# 1933 AND 1977 - SOME EXPANSION POLICY PROBLEMS IN CASES OF UNBALANCED DOMESTIC AND INTERNATIONAL ECONOMIC RELATIONS

Nobel Memorial Lecture, December 8, 1977 by BERTIL OHLIN Stockholm, Sweden

### I. Introduction

The economic history of the last half century offers two cases of serious international depressions in countries with an essential orientation towards a market economy: In the first half of the 1930ies and in the middle of the 1970ies. With some simplification one can say that in the former case recovery started after a few years without the aid of much conscious expansionist policy. An adaptation of the external values of the currencies took place in Northern Europe and in some British Dominions in 1931. It came almost two years later in the United States and in 1936 in Southern Europe. In the 1970ies, on the other hand, internal policy measures for expansion<sup>1</sup> have been numerous and far-reaching in almost all industrial nations except some with weak balances of payments. They have been accompanied by numerous adaptations of foreign exchange rates to relative cost levels. Yet the recovery which started in 1975 and 1976 has not been more forceful - perhaps instead somewhat slower and more hesitant than in the earlier case - in spite of the more serious breakdown of large parts of the banking system in the 1930ies. The immediate impression of these facts is hardly favourable to a policy of expansion built on the macro-economic theory developed in the thirties chiefly at Cambridge and in Stockholm.<sup>2</sup> But closer investigation and comparison is necessary.

The limited time at my disposal for this lecture makes it necessary for me to jump straight into a problem analysis, presenting some facts as I go along. Let me also mention that by the term "expansion" I mean a *rising gross national product* in monetary terms (GNP) and by contraction I mean the opposite. In some connections it will be clear that I have the *net* income - which does not include "depreciation allowances" - in mind.

II. Keynesian and Stockholm Models For Expansion of Output and Employment.

Among the theories which attempt an explanation of changes in employment and may be relevant for a comparison of recovery problems in the thirties and the seventies, I cannot pass over Keynes' underemployment equilibrium ideas.

<sup>&</sup>lt;sup>1</sup> The fact that the expansive policy in 1976-77 proved insufficient to bring about the desired economic development does not justify to call this policy "restrictive".

<sup>&</sup>lt;sup>2</sup> Similar ideas were current also among Australian economists although with less support of basic theory.

Keynes pointed out that-given a certain propensity to consume-an increase in the volume of investment would bring about an increase in the national income until it reaches a size which makes people willing to save an amount equal to the value of the investment. The change in the national income is the variable which had to reach a magnitude which is compatible with equality between savings and investment. The conclusion was important. If the volume of investment is increased the volume of employment would rise much more.

This was an abbreviated form of a reasoning that was included also in the theory which the so-called Stockholm School built on the foundation of Wicksell's cumulative process. But the Swedish theory took into account also the indirect and endogeneous increase in investment which would be caused by the expansion of the national income. And this secondary investment would bring about a further growth of income and savings. Furthermore, in the parallel work which took place in Stockholm while Keynes and his pupils worked at Cambridge, we tried to give a concrete picture of the reactions of savings by business firms and the public treasury, not only by individuals, thereby presenting a more realistic account of the propensity to save which I as a rule called "intention to save". I also tried to pay attention to the speed of reactions between price and income changes for different groups of people in processes of expansion and contraction, in order to find out something about the effects that would be dependent on the order of events. Large commodity stocks, e.g. of wheat, will intensity price reductions in the case of falling demand. This would reduce incomes of farmers and merchants and their purchases of other goods much quicker than the cost of bread purchases would decline. Consumers would only slowly save money on cheaper bread and increase their other purchases. This process took place in 1929 and exercised a depressing influence on total demand.

Furthermore, the flexibility of prices and wages and the relation between them would affect the development of profits which would play a role for the process of expansion. All this was important for a study of the effects of policies which aimed at increased employment and output with only small inflation.

