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The Swedish Economy Facing the 80's*

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As the Swedish economy faces the 80's it is trying to recover from one of the longest and deepest crises in its industrial history. The point of departure for the evaluation of the Swedish economy which the Industrial Institute for Economic and Social Research (IUI) has recently made [1] is that a diagnose is more important than a prognosis, i.e., it is more important to clarify the present economic situation and how it developed than to forecast the future course of the economy. Even though certain forecasts are also presented in the study, the emphasis is clearly on trying to understand the nature of the problems the economy now faces. In order to do this, it is necessary to take a long historical perspective.

Fortunately, such a historical approach was taken in another study published in 1979 by the Institute;[2] that material forms an important basis for sizeing up the present and the prospects for the Swedish economy.

Rather than trying to summarize in a few pages all that which has been presented in a 400-page book and three appendix volumes,[3] I shall concentrate here on the analysis of the factors which have generated the present difficulties in the Swedish economy. I will

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* A lecture given at the Finnish Economic Association in January 28, 1980.

1. *Eliasson, Carlsson, Ysander, Holmlund, Horwitz, Josefsson, Södersten, Att välja 80-tal. IUI:s långtidsbedömning 1979.* IUI, Stockholm 1979.

2. *Carlsson, Dahmén, Grufman, Josefsson, Örtengren, Teknik och industristruktur — 70-talets ekonomiska kris i historisk belysning.* IUI, IVA, Stockholm 1979.

3. *Axell, Gustafsson, Holmlund, Horwitz, Utrikeshandel, inflation och arbetsmarknad.* Specialstudier för IUI:s långtidsbedömning 1979, Del I. IUI, Stockholm 1979.

B—C Ysander m fl, Kalkyler för 80-talet. Specialstudier för IUI:s långtidsbedömning 1979, Del II. IUI, Stockholm 1979.

Normann, Renck, Larsson, Specialstudier för IUI:s långtidsbedömning 1979. Del III. IUI, Stockholm, forthcoming.

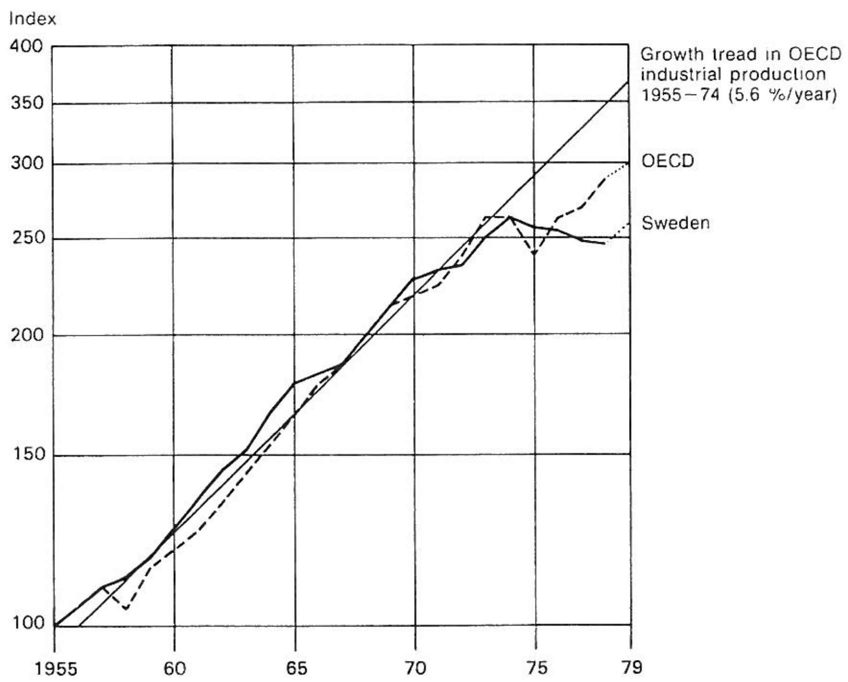


Figure 1. Industrial Production in Sweden and OECD 1955—79.

have very little to say about the future. The approach I have chosen also means that I will not discuss several large sections of the main report dealing with the public sector, the labor market, and other problems.

