ETLA ELINKEINOELÄMÄN TUTKIMUSLAITOS
THE RESEARCH INSTITUTE OF THE FINNISH ECONOMY
Lönnrotinkatu 4 B, 00120 Helsinki 12, Finland, tel. 601322

Keskusteluaiheita
Discussion papers

Herbert Giersch*

PROSPECTS FOR THE WORLD ECONOMY - SHORT AND LONG TERM**

No 145 28.12.1983

* Professor, Dr, President of the Kiel Institute of World Economics.

** Lecture given at the Seminar on Investment Prospects for 1984-1985 arranged by the Federation of Finnish Metal and Engineering Industries in Helsinki on November 9, 1983.

PROSPECTS FOR THE WORLD ECONOMY -
SHORT AND LONG TERM

I. DIAGNOSIS OF LONG TERM DEVELOPMENTS

My main diagnosis concentrates on Europe, specifically on continental Europe, and on some British Dominions where the situation is similar, but less on the U.S., Japan or the LDCs. This wider European area in my view recently suffered from the coincidence of two cyclical throughs:

(a) a short term recession the like of which occurs every three to five years, as in 1977 or in 1974, now being followed by a recovery brought about by monetary expansion in the U.S. - right in time for the U.S. Presidential elections,

(b) and a long phase of stagnation as we had in the interwar period fifty years ago when the stagnation thesis was developed, or a hundred years ago i.e. in the period which led Marx and Engels to predict, in the Communist Manifesto, the downfall of capitalism with

- a declining rate of profit,
- a concentration of established firms, and
- short term cycles which have shorter and weaker upswings and longer and deeper recessions with apparent underconsumption.

The greatest problem is unemployment - the industrial reserve army - comparable to what we had in the late twenties, shortly before the disastrous thirties.

The present phase of stagnation came after a long phase of economic growth in which large parts of Europe and Japan succeeded in catching up with the United States. This acceleration of economic growth in the 1950s and 1960s which followed the war and the Great Depression of the 1930s was brought about by six essential conditions:

(a) cheap oil, (b) rapid reconstruction in Germany and Japan, (c) a process of catching up the U.S., (d) demand management in the U.S., (e) a worldwide liberalization policy, and (f) European integration together with South-North-migration in Europe.

(a) An abundant supply of oil allowed the relative price of oil to fall. This was a "positive supply shock". It enabled the march into an oil-intensive civilization with a (second) long wage of motorization in the advanced parts of the world. What coal had been for the industrial revolution and - later - for the age of steamships and railways, and what electricity had been for the long upswing which ended before 1914, oil was for the world economy after 1945: a kind of economic rent, like mannah from heaven.

(b) Western Europe and Japan experienced a remarkable postwar recovery. Part of the explanation for Europe is the German recovery. It started from a breakdown of Germany's previous political, institutional and economic system and took place within a framework of monetary stability and with a large measure of laissez-faire resulting from the Erhard liberalization of 1948. Later on, the West German economy became the growth center for Europe's Common Market. The opening up of Japan and Germany proved to be another kind of economic rent for the world economy[1)].

1) For a detailed discussion of this point see H. Giersch, "Aspects of Growth, Structural Change, and Employment - A Schumpeterian Perspective, Weltwirtschaftliches Archiv, Band 115, 1979, s. 629-652.

(c) Both Europe and Japan could link themselves to the U.S. economy and practically succeeded in catching up with the U.S. in terms of productivity and technology. In this way Europe and Japan captured a technological rent.

(d) In the sixties, in addition, the U.S. adopted a Keynesian policy of demand management which for some time made the U.S. market grow faster than it otherwise would have done. The U.S. thus became something like black hole in the World Economy. It allowed other countries to have exportled growth.

(f) Continental Europe met the demand stimulus from the U.S. with an elastic supply response

- by exerting wage restraint, thus enabling and tolerating high rates of profit and investment in productive capacity,
- by forming a common market which allowed Europe to exploit scale economies and the advantages of intra-industry trade and specialization, and
- by importing workers from the Southern Europe.