Could an increase in investment bring about a rise in prices e.g. through an upward pressure on wages rather than in the quantity output. Keynes' answer was in general in the negative. Contrary to many earlier assumptions he as a rule assumed that, in cases where the unused supply of labour was large, the flexibility *upwards* for wages was very small. Price flexibility in the beginning of the recovery was assumed to be a little larger but still rather small. Hence, an increase in aggregate demand early in a recovery phase would expand output and employment. There would be almost no general wage increase but some minor price increase. Profits would rise and investments might be further stimulated, although this was not built into his basic equilibrium model.

<sup>&#</sup>x27;See "Monetary Policy, Public Works, Subsidies and Tariffs as Remedies for Unemployment", (1934). -- An excellent survey of the scientific debate about Keynes' theory is found in "On Keynesian Economics and the Economics of Keynes" by Axel Leijonhufvud (1968).

The process outlined in Stockholm was not much different although more attention was paid both to investment reactions and to the nature of expectations concerning future prices for raw materials as well as finished products. But there was on the whole agreement between the Keynesian group and the young Stockholm economists that public investments financed by borrowing-in such a manner that credits to business firms were not restricted but expanded if necessary-would lead to a rise in production and employment without necessarily much inflation as long as excess capacity was utilized.

Unfortunately, the conservatism of the British administration and a large labour conflict in Sweden from early April 1933 until February 1934 prevented an experiment on a large scale until a time when recovery was well under way for other reasons. Then the restrictions on municipal expenditure in Sweden in 1934 largely offset the expansive effect of the growing state financed investments

An experiment on a much larger scale was carried out in Germany after 1933 under the leadership of Dr. Schacht and extensive central bank financing. The result was a large increase in employment which continued several years without much inflation. The administration checked wage increases and by extended rationing measures weakened the price driving forces.

#### The 1970ies.

Let me compare these experiences with what happened in the seventies, leaving some ups and downs of certain raw material prices aside. In most industrial countries an expansive financial policy has been pursued in 1975-77 under conditions of general expectations that price inflation would remain strong. Wage demands and wage rates were substantially increased in the beginning of the decade, oil prices were suddenly substantially raised towards the end of 1973. Prices rose more or less in accordance with wages per unit of output and the extra cost of oil and some raw materials. Production varied with the business cycle but in some countries with only a faintly rising trendweaker than in the 1960ies. In some countries like Sweden cost levels were too high-due to appreciation of the "krona" and substantially rising wages. Hence the balance of trade from 1975 became weak and employment declined. In several other countries a recovery started hesitatingly in 1975 but a set back took place in the following year until some rise in output started again. All the time unemployment remained on a high level and yet prices and costs of living were rising, although with reduced force.

Evidently, some essential reasons for this unfavourable development can be found in the high upward mobility of wages, in the unbalanced foreign exchange relations and in the general expectations of continued cost inflation, during a period of expansive finance policies in most countries and expansive credit policies in several countries through low levels of *real* rates of interest under the influence of inflation which reduced the value of debts.

The early theories in the thirties were built on the assumptions of low wage flexibility and moderate price expectations. This was realistic at that time but had no contact with reality in the seventies. This explains why the so-called

Phillips' curve is no longer relevant-as explained by professor Milton Friedman in the last year's excellent Nobel lecture. Professor Friedman emphasized the difference between an inflation which is expected-as in the seventies-and one which is not foreseen when business firms make profit calculations for the future. It took a long time before a general recognition of this fact found its due place in the debate on employment policy.

I do not deny that the theory of expansion which was developed in Stockholm in the early thirties was deficient in not explaining clearly enough the role of the different assumptions about the flexibility and speed of reactions of wages, raw material prices and the prices of manufactured products and the alternative possibilities of profit expectations. But more attention than in the Keynesian model was given to these matters-and to the external balance.

The future cost-price relation may, of course, appear as unfavourable for other reasons than rising labour costs per unit of output. Raw materials have in several recovery periods been available only at rising prices, which may cause risks for future losses.

It is also possible that a fall in the value of foreign currencies may cheapen imported manufactured goods. This can mean unsatisfactory profit conditions and, possibly, pessimistic profit expectations for the future.