Reasons for the economic crisis of the 70's

There are essentially three types of reasons for the crisis in the Swedish economy in recent years:

(1) short-run factors partly having to do with the business cycle,
(2) factors interfering with the allocative functions of the market system, and
(3) long-term structural factors.

Sweden is certainly not alone in having experienced economic difficulties in the latter half of the 1970's. As shown in figure 1, industrial production dipped below its 1955—1974 trend from 1974

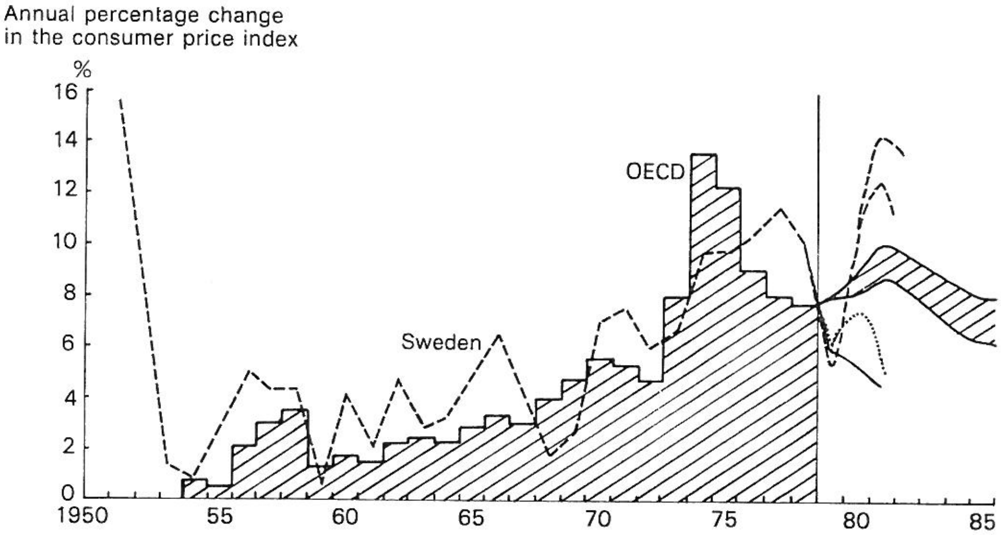
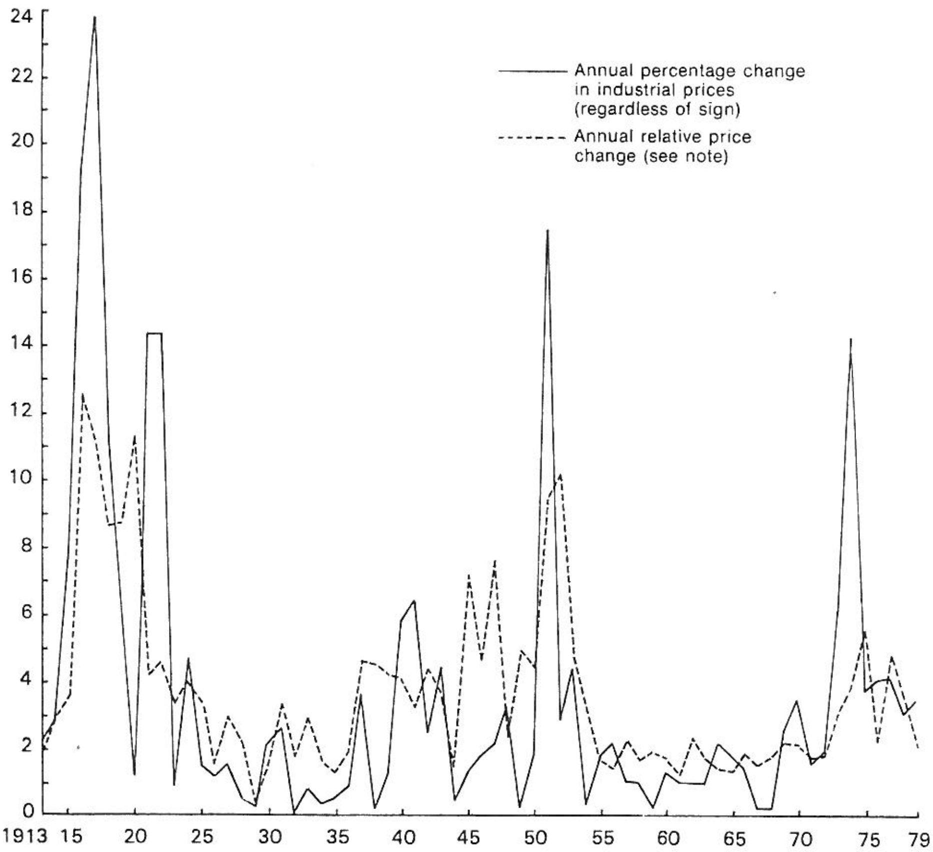