This whole set of favorable conditions can be viewed as a growth-promoting disequilibrium system. As far as Europe was concerned this system rested on an overvaluation of capital, i.e. on high rates of profit which - together with imported technology - led to high rates of capital accumulation and to an excess supply of jobs relative to the demand for jobs by domestic workers. In short: accelerated growth and overfull-employment were purchased at the expense of a more equal income distribution. This "big trade-off" between growth and equality[2)]

2) See A. Okun, "Equality and Efficiency. The Big Trade Off". Washington: Brookings Institution 1975.

proved to be worthwhile in the medium run. However, I wonder whether this trade-off would have been accomplished, had it been a matter of rational choice. People would have doubted that there was a positive return to be expected later on; and they would have become impatient with the current inequalities. As it were, growth came as a surprise rather than as a result of rational expectations; in this sense it must be viewed as a miracle in retrospect.

This disequilibrium system became unsustainable at the end of the sixties for the following reasons:

(a) Increasing balance of payments surpluses in Europe in the late sixties led to increasing inflationary pressures.

(b) After 1968 in Europe full employment led to strong wage pressures. In West Germany the unions started to realize that in the absence of an upward revaluation of the exchange rate there was room for wage increases until the balance of payments surplus would disappear. This is implicit in the notion of a balance of payments orientation of wage demands. Thus the discipline attributed to the system of fixed exchange rates, which depends upon the export of (price level) stability and corresponding competitive pressures from at least one major country, was endangered by changes in the behavior of German unions which had been the major source of this discipline in Western Europe. Thus domestic wage pressures in Europe coincided with pressures on foreign exchange markets towards devaluing the dollar vis-à-vis European currencies. When these two adjustment processes coincided at the end of the sixties and the beginning of the seventies, the rate of profit in Europe declined sharply. This brought about the turnaround[3] in the fourth Kondratieff cycle.

Revaluation and wage push combined can be viewed as "the revolt of labor", a negative supply shock. It was bound to have a negative impact on investment. Two other negative supply shocks, which also were basically endogenous, followed soon and had similar consequences: a) the revolt of the environment and b) the revolt of natural resources.

(a) In the early seventies, the public became more and more concerned with environmental pollution and other external costs of industrial growth. The fact that it was bureaucratic measures which were imposed to meet these concerns further depressed the profitability (marginal efficiency) of investment.

(b) The sudden quadrupling of the price of oil after 1973 made part of the existing stock of capital economically obsolete; this should have increased the marginal efficiency of investment, notably in the field of energy conservation and the development of alternative sources of energy, but was largely prevented from doing so by the prevailing emotional sentiments against nuclear energy, by populist pressures against higher energy prices, and by strong union resistance against a fall in real wages.

These three supply shocks - the revolts of labor, the environment and exhaustible resources - added up to a cost push, similar in nature to the cost push which tends to develop at the height of a short term

3) For discussion of these adjustment processes see J. Sachs, "Wages, Profits, and Macroeconomic Adjustment: A Comparative Study". Brookings Paper on Economic Activity, 2:1979, P. 269-319.

business cycle and which usually leads to a profit squeeze and a subsequent cyclical downturn. The cost push described here was, however, more persistent and more difficult to cope with than a cyclical cost push. In order to mitigate its impact on investment, governments and central banks adopted an accommodating (or compensatory) policy. This policy enabled organized labor to shift the deterioration of its terms of trade vis-à-vis energy and vis-à-vis the natural environment onto holders of financial assets, notably onto savers who had invested in long term securities. The profit squeeze in industry and trade made itself felt in a decline of stock prices. Had it been a demand pull inflation, rising stock prices would have protected stockholders, just as much as rising prices of real estate - and of other durables not requiring the cooperation of complementary labor - protected their holders.

This accommodating policy helped labor at the expense of capital. It permitted - for a while - to maintain employment at real wages that had become too high after the revolt of the environment and of exhaustible resources. But it helped only at the expense of capital, i.e. of accumulated labor from the past and of capital formation for the future. This brought about the fundamental distortion: depressed real rates of interest and excessively high real wages.

