweden	2.8	2.8	4.0	1.6	1.6
Switzerland	2.1	2.0	4.7	0.7	-0.7
U.K.	1.9	1.3	2.8	1.9	0.8
U.S.A.	4.1	2.8	3.5	3.1	2.3
Arithmetic Average	2.6	1.9	4.9	3.2	2.4

Source: As in A. MADDISON, "Phases of Capitalist Development", in this *Review*, June 1977, with some revisions and updating.

TABLE 13
AVERAGE RATES OF CHANGE IN CONSUMER PRICE LEVEL 1870-1979

	Annual average compound growth rates						
	1870-1913	1913-20	1920-38	1938-50	1950-70	1970-79	1973-79
Australia	0.3	8.0	-0.7	4.7	4.2	10.4	12.0
Austria	0.1 ^{a)}	92.7 ^{c)}	2.1 ^{e)}	18.1	4.3	6.3	6.4
Belgium	0.0	20.0 ^{d)}	4.4 ^{f)}	11.5	2.5	7.5	8.4
Canada	0.4	10.6	-2.4	4.0	2.4	7.7	9.1
Denmark	-0.2	15.3	-2.0	5.1	4.4	9.7	10.9
Finland	0.6	37.2	0.5	22.3	5.3	11.2	12.8
France	0.1	20.5	3.6	28.1	4.9	9.2	10.7
Germany	0.6	39.3	-0.1 ^{g)}	3.8	2.3	5.1	4.7
Italy	0.6	24.4	0.3	38.4	3.5	13.2	16.3
Japan	2.8 ^{b)}	10.5	-0.3	82.4	4.9	9.1	10.0
Netherlands	n.a.	9.9	-2.9	7.4	3.5	7.4	4.2
Norway	0.6	17.4	-3.1	4.3	4.5	8.2	8.8
Sweden	0.5	15.5	-2.7	4.1	4.4	8.8	9.8
Switzerland	n.a.	12.5	-2.8	4.0	2.4	5.1	4.0
U.K.	-0.2	13.9	-2.6	5.3	4.1	13.1	-15.4
U.S.A.	-0.6	10.1	-2.0	4.5	2.4	7.0	8.2
Average	0.4	22.4	-0.7	15.5	3.8	8.7	9.5

a) 1874-1913; b) 1879-1913; c) 1914-1920; d) 1914-1921; e) 1923-1938; f) 1921-1938; g) 1924-38.

Source: League of Nations, O.E.C.D., I.L.O. and national sources.

ANNEX I

Unemployment

Virtually all Western countries now publish an official measure of unemployment, but the scope of these different national indicators still varies a good deal, so that international comparison of unemployment rates can only be made with considerable reservation and after careful adjustment. The same is true of any long period comparison because concepts and measures of unemployment have changed over time. The historical sequence has tended to be (a) figures for trade union members; (b) figures for those applying for jobs at unemployment offices; (c) figures for those claiming state insurance benefits (under schemes whose coverage has grown steadily and is now pretty universal for wage and salary earners in most countries); (d) figures derived from census type enquiries or labour force sample surveys.

Sample surveys generally tend to be more comprehensive in coverage than other sources of data, because they cover the whole population, and ask questions from people who may have little incentive to register as unemployed, such as women and students seeking part-time jobs and new entrants to the labour market. However, not all countries treat the temporarily unemployed in the same way, and not all of them apply the same criteria for testing job search or availability for work.

Most of the countries considered here now have regular labour force sample surveys of the kind carried out in the United States since 1940, but the official unemployment indicator is not based on survey data in Belgium, France, Germany, Netherlands, Switzerland and the United Kingdom.

Furthermore, the questions asked in labour force questionnaires differ between countries in ways which affect the count of the unemployed, and the classification of people as employed or unemployed, active or inactive is influenced by differences in national tradition or labour market institutions which may have nothing to do with the degree of labour slack.

In spite of these pitfalls there are a number of useful comparative studies of unemployment both in terms of international variation and

historical trends. The I.L.O. has performed a useful job in publishing unemployment statistics for most of the countries mentioned here since the 1920s (in the I.L.O. *Yearbooks* issued from 1936 onwards) and although its own publications do not carry figures adjusted to ensure comparability it has helped promote progress in this direction by meetings of the various Conferences of Labour Statisticians¹ which in 1954 reached agreement on standardised definitions (on United States lines) of the labour force, employment and unemployment. These I.L.O. guidelines left some grey areas where incomparabilities exist, but O.E.C.D.² has recently made recommendations to clarify most of these problems.

A good historical supplement to the I.L.O. material is W. Galenson and A. Zellner, "International Comparison of Unemployment Rates", in *The Measurement and Behaviour of Unemployment*, N.B.E.R., Princeton, 1957. My own earlier work, *Economic Growth in the West*, Allen and Unwin, London, 1964, Appendix E, contains estimates adjusted to improve international comparability of unemployment levels, and more recent estimates of this kind are available in C. Sorrentino, *International Comparisons of Unemployment*, U.S. Bureau of Labor Statistics, Washington D.C., 1978.