Figure 2. Inflation in Sweden and OECD 1955—78 with projections to 1985.

and onwards in the entire OECD area. The recovery from 1975 and on has not been sufficient to bring the industrial growth rate up to the previous trend. In Sweden the downturn came a year later than in the other OECD countries, but on the other hand the upturn did not occur until mid-1978, three years later than in the OECD area in general. This delayed reaction can be attributed partly to economic policies pursued in Sweden to »bridge over» the international recession (including, i.a., government support of inventory buildup and lowered value added tax), partly to a normal pattern having to do with the structure of Swedish exports (containing a large share of raw materials and investment goods). Certainly the wage explosion which occurred in Sweden in 1975—76 did nothing to improve the situation.

Reduced allocative efficiency through inflation

In addition to these relatively short-term factors there are others causing disturbances in the adjustment to the long-term changes that will be outlined below. These factors are inflation and the growth of the non-market sector.



Note: The relative price change has been calculated as $P_{R_t} = \sum_{i=1}^{n} \frac{|P_{i_t} - \bar{P}_t|}{n}$

where P_R = relative price change

P_i = price change for certain commodities (iron ore, wood pulp, steel, textiles, and engineering products)

$\bar{P}$ = average price change for industrial goods

i = 1, ... n, n = 5

i represents each of five industries.

Figure 3. Annual percentage change in the price index for industrial goods and in relative prices in Sweden 1913—1979.

Regarding inflation, Sweden has had persistently higher rates of inflation (as measured by changes in the consumer price index) than the OECD area in general since the mid-1950's, with the exception of 1958, 1968—69, and 1973—75. See figure 2. The burst of inflation which started in 1973 was more pronounced initially in the OECD area than in Sweden where it peaked later and lasted longer.

There is a strongly positive correlation between the rate of inflation and the rate of relative price changes (see figure 3). When relative prices change rapidly, it is difficult to distinguish general price movements from relative price changes and thus to interpret the price signals correctly. Therefore, inflation creates uncertainty and delays adjustment to changes in relative prices. The reactions of various economic agents become unpredictable and erratic, further aggravating the uncertainty. Planning horizons become shorter and discount rates higher, limiting investments to short-run cost reducing measures. There is a good deal of evidence that an economy which is subjected to high rates of inflation for a prolonged period will find itself in a state of disequilibrium with undependable price signaling. This leads to diminished investment as well as inefficient resource allocation, since the investments that are made may easily be directed to the »wrong» firms and sectors of the economy. Because of this, the economy loses momentum even in the longer run.

For this reason, a substantial reduction in the rate of inflation is one of the most crucial factors determining the performance of the Swedish economy, at least up until the mid-1980's. Unless the rate of inflation can be brought down, it will be difficult to bring about the structural changes in the economy which are necessary.

Having said this, it is important to point out that lowering the rate of inflation is a difficult task indeed. It is not made easier by the fact that there is no universally accepted theory (model) of inflation. Some economists emphasize shortrun factors, such as the failure of stabilization policies, the oil price increases and the increased world liquidity resulting from large OPEC balance of payments surpluses, etc.

Other economists stress longer term factors such as the growth of the public sector, particularly because it is largely financed through taxes rather than through market prices, thus creating a growing gap between the demand for public goods and services and their supply. The highly progressive income taxes in many countries are also inflationary, since they drive a wedge between employer and employee incentives, leading to inefficient resource allocation. Another long-term factor is the transition in the early 1970's from fixed to flexible international exchange rates, the reduced price discipline in various countries which accompanied this, and the lack of experience of handling the new freedom which flexible exchange rates give economic policy makers. This gave the battle against inflation an entirely new dimension.