What could have been predicted to result from this distortion?
A classical economist would have answered: you will have to expect:

- a decline in the propensity to save;
- an increasing demand for social security as private provision for the future would become more difficult;

- a tendency among governments to spend more - for public infrastructure investments, for subsidizing structurally weak industries and for expanding the welfare state - and to run into increasing deficits as they can be financed at low or even negative real rates of interest;
- a tendency to divert savings from productive investment, where capital has to combine with the excessively expensive labor, to non-productive investment like real estate, owner-occupied homes, objects of art and other hedges against (cost-push) inflation;
- a slowdown in productive investments and hence in the growth of the productive capital stock;
- a tendency in productive investment to replace the excessively expensive human labor with the artificially cheap capital
- a bias in favor of labor saving innovations and inventions and an undue neglect of capital saving paths of technical progress.

The results are various disequilibria in the real sector. They become visible once the accommodating policy has to be abandoned and people start to calculate in real terms. This "Day of Judgement" has come. Now we deplore that there is

- an inadequate stock of physical capital in the productive sector of the economy, inadequate in the sense that large parts of it are economically obsolete at prevailing real wages;
- an inadequate number of jobs built into the stock of productive capital and hence
- a structural unemployment in many countries which must be identified as a capital shortage unemployment due to a job gap;
- a stock of knowledge which contains too many labor saving devices, implying the danger of technological unemployment;

- a reaction among the intellectuals, and possibly also among the workers, against quantitative growth, against the capital using types of technical advance which often mean bigness ("small is beautiful"), and perhaps against technical progress as such;
- complaints about interest rates having risen too much and being too high, so that everybody feels overly indebted: central governments, local governments, firms and households.

II. THERAPY

For a new spurt of long term economic growth to develop it will be indispensable to correct these fundamental distortions. The driving force for economic development comes from the demand of investors who compete with each other for markets which have not yet emerged. These investors build imaginary bridges into the future, but future oriented activities in a market must be paid for in terms of profits that support profit expectations. As we today face a future which does not promise a return of those favorable factors as we had them in the 50's or 60's, relative prices for capital and labor have to adjust to reflect better present and future scarcity values and to correct the fundamental distortions which emerged in the past.

In this context wage restraint is crucial in the West, and perhaps in the World as a whole, for the following reasons. Only little relief will come for firms from the side of capital costs because it is capital which has become the scarce factor. What we observe since the end of 1979 is the revolt of capital, associated with the fight against inflation. Attempts to bring down the real rate of interest by an expansionary monetary policy are likely to be counterproductive. Such attempts will sooner or later rekindle inflationary expectations. But the real rate of interest may further come down a bit if and when

- the fear of inflation has lost its basis, because it has become clear that structural unemployment will not be fought with inflation;
- participants in the capital markets observe that lower wage costs help more firms to survive and thus reduce the need for despair borrowing, which is still very high at present,
- governments reduce their deficits.

The need for wage restraints is being underlined by the notion of a job gap (para 10). The gap would shrink if real wages were allowed to fall so that some jobs which are economically obsolete under present conditions would become viable again. This is the short term view. In the longer run, there is a good chance that the gap can be closed through investment. Lower wage costs per unit of output would

- raise profits, profit expectations and investments even at high real rates of interest and
- reduce the labor saving bias in investment and thus ensure that we create more additional jobs with any given volume of investment.

No democratic government will be strong and farsighted enough to bring about what appears to me the first-best or utopian strategy for a quick resolution of the wage-interest-jam:

- a once for all reduction in nominal wages and salaries to correct past mistakes and to alleviate fears of cost push inflation - combined with

- a once for all increase in the money supply (quantity of money) to correct excessive tightening in the past and to alleviate fears of a liquidity trap[4].

A second-best solution would contain three elements:

- freezing of nominal wages and salaries (insofar as they have minimum wage characteristics) until unemployment has been brought down to tolerable levels,
- preannouncement of an increase in the money supply geared to the short term gain in output due to the wage freeze, plus the expected rate of growth of potential output, plus the core rate of inflation which society would be prepared to tolerate and
- issuing of purchasing power bonds (index linked bonds) to avoid inflationary distrust among savers and to allow financial markets to accurately monitor governments and central banks; these bonds will reveal how high the real rates of interest really are.