For years prior to the first world war, the only countries for which there is a reasonable series for any length of time are the U.K. and the U.S.A. For the U.K., for 1855-1914, see C.H. Feinstein, *National Income, Expenditure and Output of the United Kingdom 1855-1965*,

TABLE 14

UNEMPLOYMENT AS PERCENT OF LABOUR FORCE 1870-1913

	U.K.	U.S.A.		U.K.	U.S.A.
1870-9	3.5	10.0	1900	2.4	5.0
1880-9	5.5	4.0	01	3.2	4.1
1890	2.1	4.0	02	3.9	3.7
91	3.4	5.4	03	4.6	3.9
92	6.2	3.0	04	5.9	5.4
93	7.4	11.7	1905	4.9	4.3
94	6.8	18.4	06	3.5	1.7
1895	5.7	13.7	07	3.6	2.8
96	3.2	14.4	08	7.7	7.9
97	3.3	14.5	09	7.5	5.1
98	2.8	12.4	1910	4.6	5.8
99	2.0	6.5	11	2.9	6.7
			12	3.3	4.6
			13	2.1	4.3

¹ See *International Recommendations on Labour Statistics*, I.L.O., Geneva, 1976.

² See *Measuring Employment and Unemployment*, O.E.C.D., Paris, 1979.

TABLE 15
UNEMPLOYMENT AS A PERCENTAGE OF THE TOTAL LABOUR FORCE 1913-38

	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Japan	Netherlands	Norway	Sweden	Switzerland	U.K.	U.S.A.
1913	3.3	2.0	3.1	3.0	6.0	(1.1)	1.0	1.9	1.7		1.5	1.5	1.1	1.0	2.1	4.3
1920	4.6		6.1	5.8	3.0	1.1	2.7	1.7			1.7	5.6	1.3		1.9	3.9
1	5.9		1.9	4.4	10.0	1.8		1.2			2.6	5.2	6.4		11.0	11.4
2	5.5		0.6	3.2	9.5	1.4		0.7			3.2	5.5	5.5		9.6	7.2
3	4.9		0.6	4.5	6.5	1.0		4.5			3.3	1.3	2.9		8.0	3.0
4	5.5	5.4	0.6	4.5	5.5	1.2		5.8			2.6	0.3	2.4		7.1	5.3
5	5.6	6.3	0.9	4.4	7.5	2.0	1.2	3.0			2.4	3.4	2.6		7.7	3.8
6	4.6	7.0	0.8	3.0	10.5	1.6		8.0			2.1	10.4	2.9		8.6	1.9
7	5.2	6.2	1.1	1.8	11.0	1.5		3.9			2.2	11.3	2.9		6.7	3.9
8	6.4	5.3	0.6	1.7	9.0	1.5		3.8			1.6	7.6	2.4		7.4	4.3
9	8.2	5.5	0.8	2.9	8.0	2.8	1.2	5.9	1.7		1.7	5.4	2.4	0.4	7.2	3.1
1930	13.1	7.0	2.2	9.1	7.0	4.0		9.5	2.5		2.3	6.2	3.3	0.7	11.1	8.7
1	17.9	9.7	6.8	11.6	9.0	4.6	2.2	13.9	4.3		4.3	10.2	4.8	1.2	14.8	15.2
2	19.1	13.7	11.9	17.6	16.0	5.8		17.2	5.8		8.3	9.5	6.8	2.8	15.3	22.3
3	17.4	16.3	10.6	19.3	14.5	6.2		14.8	5.9		9.7	9.7	7.3	3.5	13.9	20.5
4	15.0	16.1	11.8	14.5	11.0	4.4		8.3	5.6		9.8	9.4	6.4	3.3	11.7	15.9
5	12.5	15.2	11.1	14.2	10.0	3.7		6.5			11.2	8.7	6.2	4.2	10.8	14.2
6	9.9	15.2	8.4	12.8	9.5	2.7	4.5	4.8			11.9	7.2	5.3	4.7	9.2	9.8
7	8.1	13.7	7.2	9.1	11.0	2.6	3.7	2.7	5.0		10.5	6.0	5.1	3.6	7.7	9.1
8	8.1		8.7	11.4	10.5	2.6		1.3	4.6		9.9	5.8	5.1	3.3	9.2	12.4