The diminished role of the market economy

Thus, inflation is one reason why the adjustment to new conditions in the economy is delayed. Another reason is that the flexibility and efficiency of the mixed market economy have been eroded. In recent years, there has been much debate in Sweden about whether or not the functioning of our mixed economy is in danger. This is an area in which there has been much too little empirical research. But even though empirical knowledge is deplorably scarce, it is our impression that there is a set of questions here which need to be answered if one is to deal comprehensively with the ailment of the Swedish economy. The issue simply cannot be ignored. The effort which we have made in our study to acquire quantitative knowledge in this area must be seen as a first attempt indicative of what needs to be done in terms of further empirical research, not as definitive evidence.

Our point of departure is that we would like to retain a market economy with a certain degree of regulation, i.e. what is commonly referred to as a mixed economy.

The underlying value judgement is that the degree of market orientation of the economic system is an important determinant of efficiency and economic growth. We note, however, that there may be a conflict between efficiency and equality in the society.

The question is to what extent the degree of market orientation has diminished in recent years. The degree of market orientation refers to the degree to which the resource allocation in the society is carried out via markets which are not subject to regulation or restricted competition or distorted by subsidies.

Our calculations show that the non-subsidized share of industrial production diminished from approximately 98 % in 1975 to about 87 % in 1978/79. Thus, the subsidized portion has increased very rapidly in recent years, but it is still fairly small. Calculations made by GATT (The General Agreement on Tariffs and Trade) show that state subsidies to industry constituted about 1 % of the GNP in Sweden between 1965 and 1973 but increased to 1,4, 2,2 and 3,2 % in 1974, 1975 and 1976. According to GATT, the 1976 figure for Sweden was higher than that for any other OECD country with the exception of Belgium, Ireland and Norway. However, during the earlier part of the period under study, the Swedish figures were clearly below average.[4]

We have also tried to calculate the degree of market orientation of the whole economy, not just the industrial sector. The calculations show that in 1978/79, approximately 80 % of the production of goods and electric power was nonsubsidized, but only about half of the production of services. For the economy as a whole, less than 2/3 of the production of goods and services was non-subsidized. This figure has decreased during the 1970's because the share of the public sector has increased and because the industrial subsidies have increased.

However, even though government subsidies to industry have increased rapidly in recent years, one cannot immediately draw the conclusion that our industry has become less market oriented during the post-war period. The high degree of participation of the Swedish economy in foreign trade in combination with the growing liberalization of world trade would indicate, on the contrary, that our industry has become more exposed to foreign competition and therefore possibly more market oriented than earlier.

Nevertheless, the increased subsidies of industry in recent years pose a serious problem insofar as they have primarily involved some of our largest export industries responsible for about 40 % of our total exports (iron ore, iron and steel, shipyards, the forest based industries, and textiles and apparel) which up until now have been the basis for a large part of the increase in our standard of living. If these subsidies are not quickly withdrawn during the present upswing in the Swedish business cycle, there is great danger of permanent damage to our international competitiveness.

If one tries to measure the degree of market orientation of the Swedish economy from the demand side rather than from the supply

4. *Herin, J., 1979, »Den internationella konjunkturutvecklingen och strukturomvandlingen» i Vägar till ökad välfärd,* Expertbilaga 1, s. 105. (Ds Ju 1979: 2) till Ds Ju 1979: 1.