In favourable circumstances[5] this second-best solution would - in my intuitive judgement - require three to five years to reduce unemployment to tolerable levels of - say - below five per cent depending upon the core rate of inflation and the "employment-neutral" productivity advance which may be about one to two per cent per year[6].

---

4) This may be called a Pigou-Keynes strategy. Keynes alone is not enough as there is still the Fisher effect: inflationary expectations raise interest rates, perhaps excessively.

5) A further weakening of OPEC power, no additional protectionism, some complementary steps towards a lowering of barriers to entry for new enterpreneurship and young workers etc.

6) Measured productivity advance may be lower or higher depending upon whether less productive labor was brought into or squeezed out of employment. For a detailed discussion of the productivity issue see H. Giersch and F. Wolter, "Towards an Explanation of the Productivity Slowdown. An Acceleration-Deceleration Hypothesis". Economic Journal (forthcoming).

The third-best solution might be:

- keeping wages (insofar as they are minimum wages) and salaries constant in real terms until unemployment has fallen to tolerable levels,
- issuing of purchasing power bonds to prevent real rates of interest to be excessively high or low;
- pursuing a steady monetary policy.

On the wage front this solution might be worse than laissez-faire, if and where organized labor has shown readiness to let real wages decline when unemployment increased and where it would tolerate a further fall even if its bargaining position gradually improved with the general situation. Similar considerations apply where governments can successfully continue or start an incomes policy which effectively ties government subsidies to ailing firms and regions to real wage concessions by organized labor, thus making relative wages more flexible. At any rate, piecemeal engineering to make real wages more flexible in the downward direction might be the most practical way under given political conditions. However, the costs in terms of high unemployment and lost output may be intolerably high.

To shorten the period of excessive unemployment where democratic governments are under severe political constraints, societies have to speed up their learning process and achieve an enlightened consensus. People have to recognize

- that governments alone cannot guarantee or effectively create productive employment outside the public sector and that more employment in the public sector would be a burden on the private sector;

- that a return to higher employment in the private sector requires the co-operation of organized labor which (together with the other side on the bargaining table) determines minimum wages in some countries;
- that excessive minimum wages (fixed by law or at the bargaining table) are barriers to entry for unemployed labor as well as for potential entrepreneurs and
- that institutional barriers to entry - protecting insiders - are as bad as wage barriers.

What we need is a strategy for discovering barriers to entry: a basic right for citizens to sue in courts the governments and all interest groups who have erected barriers to entry.

This positive program for better employment and growth must be supplemented by simultaneous efforts to turn the tide of protectionism. Every market contraction leads to fiercer competition which in turn leads to all sorts of dysfunctional protection: subsidies, voluntary restraint agreements, anti-dumping measures, quantitative import controls, domestic content legislation, bilateralism in judging international trade issues - and all this despite a free trade rhetoric in solemn policy declarations from high level meetings. The overall welfare losses from such "organized trade" (trade without competition) must be tremendous.

In preventing such aggravating actions, there is a case for international policy co-ordination. What is required is a stronger international policy carte against domestic pressure groups. However, policy cartels to widen the scope for a new spurt in unanticipated inflation (like the locomotive approach after 1976) are likely to do more harm than good.

In the domestic field, coordination of wage policy and monetary policy along the lines suggested above can positively help in getting out of the present impasse. An important prerequisite is a social consensus based on an understanding of market processes rather than polarization and political uncertainty.

On the international level, confidence creation can be positively promoted by

- reciprocal learning, i.e. speedy transmission of success stories and the deeper reasons for failure;
- reciprocal encouragement: on a long road to prosperity which requires the restoration of a healthy incentive structure, an impatient public (and impatient representatives of group interest) may need to be calmed down, perhaps with mutual support across national frontiers and language barriers and even across party lines;
- standby - arrangements for emergency situations, however prepared without much publicity and without overinterpretation so that the danger of moral hazard from overinsurance is kept in bounds.