I have chosen a few unbalanced price, cost and foreign exchange relations to exemplify the obvious possibility that they may counteract tendencies to expansion. Such unbalanced relations and consequent pessimistic expectations were numerous in 1934 and 1935 in countries like France and Switzerland which put off devaluation of their currencies until 1936, while most of the other countries had devalued much earlier. Apart from brief periods after the depreciation of the currency, e.g. in the United States in 1933, there was no general expectation of a general rise of the price level nor were wage costs going up or expected to do so in the near future, except in the United States-particularly in 1933-34. As soon as sales volumes of export goods started to grow under the stimulus of currency depreciation and the cheapening of such goods on the world market-profits rose and the outlook became more optimistic. This illustrates the great importance of the adaptation of international cost relations and foreign exchange rates, a question I shall return to. In the last few years there are other examples of a similar kind, e.g. in France, which this time was quicker with a reasonable depreciation than in the thirties.

So far I have said next to nothing about *the great difference in interest rates* between the depressions in the early thirties and in the middle seventies. Was the relatively greater force of the economic recovery in the former period perhaps due to low interest level in the industrialized countries, whereas the much higher interest level served as a break the recovery in the seventies? In my opinion the answer is "No". As a matter of fact, in spite of higher nominal interest rates, it was cheaper to borrow capital in the seventies than in the thirties. The influence of price level changes on the real value of the sums one had to repay should be taken into account.

From 1929 retail and wholesale prices were falling several years-longer in the gold standard countries-and rising a few per cent in the following period. Nominal bond yields in the leading countries-except Germany with a level around 8 per cent-lay between 4 and 5 per cent-with a falling tendency for some years. It is uncertain how much expectations of price level changes influenced the borrowers' opinion in the thirties about the "real" interest they had to pay. The interest level was, in any case, positive not only before 1933 but also in the following years. In the middle of the present decade, on the other hand, the rate of inflation and probably the expected price rise in most countries exceeded the bond vield. Hence, "real" interest rates were negative and remained negative or around zero to 1976 in most industrialized countries, except Switzerland, where the inflation was insignificant. The interest rate on middle term bank credit was higher everywhere and the "real" level was often positive, but it does not much alter the picture. The general impression is that in most industrialized countries borrowing was cheaper in the seventies than in the thirties.

The "hesitant" character of the recovery in 1975-77 no doubt had more to do with the restrictive credit policies in countries with "weak" payment balances, like Great Britain, Italy and Scandinavia-whereby the effects of an expansive public finance policy was more or less offset-than with the "high" level of interest charges. In countries with "strong" payment balances and general confidence in the economic future, the interest policy did not deprive the economic policy of its expansive character, e.g. in the United States and West Germany where budget deficits were considerable, and a moderately expansive policy of public expenditure was pursued. The net total effect of national economic policy in weak and strong payment balance countries could be assumed to be expansive.

The unfavourable factors include the monopoly price increase for oil and the inability of the oil exporting countries to spend their new extra income. Among the other circumstances which made profit expectations insufficient for prosperity in the world economy one must reckon the rapid rise in labour costs and the expectations that cost increase might outrun price increase, which spread in business circles in many countries. This was one if the chief differences between the recovery periods in the 30ies and the 70ies.

Another difference was no doubt the fact that the percentage reduction in world output and employment during the downward phase of the recession was several times greater in the 1930ies than in the 1970ies. For this reason surplus capacity when recovery started was greater-in percentage terms-in the former period that in the latter. Without many "bottle necks" output could grow more and the process of expansion could gather greater strength. On the other hand, the relatively greater surplus capacity limited the stimulus to new investment which may have weakened the forces making for recovery.