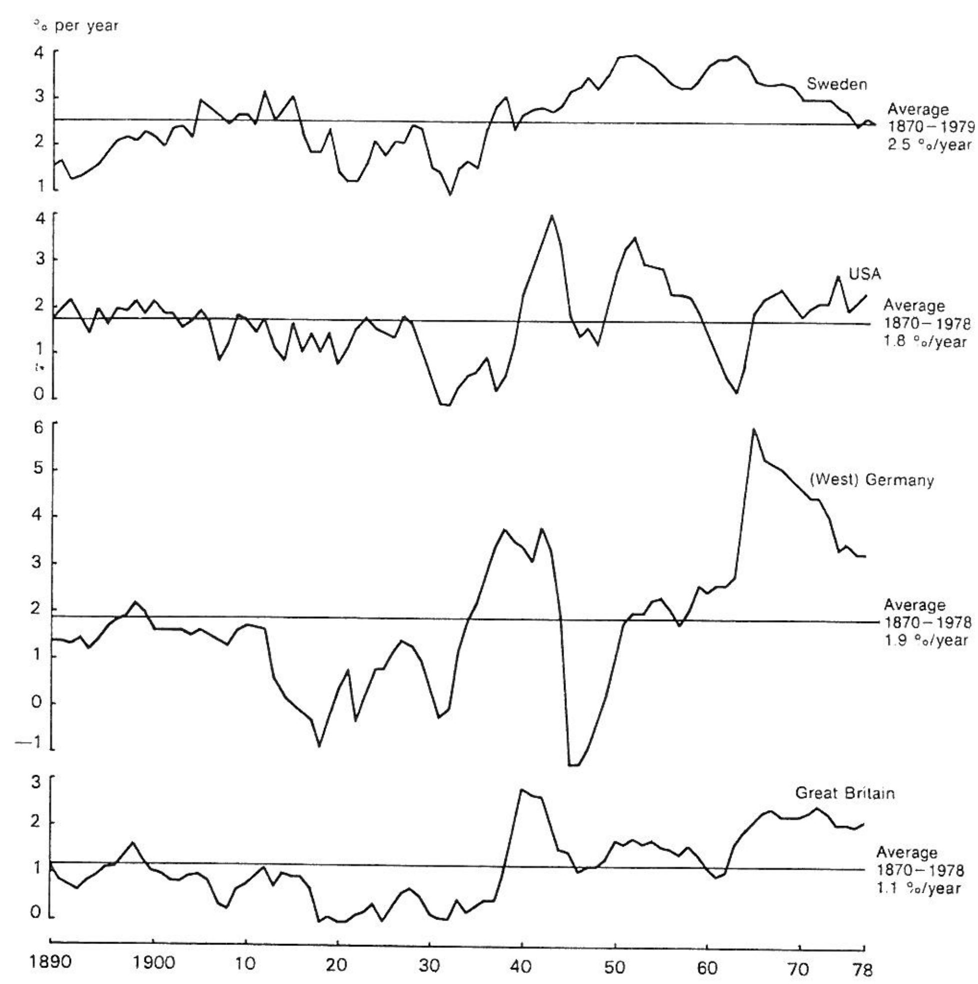
side, the extent of price regulation and of limitation of competition must be considered. Our rough calculations show that only about one-third of the total (private and public) consumption in the country is guided by market prices. This is based partly on the assumption that none of the goods and services produced by the public sector are sold at market prices. This assumption may or may not hold; nevertheless, it is beyond doubt that a very considerable part of the Swedish economy is guided by other criteria than market prices.

The problem with the public sector as far as the efficiency and flexibility of the economy are concerned is not that it has grown so rapidly in recent decades that it now absorbs approximately the same share of total employment (25 %) as the manufacturing sector. On the contrary, the demand for the types of services produced in Sweden by the public sector tends to grow rapidly with real income in all countries, regardless of whether they are produced in the public or private sector. Instead, the problems of efficiency of resource allocation raised by the public sector have to do with the way in which its activities are financed and with its being sheltered from competition. Since it is financed through taxes and fees which cannot be regarded as market prices, there need not be any relationship between demand and supply, i.e. there is not the same pressure to adapt its products to consumer demand as in a market guided by market prices. Since the public sector is generally sheltered from competition through free entry, etc. its production costs also tend to be higher than in the private sector. Of course, these problems are not unique to Sweden — they are common to most industrial countries.

Long-term structural factors

Swedish economic growth in historical and international perspective

In order to understand what has happened in the Swedish economy in the 1970's, it is necessary to take a long historical and international perspective. Therefore, a comparison of the Swedish growth record over the past 100 years with those of other countries has been made.



Note: The average for each 20-year period is shown for the final year of each period.

Figure 4. GNP/capita growth rates in Sweden, USA, (West) Germany and Great Britain 1870—1978.
Moving 20-years averages.