III. IRRITATING ISSUES

All this assumes that Europe suffers from institutional sclerosis (barriers to entry) as well as wage-wage and wage-price distortions. Remove the barriers and have the distortions corrected, and we shall

return to a growth path which would be natural in the sense that it is likely to reflect people's demand for income in terms of effort. Such views are not yet common among economists and other intellectuals.
To reduce the noise level in our intellectual information system, where the growthmanship of the 1960s has given way to a zero-sum-mentality, we need to clarify two issues: supply constraints and demand saturation.

The idea that there are supply limits to natural growth has already lost strength with the weakening of "commodity power" (OPEC, raw material cartels) since 1980 and price induced progress made in the field of conservation and exploration. But environmental constraints are still virulent and continue to generate widespread emotional protest - and hence excessive protest - against environment intensive investment from both conservative and radical "greens". This makes it urgent to find and adopt quasi market solutions to the problems of environmental scarcity.

The saturation argument is as old as the Malthusian limits to growth story. It equally ignores technical advance and structural change. Philosophycally, it assumes determinacy. In a world with an indetermined future, people have an insatiable demand for security, and hence for private wealth as the only form in which individuals and families can cope with uncertainty. Social security seems to be less demanding at first sight; but existing social security systems find themselves in a precarious situation insofar as they have not ensured a sufficient capital accumulation and/or birth rate. Capital accumulation by advanced countries need not lead to a vanishing of investment opportunities. Not all the investment must be made in the advanced world. There is no saturation whatsoever in the open societies of the Third World. What we need then is an improved world capital market. To sum up: an open future and an open world economy take the sense out of the saturation thesis.

Insufficient demand means insufficient money or distorted relative prices. With prices close to scarcity values, money will translate itself into sufficient demand for output; and the latter - together with wage rates close to scarcity values - will translate itself into sufficient demand for labor. There is no need for collective decisions to reduce unemployment by shortening the working time. While there is nothing to be said against individual decisions to work less for lower incomes and against arrangements which open up such opportunities, a reduction of working time by government decree or collective bargaining involving some form of coercion reduces the flexibility of the system and causes an unnecessary welfare loss.

Technological unemployment may exist and is the subject of widespread fear, but one has to recognize that it is just another sort of minimum-wage unemployment. If wages are too high for too long a time, firms will be induced to prefer the labor saving options offered by the advance of knowledge; and scientists interested in producing economically useful knowledge will provide new options of the labor saving type and pay less attention to capital saving paths of progress. This is why inflation designed to keep interest rates low and to accommodate excessive wages (in the face of high energy prices) may have disastrous boomerang effects on labor in the longer run. A disregard of capital saving progress in the 1970s may be one of the causes for the dramatic slowdown of productivity advance all over the world.

There is no basic shortage of entrepreneurial talent[7]. This belief is derived from the observation that most of the qualities which are essential for enterpreneurial activities are exhibited by a vast number of people, including good car drivers in crowded, but fairly unregulated streets. Nevertheless, I have strongly felt since the late sixties that Europe must sooner or later suffer from a loss in potential economic driving power due to the fact that it failed to transform a rebellious youth into a vigorous cohort of achievement oriented entrepreneurs[8].

Given the abundant supply of entrepreneurial talent and the probability that it is easier for a person to acquire managerial skills than to accumulate capital, it appears that capital again becomes the limiting factor and a barrier to entry.

---

7) For details see H. Giersch, "The Role of Entrepreneurship in the 1980s, Institut für Weltwirtschaft, Kieler Diskussionsbeitrag, 88, Kiel, August 1982.

8) How much (potential) entrepreneurial talent has been wasted in futile and unproductive attacks on the establishment, and even in law-breaking, in hijacking and in all the other forms of outright terrorism? It would be useful to enumerate all those barriers to entry that contributed to diverting young entrepreneurial forces into the dead-end avenues of anti-capitalist revolt. In this connection, it should not be left out of account that formal education, including academic training, may reach far too much into adult life or may, given its length, be too passive or reflective in character for too many people who are disposed to become active decision makers in their prime of life. For these reasons I also fear that in LDCs intellectual training - as opposed to apprenticeship and vocational education - receives more attention and emphasis than is good for economic development.