III. The Relative Size of Inflation and of Production Growth When National Income in Monetary Terms Is Expanded-under the Influesace of Different Policies and Conditions

How is a policy of expansion of GNP in value terms to lead to as much production and as little inflation as possible? This is a question of great practical importance. Some economists belonging to the monetarist school are inclined to believe that a policy which raises the national income in terms of moneystarting from a position with considerable unemployment-will in most cases bring much inflation and only a small increase of output. The opinion among the expansionistic economists in the thirties was more optimistic. They believed that it would be possible -- under the then existing conditions-to obtain a large increase in output with only a little inflation. There is still a large group of economists who hold an optimistic opinion, in spite of some gloomy recent experiences.

My previous reasoning seems to point in the direction that a great many circumstances will be able to influence the development, i.e. determine the share of increase in GNP which takes the form of inflation and increased production respectively. This seems to be a problem where-following Alfred Marshall-one is justified in saying: "All brief statements are wrong".

At which stage of the recovery will producers and traders in a certain industry start increasing their prices? My impression is that it will as a rule happen before the stage of full utilization of capacity is reached, but that rules of behaviour vary from one country to another and change gradually. Much depends on with utilization that is regarded as "normal" and what the market outlook is for the near future. The influence of price control can be essential as in Germany in the thirties, but small in other cases. If there is a general expectation in the world that production in manufacturing industries will expand, a speculative rise in raw material prices may come at an early stage and lead immediately to somewhat higher prices for the finished products. Expectations of this sort may lead to an increase in commodity stocks at all stages of activity, which means an increased demand for primary products and a further upward movement of their prices.

Evidently the behaviour of the world markets for primary products make it much easier for an individual country to expand without inflation than it is to bring about a world wide international recovery without inflation.

In general it can be said-with the abovementioned qualifications-that the greater and the more evenly spread the surplus capacity is, the smaller the inflation will be as a result of a certain expansion measure. Naturally, the spread of unemployment among skilled workers, the wage policy of trade unions and the possiblility of "wage sliding", particularly in industries with piece rate payment systems, will play a great role. It may also exercise a contagious effect on wage rates in other industries.

The question I raised was the following: Which kind of policy of expansion can lead to relatively large increase in output and employment and a relatively small degree of inflation: It will be a political decision to determine what is to be considered an optimum combination, i.e. the best choice between margi-

nal "trade off" between one per cent more output and a certain per cent less inflation at different stages of development. A number of policy aspects can stimulate output and counteract inflation. They can change the optimum position and can only be enumerated in this lecture.

- 1. The policy makers and the business world need knowledge about the relevant conditions. It is not always easy, e.g. to get a true picture of the local and inter-industry spread of surplus capacity with regard to labour and factories. If the facts in these respects are made generally known, it will help industry to plan resource utilization e.g. increased supply of raw materials, available when and where it is needed.
- 2. Stimulus to the private and public demand for the types of goods and services which can be produced through a better utilization of the existing capacity and available stocks of primary products and with the aid of new capacity, which can be created within reasonable time. Public works fall under this heading.
- 3. Counteract if possible disturbances in demand conditions which create new and uneven surplus capacity.
- 4. Stimulate and facilitate movements of labour between places and regions and between different occupations. Organise additional training for people from all industries including agriculture, who want to qualify for new jobs. Counteract a possible preference of some persons to live on social assistance rather than seek a new job in new places or new occupations.

All these things and some others will facilitate an increase in output, as a result of a selective increase in demand. With regard to the task of a weakening of the forces making for inflation I shall now mention some policy aspects that can be essential.

- 5. Use strategic price control in some periods to counteract price increases that go beyond the rise in costs and reasonable profits. This is particularly important if monopolistic organisations will otherwise raise prices to obtain profits that are generally regarded as unjust and bad to high wage claims.
- 6. Discourage tendencies to wage and salary increases which go beyond the rise in costs of living and in productivity. (See section IV).
- 7. Attempt a general agreement between government, parliament and organisations that inflation should be kept back in accordance with a definite goal. Lead in this way the price expectations away from anticipations of a continued inflation of the size of the preceding decade in industrialised market economy countries.
- 8. Use a flexible monetary system which can reduce the value of foreign currencies to counteract the effects of an inflation abroad if it is a natural part of a policy to avoid deflation.