The results of the comparison indicate that the Swedish rate of growth of GNP per capita over this period has been greater than that of any other country, with the possible exception of Japan.

A brief look at the growth pattern over time is also instructive. In Figure 4, the GNP per capita growth rate in Sweden, the United States, Germany, and Great Britain are compared for the period 1870—1978. The curves in the Figure represent moving twenty year averages. Turning first to the growth curve for Sweden, it is quite obvious that the post-war rapid growth pulls up the average for the entire period, with peaks in the early 1950's and the mid-1960's. It is also interesting to note two 40-year cycles in the Swedish growth pattern, one beginning in 1890 and ending in 1930, and the other beginning in 1930 continuing through 1978. These may be referred to as Kondratieff cycles. But the absence of similar cycles in the growth curves of the other countries included in Figure 4 and the fact that it is possible to explain the curvature in the Swedish growth record makes it doubtful whether one can predict a new similar cycle in the future.

As regards the United States, it is interesting to note that there seems to be no upward trend in the long-term growth rate over the entire 100-year period. There were great variations in the long-term growth rate in the period between 1930 and 1960. There was a long trough during the Depression in the 30s, peaks during the Second World War and the Korean War, and another, through in the 50s. The U.S. growth record in the 1960's and 70's is also slightly better than that of the entire one hundred year period but the record over the whole post-war period is no higher than that of the entire period.

For Germany the growth rate has varied even more over time than has been the case for the United States. The twenty-year period of slow and uncertain growth preceding Hitler's ascent to power shows up clearly as does the build-up and collapse in connection with World War II, the catching up during the 50's and the extraordinary growth in the 60's, to which we shall return shortly.

For Great Britain the Second World War marks a clear distinction between rather slow growth up to the War and substantially higher growth rate after the War. Thus, the British growth rate has been remarkably fast during the post-war period in relation to the British historical experience. However, the British growth rate has been low in relation to that of other countries with the exception of the United States which had a lower growth rate than Britain in the 60's and 70's.

Thus, if one wants to understand the growth process and to make an assessment of the future what needs to be explained is the rapid growth in the post-war period in virtually all the industrialized countries and especially the high growth rates in the 1960's.

Factors behind the rapid post-war growth

1. One of the factors behind the rapid post-war growth in the industrial countries was the large technology gap that existed between the United States and other industrial countries after the Second World War.

2. The reestablishment of relatively free trade and free capital movements led to a vast reallocation of resources and much improved international division of labor, thus increasing productivity in all participating countries. In fact, a large portion of the rapid GNP per capita growth rates in Europe in the 1960's must be attributable to the lowering of trade barriers within the European Common Market and the European Free Trade Association.

3. The rapid growth of demand for certain mass-produced consumer durable goods such as automobiles and television sets led to the introduction of large-scale capital intensive production technologies in the industrialized countries.

4. There were large pools of relatively unproductive labor in agriculture in most West-European countries and in Japan. Between 1950 and 1977 the share of the total labor force in agriculture diminished from 47 % to 15 % in Japan, from 42 % to 11 % in Italy, etc. Thus,other sectors could expand without undue pressure on the wage rates.

5. The reestablishment of convertible currencies and stable exchange rates created stability during the first 25 years of the post-war period. However, since the exchange rates were pegged to the U.S. dollar, the world monetary system required a growing supply of dollars which could be achieved only through increasing U.S. balance of payments deficits. Thus, the system had built into it elements of its own destruction which occurred in the early 1970's.

6. Throughout the post-war period up until the oil crisis in 1973—74, rapid economic growth could take place in the industrialized countries with low energy prices and ample supplies.