IV. LONG TERM PROSPECTS FOR THE WORLD ECONOMY

My message for the long-run movement is the following hypothesis: The industrial countries of Europe and perhaps also of North America, but less so of Asia, may need the whole of the 1980s to correct some of the fundamental distortions which have emerged in the 1960s and 1970s and to prepare the ground for a new spurt of economic growth in the 1990s. In this adjustment process the U.S. seems to be ahead of the advanced countries of Europe, regulated and perhaps over-regulated as the latter are, (1) as its real wages have started to decline fairly quickly, (2) as its capital shortage is perhaps not as pronounced, and (3) as its business community can look forward towards a policy favoring capital formation. The U.S. is forcing Europe into an adjustment process which, although basically inevitable in my view, Europe is not ready to accept. This reluctance can be well understood. The public discussion for too long a time focussed on U.S. monetary-fiscal policy, maintaining that it is wrong and believing that it can be changed and that the change would lead to a substantially lower level of real interest rates. To some extent, U.S. policy offered and still offers itself as a scapegoat for Europe, and it may take years before it has been fully realized that the decline in the real interest rate which can be brought about by a change in the U.S. policy may be quite modest - compared to the fuss made about it and, more essential, compared to the adjustment task that remains to be done. In these circumstances it is very likely that every short term relief on the interest rate front will be misunderstood as a return to better fundamentals and may therefore merely postpone the breakthrough to a higher growth path.

On the other hand, it has to be recognized here that there is a good chance for the breakthrough to set in earlier, should a technological revolution of the right kind be just around the corner. Such a revolution would have to raise the marginal efficiency of investment, but to be more capital saving than labor saving on balance. A possible candidate for leadership in this direction may be the microprocessor in its many applications. Whether it will really turn out to have a sufficiently strong capital saving effect will - again - depend upon whether the real rate of interest is believed to remain high and whether the level of real wages and the wage differentials can be expected to fall more in line with the basic situation on the labor market.

V. NEW TECHNOLOGIES

New technologies offer new opportunities for faster growth in the future. To the extent that they raise the profitability of investment they can be a substitute for other favorable conditions which were relevant in the past, such as gold discoveries followed by low interest rates, post-war reconstruction efforts, the opening up of new foreign markets in a liberalization and integration process, or cheap oil. In the same vein, new technological developments reduce the need for wage restraint as a means for improving business prospects.

However, the new technologies, in order to be useful, must meet the requirements of the prevailing situation. This situation is characterized

- by a capital shortage with high real interest rates,
- by a perceived shortage of exhaustible resources, including raw materials, oil, and other sources of energy, and
- by great concern for the environment.

Of comparative advantage, therefore, are technological improvements which promise to be energy-saving, raw material-saving, pollution-free and capital saving. The best candidate for leadership in this respect may well be electronics and the microprocessor in all their applications, including telecommunication. It will be obvious to you how much energy, how much paper and how much environment we can save per unit of output, if we move from an oil intensive to an information intensive civilization, if we communicate rather than commute and if we use electronics rather than printed paper for exchanging information. What may be doubted, however, is whether these new technologies are also capital saving.

Usually a new technology is capital saving only on balance; this is so because it simultaneously helps to save labor per unit of output. Moreover, it may only be after some time that capital saving outweighs labor saving, e.g. after an initially high capital expenditure pays off in terms of declining costs for the equipment supplied to the customer. Apart from this, a new technology may not be capital saving on balance, except in a relative sense by being more capital saving and less labor saving than alternative paths of technical progress. Finally, whether or not a new technology is capital saving will depend upon decisions taken by the final users. If the user lets the new machine run for 24 hours per day it is more capital saving than labor saving, compared to a one shift operation. My point is that the present and expected advances in computer technology and in telecommunications are probably quite flexible compared e.g. to nuclear energy so that they will be exploited in a capital saving manner, provided the real rate of interest remains fairly high in relation to real wages. If this is so, the new electronic technologies are most likely to help us out of the vicious circle of unemployment and slow growth.