This kind of policy is naturally coordinated with the general policy of credit and finance, which affects the aggregate volume of demand. The policy makers have to make the "trade off" between the different possible combinations of output and inflation. The goal is to find a "Pareto optinum", where no possible increase in output is worth the price of the consequent extra inflation and no

possible reduction of inflation is worth the sacrifice of accepting the consequent reduction of output.

The *speed* of the process of expansion of aggregate purchases, which is called forth in this way will affect the character and durability of the development. E.g. the adaptation of the supply of labour with regard to regional location and quality will better correspond to the demand for labour if reasonable time is available for the adjustment. This may be one reason why many observers with practical experience from business hold the opinion that a recovery will go further and that the high level of activity will last longer, if the expansion is not speeded up excessively through measures to increase aggregate demand. A cautious procedure also permits the gaining of insight through "trial and error".

The problem have here been seen from the point of view of an individual country. Several extra difficulties and problems are created by the shifting developments in different countries and their influence on international economic relations. See the last section of the lecture.

An analysis in equilibrium terms of the conditions of simultaneous internal and external balances-a subject where a pioneer work has been done by James Meade in "The Theory of International Economic Policy" (1951)--can provide a helpful basic insight. Even though it is seldom directly applicable to the study of a process *of change* in output and in price levels, it can give indications as to which kind of such changes, that is a movement away from the Pareto optium.

## IV. Further Observations On the Increase of Real Income and the Limitation of Inflation In a Phase of Expansion.

How is a continuation of an inflation of the magnitude which the industrialized countries have experienced in the last decade to be avoided? My analysis can be brief as there is a considerable agreement between economists about this question, although the difficulties in making such policy effective in real cases are great for social and political reasons. Insight in this matter is important for successful policies which aim at an expansion of real income.

It is a generally accepted procedure to make a distinction between three types of inflation. The first is "demand inflation" which occurs when the aggregate demand exceeds the value of the aggregate supply at existing prices. The sum total of consumers demand and investment demand coming from domestic or foreign sources exceeds the value of the supply, which also has its origin both at home and abroad. In other words, there is a lack of general monetary balance. It is often caused by an increase in private investment demand or demand for public purposes but can also be due to an expansion of consumers' purchases connected with a reduction in the disposition to save on the part of individuals and business firms, as well as public authorities. A characteristic of this kind of inflation is usually that the excess of demand leads to increased business profits. Business incomes rise quicker than costs.

The second type of inflation can be called "cost and monopoly inflation". It is often due to the pressure of increased wage rates or new or higher wage

taxes. In these cases the cost of labour in production is moved upwards more than productivity. In the absence of special obstacles, e.g. foreign competition, the consequence is rising commodity prices but not rising profits. It occurs sometimes that demand inflation is superimposed on cost inflation.

However, cost and monopoly inflation may also be caused by monopolistic price increases at home or abroad. The leading instance is the lifting of the price of oil to three or four times its former level a few years ago. The consequence was higher costs throughout industries which need large quantities of energy and higher commodity prices. If the credit systems of the different countries should refuse to supply the means of payments and volumes of new credit required for such a development - with the intention of preventing rise of the price level-the result will be a growth of unemployment.

From the point of view of an individual country a third kind of inflation is the upward pressure on costs and prices which can be the result of rising prices abroad, unless this effect is prevented by a rise of the exchange rate of the domestic currency.

It goes without saying that many difficulties meet a government which-under present conditions-in cooperation with the central bank tries to avoid demand inflation, control monopolistic pricing and create conditions where a trade union pressure or so-called wage sliding does not lead to wage increases which exceed the average growth of productivity. Besides, to avoid contagious import inflation due to rising prices abroad-when they are rising -it is necessary to use a system of flexible foreign exchange rates, which may be complicated by speculative capital movements. It may, however, sometimes be assisted by such movements, if a skilful policy of declarations of monetary goals is used.