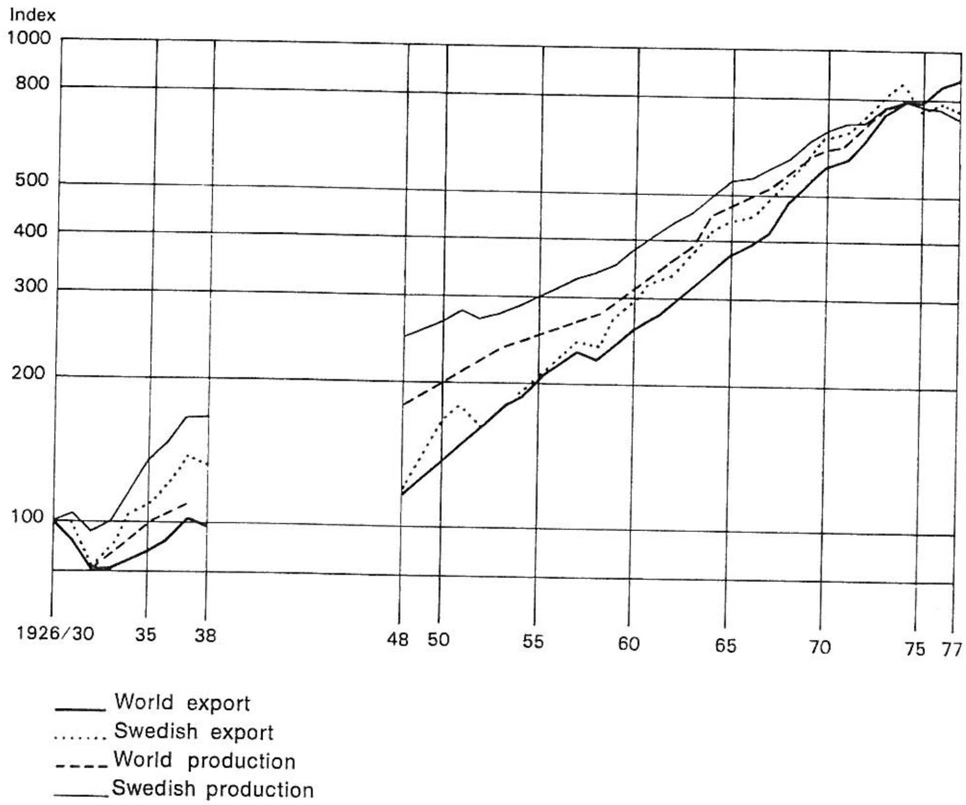
To these factors can be added two which were of particular relevance to Sweden. One was the fact that Sweden had the good fortune of staying out of the Second World War and, therefore, experienced no wartime destruction. The pent-up demand that had accumulated during the war could, therefore, be released into activities such as housing construction and private consumption which generated rapid growth in the Swedish economy. Also, immediately after the war the international demand increased rapidly for traditional Swedish products such as iron ore, pulp and paper, and steel. Between 1946 and 1951 the prices of several of these items trebled or quadrupled, generating large profits which could then be re-invested in Swedish industry.

But while these factors were important in generating rapid growth in the post-war period, they have now been seriously weakened or even turned in an adverse direction. For example, the technology gap has been largely closed and the Western industrialized countries are already adjusted to relatively free trade. Further progress in the direction of trade liberalization is slow. Similar arguments apply to the other factors. Thus, unless these growth generating factors can be replaced by other factors, the future growth rates are likely to be much lower than the growth rates so far during the post-war period.

Relative decline since 1965

Thus, if the Swedish growth rate was impressive over the whole 100-year period, the same conclusion does not hold for the most recent 10—15 years. Figure 5 shows that the strong position in terms of both industrial production and exports of industrial goods which Sweden had acquired during the inter-war period and immediately after the Second World War has been gradually eroded during the post-war era. In 1974 the relative size of industrial production and exports both in Sweden and in the world as a whole was the same as in the base period 1926/50.