The chance that they will reduce unemployment in the advanced countries is enhanced by the presumption that the new developments in communication are likely

- to make use of human capital which has been produced so abundantly in recent years and
- to amount to product innovations which create new wants.

It may be argued that if the computer fully invades our society it will also turn out to replace and to save human capital on a vast scale. Against this I hold that it will free human resources and hence human capital for other uses. What the computer cannot do well is to replace human judgement required in complex situations or for the intuitive solution of delicate problems of interpretation, say in the translation of a poem by Goethe or in the diagnosis of interrelated diseases or in the performing arts. Although I am quite unable to make specific predictions in this field, I am fairly convinced that the computer will, albeit only indirectly, contribute to new developments in the humanities. It is in this field where future growth will find a major outlet.

VI. SHORT TERM PROSPECTS

The recent recession between 1980 and 1982 can well be viewed as a period of deliberate disinflation produced by monetary deceleration.

In the OECD area central banks reduced the growth rate of the money supply (M_2) from 11 per cent in the first half of 1980 to 6 per cent in the second half of 1982. Real long term interest rates which had been close to zero in 1980 jumped to around 5 per cent in 1981 and 1982. During the same phase inflation rates (CPI) declined from 13 per cent in 1980 to about 8 per cent in 1982. They were as low as 2 per cent in the six months to April 1983.

Unfortunately, monetary deceleration was not accompanied by the necessary wage restraint. Outside the U.S., hourly earning in manufacturing rose faster than consumer prices, so that real wages went up. At the same time profits and rates of return declined, with negative effects on investment. Real wage rigidity in the face of increasing unemployment turned out to be particularly strong in Belgium, Germany, the Netherlands and the UK and nonexistent or low in Sweden, Canada and the U.S. A high degree of real wage rigidity in a cyclical down-turn tends to produce a particularly strong fall in the rate of return on capital and, by adding to inflation and reinforcing inflationary expectations, also to contribute to high real long-term interest rates. Real wage rigidity in a downturn or in stagflation tends to produce job losses and enforce gains in productivity.

Monetary deceleration without sufficient wage restraint made world production in real terms fall by 2 per cent in 1982. It was for the first time that world production declined after the 1 per cent drop in 1975. This also holds for world manufacturing production. The decline was concentrated in industrial countries (-3.5 per cent) and was less pronounced in LDCs. The Comecon Area still had an increase of just over 3 per cent.

In 1982 total employment in the industrial countries declined by 1 per cent, most sharply in Western Europe. Overall unemployment in the industrial countries reached 30 million people, nearly 8 per cent, as compared to 6,5 per cent in 1981. In 1983 unemployment in the industrial countries is about 9 per cent.

The volume of world trade in 1982 declined as much as world production (2 per cent). It was - after 1958 and 1975 - only the third decline since 1945.

After a three year period of stagnation and decline which so far is unique in the economic history after 1945, western industrial countries now experience a new cyclical upturn. In the same way as the recession, the recovery was preceded by a change in monetary policy. Monetary acceleration started in the U.S. and was imitated in almost every country.

World recovery is led by the U.S. where employment and capacity utilization show a considerable improvement. West Germany and the U.K. were the next countries to experience a recovery. In France and Italy the recessionary tendencies are still dominant, and the recovery in Japan looks surprisingly weak in comparison to Japan's past performance.

So far the recovery has mainly come from increased outlays for consumers durables including private passanger cars. But a sustained upswing also requires a growth of investment expenditure. At the end of 1982, when the downturn had reached its lowest point, it was hard to imagine that any noticeable recovery of business investment would take place in the course of 1983. First, there was spare capacity in abundance.

Second, the international debt problem threatened to lead to a world-wide liquidity crisis. Third, real interest rates were at a level comparable to that in the early Thirties. Fourth, it was feared that protectionism would spread like wildfire. In these circumstances, continuation of the contraction or even a repetition of the Great Depression seemed to be more likely than a worldwide recovery of investment.

However, notwithstanding these gloomy considerations the monetary acceleration which we observe since spring 1982 and some fiscal measures taken by governments brought about a recovery that was not only unexpectedly strong but was also supported by an increase in investment outlays.