There can be no doubt that the greatest problem in the long run is how to create the situation where excessive wage increases are avoided. In a country like Sweden the share of the national income after deduction of taxes, which goes to wage earners and salaried people is normally above 80 per cent. The extra income which is due to monopolistic price policies of domestic business firms is insignificant, except perhaps during boom periods. Foreign monopolies have played a much greater role in the seventies than the private domestic monopolies, most of which have to reckon with competition from abroad and, therefore, are rather "single producers" than real monopolists.

Under the conditions created by high marginal income taxes and expectations of continued inflation trade unions in Sweden in the last three years found it necessary to ask for-and obtained-wage increases which-including wage sliding and increased wage taxes-increased the labour costs almost ten times as much as the increase in real wages. A system which makes it necessary to obtain a nominal wage increase of 15 per cent to give a reasonable chance of an increase in real earnings by 2 per cent can hardly be called rational. The centralised negotiations between employers and unions are under these conditions chiefly concerned with the question: how much inflation Sweden is to have. Only secondarily the issue is how large the increase in real earnings shall be, but the answers to these two questions hang together. Consequently,

the discussion has run in terms of very high nominal wage increases. This is so in spite of the fact that the outcome with regard to real earnings during a one or two year period after the agreement is uncertain as it depends on the unknown future increase in costs of living.

Evidently-apart from the progressive tax system, heavier through inflation one of the main reasons for wage demands which are many times higher than the rise in productivity is the expectation of continued large inflation. Here we meet a great difference between the actual situation and the conditions during the depression of the 1930ies. The experience of falling prices from 1929 to 1932 led to the belief that no large rise in the cost of living could be expected in the first few years. This in turn led to what seems now very modest wage demands, moderate price increases and low inflation in the following years even in countries where depreciation had paved the way for recovery.

It is hard to avoid the conclusion that if we are to combine a reasonably high volume of employment with a greater stability of price levels in the industrial world in the future than we have had in the seventies, some revision of the method of collective agreements is called for-in some countries at least. The trade union members are concerned with real earnings and not earnings in terms of money. It should not be impossible to negotiate about what the parties concerned are interested in. If this proves impossible, there must be some kind of "income policy", e.g. through agreement between governments, parliaments and labour market organizations. It can limit the nominal wage increase without reducing labours' dominating share of the real national net income. A system of "index scales" of income taxerates will probably be necessary.

Besides, it seems inevitable that some adaptation of the foreign exchange rates must take place now and then, as labour costs, productivity and demand conditions cannot be expected to follow the same lines in all industrial countries. The question also arises if the need of foreign exchange variations could be reduced through some coordination of the *relative* changes of the wage demands of the trade unions in different countries. But it is obvious that enormous difficulties would meet such an attempt.' When will time be ripe for an attempt?

## V. Brief Observations on the Results of Insufficient Adaptations of International Cost Relations.

Let me begin with the influence of an adaptation of the foreign exchange rates on the development of output in an early case. Finland avoided participation in the world wide deflation in the beginning of the 1920-ies and

<sup>&</sup>lt;sup>1</sup>A very skilfully made survey of some problems which I have dealt with in this part of the lecture is to be found in "Inflation and Unemployment" by Lars Calmfors and Erik Lundberg, Stockholm 1974 (in Swedish). A more recent OECD-investigation "Towards Full Employment and Price Stability" by seven leading economists from seven industrial countries under the chairmanship of Paul McCracken, Paris 1977, -- the Swedish member was Assar Lindbeck - also provides an excellent survey and analysis.

also suffered less than other North European countries through increased unemployment and decline in industrial production. From 1920 to 1923-the period of deflation in Scandinavia and Great Britain, which were close trade partners of Finland-the Finnish cost of living rose by 22 per cent. The quotation of the Finnish mark at the same time fell by 46 per cent. Finnish wage costs were in the rest of the 1920ies relatively low compared to in most European industrialised countries.