TABLE 16
UNEMPLOYMENT AS A PERCENTAGE OF THE TOTAL LABOUR FORCE 1950-78

	Australia	Austria	Belgium	Canada	Denmark	Finland	France	Germany	Italy	Japan	Netherlands	Norway	Sweden	Switzerland	U.K.	U.S.A.
1950	1.5	3.9	5.0	3.6	4.0	1.0	2.3	8.2	6.9	1.9	3.0	1.2	1.7	0.0	2.5	5.2
1	1.3	3.5	4.4	2.4	4.6	0.3	2.1	7.3	7.3	1.7	3.4	1.5	1.6	0.0	2.2	3.2
2	2.2	4.7	5.1	2.9	5.8	0.4	2.1	7.0	7.8	1.9	4.9	1.6	1.7	0.0	3.0	2.9
3	2.5	5.5	5.3	2.9	4.4	1.5	2.6	6.2	8.1	1.7	3.7	1.9	1.9	0.0	2.6	2.8
4	1.7	5.0	5.0	4.5	3.8	1.0	2.8	5.6	8.3	2.2	2.5	1.8	1.8	0.0	2.3	5.3
5	1.4	3.6	3.9	4.3	4.5	0.4	2.4	4.3	7.0	2.5	1.8	1.6	1.8	0.0	2.1	4.2
6	1.8	3.4	2.8	3.3	5.1	2.2	1.8	3.4	8.7	2.3	1.4	1.9	1.6	0.0	2.2	4.0
7	2.3	3.2	2.3	4.5	4.9	2.2	1.4	2.9	7.0	1.9	1.8	2.1	1.7	0.0	2.4	4.2
8	2.7	3.4	3.3	6.9	4.5	2.2	1.6	3.0	6.0	2.0	3.4	3.3	2.0	0.0	3.0	6.6
9	2.6	3.1	4.0	5.8	3.1	2.1	1.9	2.0	5.2	2.2	2.5	3.2	1.8	0.0	3.0	5.3
1960	2.5	2.3	3.3	6.8	2.1	1.4	1.8	1.0	3.9	1.7	1.7	2.3	1.7	0.0	2.2	5.4
1	2.3	1.8	2.5	7.0	1.9	1.2	1.5	0.7	3.4	1.4	1.1	1.8	1.5	0.0	2.0	6.5
2	2.2	1.9	2.1	5.8	1.6	1.3	1.4	0.6	2.9	1.3	1.1	2.0	1.5	0.0	2.8	5.4
3	1.8	2.0	1.7	5.4	2.1	1.5	1.3	0.7	2.5	1.2	1.1	2.4	1.7	0.0	3.4	5.5
4	1.6	1.9	1.3	4.3	1.2	1.5	1.1	0.6	3.9	1.2	1.0	2.1	1.6	0.0	2.5	5.0
5	1.5	1.9	1.5	3.6	1.0	1.4	1.3	0.5	5.0	1.1	1.1	1.7	1.2	0.0	2.2	4.4
6	1.7	1.7	1.6	3.3	1.1	1.5	1.4	0.6	5.4	1.3	1.4	1.6	1.6	0.0	2.3	3.7
7	1.8	1.8	2.3	3.8	1.2	2.9	1.8	1.7	5.1	1.3	2.8	1.5	2.1	0.0	3.4	3.8
8	1.7	1.9	2.7	4.4	1.6	3.9	2.1	1.2	5.3	1.2	2.5	2.2	2.2	0.0	3.3	3.5
9	1.7	1.7	2.1	4.4	1.1	2.8	2.3	0.7	5.2	1.1	2.0	2.1	1.9	0.0	3.0	3.5
1970	1.6	1.4	1.8	5.6	0.7	1.9	2.4	0.6	4.9	1.1	1.6	1.5	1.5	0.0	3.1	4.9
1	1.8	1.2	1.7	6.1	1.1	2.2	2.6	0.7	4.9	1.2	2.0	1.5	2.5	0.0	3.8	5.9
2	2.6	1.0	2.2	6.2	0.9	2.5	2.7	0.9	5.7	1.4	3.3	1.7	2.7	0.0	4.1	5.6
3	2.4	1.0	2.2	5.4	0.9	2.3	2.6	1.0	5.7	1.3	3.3	1.5	2.5	0.0	2.9	4.8
4	2.6	1.1	2.4	5.3	3.5	1.7	2.8	2.2	4.8	1.4	4.0	1.5	2.0	0.0	2.9	5.6
5	4.8	1.7	4.2	6.9	4.9	2.2	4.1	4.1	5.3	1.9	5.8	2.3	1.6	0.3	4.1	8.4
6	4.7	1.7	5.6	7.1	4.2	4.0	4.4	4.1	6.1	2.0	6.2	1.8	1.6	0.7	5.6	7.6
7	5.6	1.5	6.3	8.0	5.1	6.0	4.9	4.0	6.4	2.0	6.0	1.5	1.8	0.3	6.2	7.0
8	6.4	1.8	6.8	8.3	5.2	7.4	5.2	3.8	6.7	2.2	6.0	1.8	2.2	0.4	6.1	6.1

O.E.C.D. *Labour Force Statistics* was adjusted upwards by 40.5 per cent, this being the ratio of total Dutch unemployment to that shown by O.E.C.D. for 1975, see *Sociale Maandstatistiek*, May 1977, p. 317. An upward adjustment was also made for Norway to compensate for partial coverage before 1972. Unemployment in the U.K. from C. Sorrentino, *Op cit.*, adjusted to include Northern Ireland. For the United States unemployment amongst 14 and 15 years old was added to the official figures. For Sweden the 1950-60 figures are from A. Maddison, *Op. cit.*

A. M.