(a) In the United Kingdom, investment in machinery and equipment (excluding oil) recovered already in 1982 and is expected to rise by some 3,5 per cent in 1983.

(b) In the United States and in Germany these forms of investment increased markedly since the end of 1982, by annual rates of 10 per cent in the U.S. and 15 per cent in Germany in the first half of 1983. As the upturn started from a very low level, the investment increase for 1983 as a whole is likely to be less impressive. It may amount to 2 per cent for the United States and 6 per cent for Germany.

The turnaround in investment activity was brought about by (1) better sales prospects, (2) by a decline in nominal interest rates, (3) by a slowdown of wage increases, (4) by more liberal depreciation allowances and by investment tax credits, (5) by the decline of the oil price, (6) and by hopes that an international debt crisis was avoidable.

However, there are doubts whether these improvements will allow more than a short-lived recovery for the longer run. I see risks from the following factors:

- high and even rising tax rates and social security contributions,
- a worldwide tendency to rescue jobs by outright and hidden subsidies and by all sorts of protectionist devices, and
- growing pressures on behalf of trade unions to reallocate jobs by shortening the working week instead of making more jobs profitable by exerting wage restraint.

These impediments to a sustained upturn of investment seem to be particularly strong in continental Europe. With the exception of Germany and the Benelux countries, continental Europe is still stagnant. France and Italy are likely to register a considerable decline of business investment in 1983. In the Nordic Countries investment will presumably increase, but only moderately. All in all, investment activity in Western Europe is, therefore, sluggish in 1983 and is likely to increase only mildly in 1984.

In given circumstances, most firms in traditional industry will not enlarge production capacity. But investment will be made to carry out product and process innovations - improvements in product quality and efforts to reduce costs, notably the costs for overpriced unskilled labor, by using robots.

High wages and the high level of capital costs stimulate such investment more than they stimulate mere capital widening. Thanks to technical progress in microelectronics the new processes are not only labor saving but also capital saving, and they are capital saving to the extent that robots, computers and equipment in the communication system are becoming cheaper from generation to generation.

Investment activity in the service sector is likely to be more buoyant than in industry. Telecommunication and computerization enable banks, trading companies and other areas to enlarge and improve their services; and competition should lead to a quick exploitation of such opportunities.

Competition among investment goods producers will continue to be fierce and Western Europe has to try hard to close the technological gap which it faces vis-ã-vis the United States and Japan. If the investment goods industry in Europe succeeds in adjusting its products to new technologies it may not only be able to defend its traditional markets in Europe but also to expand in more buoyant markets abroad.

In the United States the chances for a sustained upswing seem to be better than in Europe, for two reasons:

(a) wages and prices in the U.S. reacted more flexibly to the disinflation policy of the past,

(b) fiscal policy was more directed towards improving conditions on the supply side. Both reasons apply to the medium run. They may be overcompensated by fears that the public sector deficit in the U.S. will continue growing and further push up the real rate of interest, the dollar, and the import surplus in the current account.

55. Prospects are less clouded for the newly industrialized countries in Southeast Asia, the new growth center of the world. If Western Europe

could manage to penetrate these expanding markets, it might overcome the fundamental weakness of its domestic economic structure.

As to the competitive position of Western Europe, its suppliers will benefit from the strength of the dollar, both in the U.S. and in third markets. Within Europe no major change in the relative competitive position of individual countries seem to be imminent. However, within the EMS, countries with relatively low wage and price increases normally have a competitive edge, as political authorities are rather slow to adjust the exchange rates when wage and price trends diverge (as they do).

Experience has shown that when governments attempt to protect "their" high-tech industries by subsidies, they actually foster inefficiencies rather than promote the catching up process. It is much more efficient to expose domestic markets to foreign competition. This leads to a more general point with which I may conclude: The more countries are prepared to liberalize, the more will they raise supply responsiveness during the present expansion of demand. And the longer can governments pursue an expansive monetary-fiscal policy without running the risk of rekindling inflation. An inelastic supply and early wage pressure would force governments and central banks to return to restrictive policies perhaps as early as in 1985.