More important for my lecture is the influence of the depreciation of the British and Scandinavian currencies in the autumn of 1931-by roughly 27 per cent for the pound and a little over 30 per cent for the Scandinavian currencies. The Italian lire followed a similar course. But the dollar was depreciated by 40 per cent in the course of 1933 and the Scandinavian currencies slided down to about the same relative position. while pound sterling was kept a little higher in its relation to gold. The French and Swiss currencies were kept stable in gold until the autumn of 1936, when they also were depreciated.

Without going into the differences with regard to the development of relative wage costs-which differences were much smaller than the foreign exchange variations-it is possible to draw some conclusions about the effects of the changes in competitive power, which took place as between Great Britain and Scandinavia, on the one hand, and France, on the other.

	U.S.A.		G.B.		France		Germany		Sweden	
	Prod.	Prices	Prod.	Prices	Prod.	Prices	Prog.	Prices	Prod.	Prices
1929	100	123	100	115	100	115	100	125	100	168
1931	68	107	84	103	89	117	68	110	96	158
1933	64	94	88	98	77	107	61	96	91	151
1935	76	100	106	100	67	100	94	100	123	155
1937	92	105	124	108	83	128	117	101	149	161

Table I. Industrial Output and Costs of Living.

Table I shows that the development of production in industry from 1931 to 1933 was more favourable for the depreciating countries, although Sweden -where output was almost as high in 1931 as two years earlier-suffered from a delayed recession and the special Kreuger crisis in 1932. The countries with fixed gold value currencies saw their industrial output decline. In France the drop from 1931 to 1935 was about 25 per cent, while the index for Great Britain rose by 26 per cent and for Sweden by 28 per cent. In Germany the enormous expansion of public activity chiefly for rearmament brought about a large increase in output and employment, in spite of the high quotation of the mark. Import restrictions were used to keep the foreign trade deficit down.

The development in the United States was affected by a quite different "economic policy program" from the summer of 1933 when the policy of the Roosevelt regime got going. From 1929 to 1931 industrial production declined by 32 per cent and by a further 6 per cent in the following two years. Then,

in the first two-years periods, came an increase of output by 17 per cent and 21 per cent respectively. But these figures hide the fact that the volume index rose from 63 in the first quarter of 1933 to 100 in July and then fell to 73 in November. It remained on this low level for 13 months to November 1934. Only thereafter did the lasting recovery start! This serious set back is a problem in itself.

I must confine myself to some brief observations. The recovery programstarted in the first half of 1933-which aimed at higher wages-brought an end to pessimistic price expectations in many circles, which stimulated production. However, it became gradually more and more evident that to increase the price of something you want to sell-in this case labour-was not an effective means of stimulating the sales, i.e. the demand for labour and employment. A certain distrust of "government intervention on a large scale" persuaded important business circles to "wait and see". If prices were expected to rise as much as wage rates, expected profits would not go up, unless one could be reasonable certain of an increased future volume of sales, which the business world was not in the beginning. This I maintain is one of the main reasons why the original optimism in many American business circles disappeared and a set-back in production came.

There was, however, after some time a considerable stimulus to American export industry from the increase of competitive power due to the devaluation of the dollar and from improvement in business in some European and other countries. The import competing home market industries also got a better chance. Besides, some government measures to stimulate private building and large public works exercised positive effect on production. Under such conditions the cheapening of credit and the reorganisation of the credit system could assist also. However, the wrong method to increase demand for labour, must have delayed and weakened the recovery. To what extent "time was ripe" for an ordinary upswing of the business cycle-once the expectations of continued price decline had vanished-is impossible to say without detailed analysis of all possibly relevant facts.

Let me now turn to the 1970-ies and inquire if here, like in the 30-ies, one can trace an influence of unbalanced relative cost relations in different countries due to maladjusted foreign exchange rates.

Like France and other gold standard countries in the years 1931-36 some countries in the seventies kept the international quotations of their currencies on too high levels. Internal cost developments were not sufficiently or only belatedly taken into consideration. In other countries the devaluation was excessive. The fall in the external value of the dollar, pound sterling and lira brought difficulties e.g. for French industry, until a downward movement of the quotation of the French franc in the middle of the decade helped to restore the competitive ability of the French industry. The overvaluation of the currency lasted longer in Sweden, where in the two years 1975 and 1976 labour costs rose by 42 per cent, while the external value of the Swedish

currency was raised by 8 per cent relative to the average quotation of the currencies that were important for Swedish trade. The result was a growing loss of markets for Swedish export industry and great difficulties for some import competing domestic industries as well. Naturally, the changing structure of the world economy, e.g. textiles, steel and wharfs also played a significant role.

The failure to adapt the foreign exchange rates when internal costs rose differently in different countries also brought some other indirect negative effects for the world economy, which made themselves felt not only in countries with "overvalued" currencies, but also in countries with a long lasting inflation, a falling external value of its currency and a "lack of confidence" i.e. pessimistic expectations and a flight of capital. Profit expectations were unsatisfactory in countries like Great Britain and Italy, although their currencies were not "overvalued".

The direct and indirect negative effect of overvalued currencies was well known already in the 1930-ies. It was emphasized particularly by J. M. Keynes, when Great Britain had returned to the old gold parity in 1925, without a natural balance with costs in the chief competing countries. When finally the pound was depreciated in 1931, Keynes reaction was optimistic. In a letter I received a few days later he wrote: "We in Great Britain are living in a state of boisterous cheerfulness over the events of the last week!" (24th sept 1931).

It may be worth while to add some brief comments on the Swedish economic development in the periods after the devaluation of its currency in the early 1930-ies, the late 1940-ies and in the present year 1977. As I have already mentioned, there was only a very insignificant expansionary economic policy in the years 1932-1935, although much more had been planned. Some years the contraction in the municipal financial policy offset the expansion of the state. But, a rising demand for Swedish exports from the autumn of 1932 and the relatively low Swedish costs after a depreciation around 40 per cent in the years 1931-33 brought a substantial recovery in the Swedish economy, which lasted until the second world war. Particularly for a small country, an undervalued currency seems to have a very considerable expansionary effect-particularly after a certain lapse of time.

This conclusion is corroborated by the Swerish development after the depreciation of the "krona" by 30 per cent in 1949. Swedish costs became relatively low and the competitive power remained large during many years thereafter, in spite of substantial wage increases. A very favourable economic development characterized Swedish industry in practically the whole of 1950-ies.

In the last few years, the opposite Swedish development, which I have indicated for 1975-76, brought a larger labour cost increase than in most countries, which had the opposite effects on output and employment. They stagnated and declined.

Competitive prices based on relatively low money costs in some countries seem to exercise a favourable influence on industry in those countries but probably a negative effect on other countries. This, however, depends a great deal on the reaction of profits and profit expectations.

The impression gained is no doubt that *a better international cost balance in the 1970-ies* would have made the competitive power of different countries more "normal". It would also have increased confidence in business, diminished certain speculative capital movements and led to a more efficient conglomerate of measures for economic expansion. To avoid an "overvalued" currency is, evidently, not a sufficient condition for such profit expectations and investment volumes, that are necessary for the maintenance of high employment. But the maladjustment of relative cost levels seems in many cases-both in the 1930-ies and the 1970-ies-to have been one of the major causes of an unfavourable development of employment.

The erratic development of relative production costs in different countries and of the external currency values, could, of course, be modified so as to improve the international cost balance and, reduce discrepancies in competitive power. The International Monetary Fund or some other institution could serve as an expert advisory agency with regard to minor depreciations and appreciations of the currencies in the member countries. IMF-rules of behaviour with regard to the relation between cost level variations and foreign exchange rates could be laid down in the same way as the codex of principles for trade policy by the GATT. It is conceivable that thereby the conditions for reasonable policies of expansion could be improved from a world economic point of view.

It should not be overlooked, however, that a natural depreciation of a currency of a country with an excessive cost level will make international cost relations during a considerable period of time more natural only if the price raising effect of the depreciation does not lead to considerable extra labour cost increases or an unfavourable development of productivity. If it does, inflation will get new force and an international cost relation maladjustment will continue.