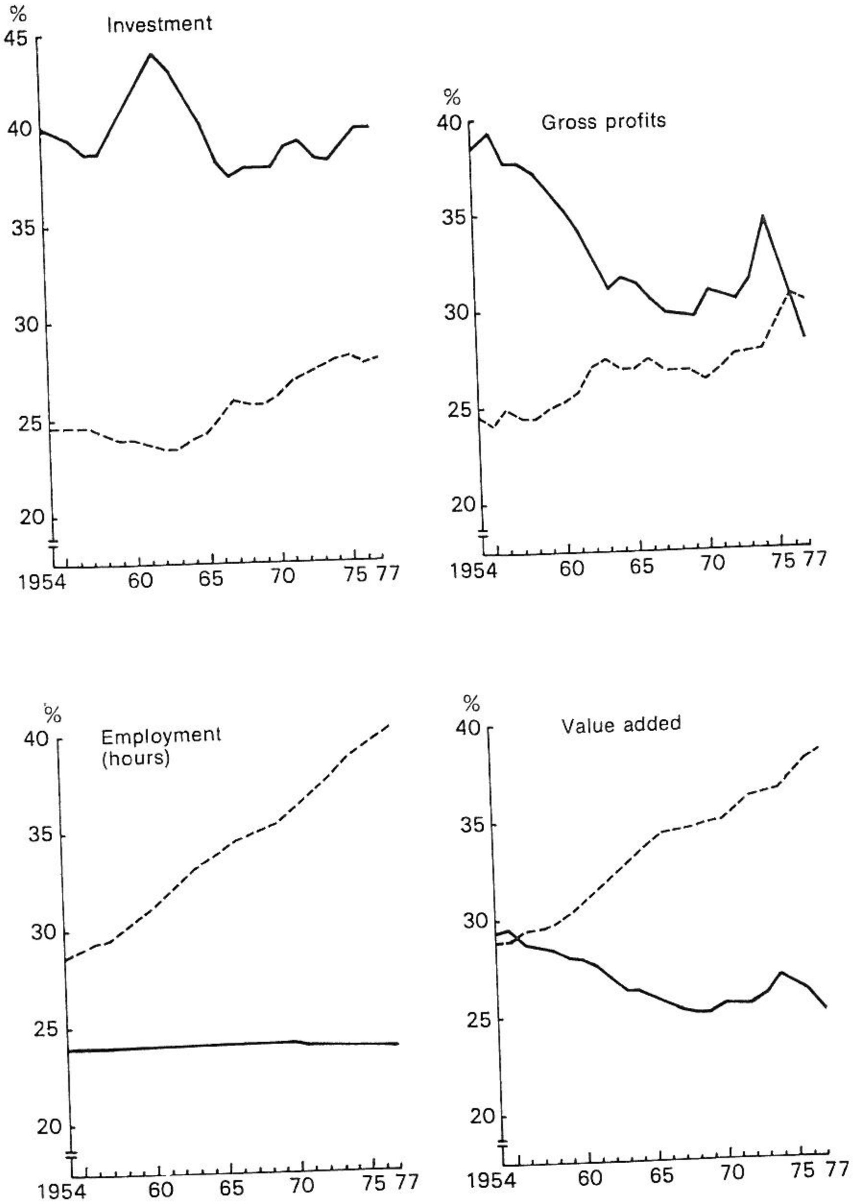
The Swedish export performance as shown in Figure 5 presents a particularly interesting pattern. After the raw material boom during the Korean War, Swedish exports declined, but from the mid-1950's until 1965 they gained shares in world markets. Thus, Sweden seems to have been quick to reap the benefits of the liberalization of trade, particularly through the formation of the European Free Trade Association and the European Economic Community. But after the mid-1960's, the Swedish competitiveness in world market



Note: Figures not available for world exports and world production 1949—52.
Figure 5. Growth of world exports, world production, Swedish exports and Swedish production of industrial goods 1926/30—1977.
Index 1926/30 = 100. Semilogarithmic scale.

seems to have declined. However, it is only with hindsight that this has been generally understood in Sweden. That is one reason why the crisis of the 70's seems to have occurred suddenly, when in fact there were many warning signals earlier.

There are, of course, many reasons for this relative decline. One of the most important sets of reasons is the Swedish dependence upon raw materials, the physical constraints imposed by the Swedish raw material base, and the relatively slow growth of raw materials in world trade in general. Thus, this relative decline could have been, and in fact *was*, foreseen (in the first so-called Long Term Survey carried out in Sweden in 1948). But for various reasons the shift away from raw materials into other lines of production has not been fast enough to sustain growth at the same rate as earlier.



—— Raw material based industries.
---- Engineering industries.
[a] Mining, steel and forest based industries.

Figure 6. The share of the raw material based industries[a] and of the engineering industries in the total investment, employment, value added and gross profits in industry 1954—77.
Percent, moving 5-year averages.

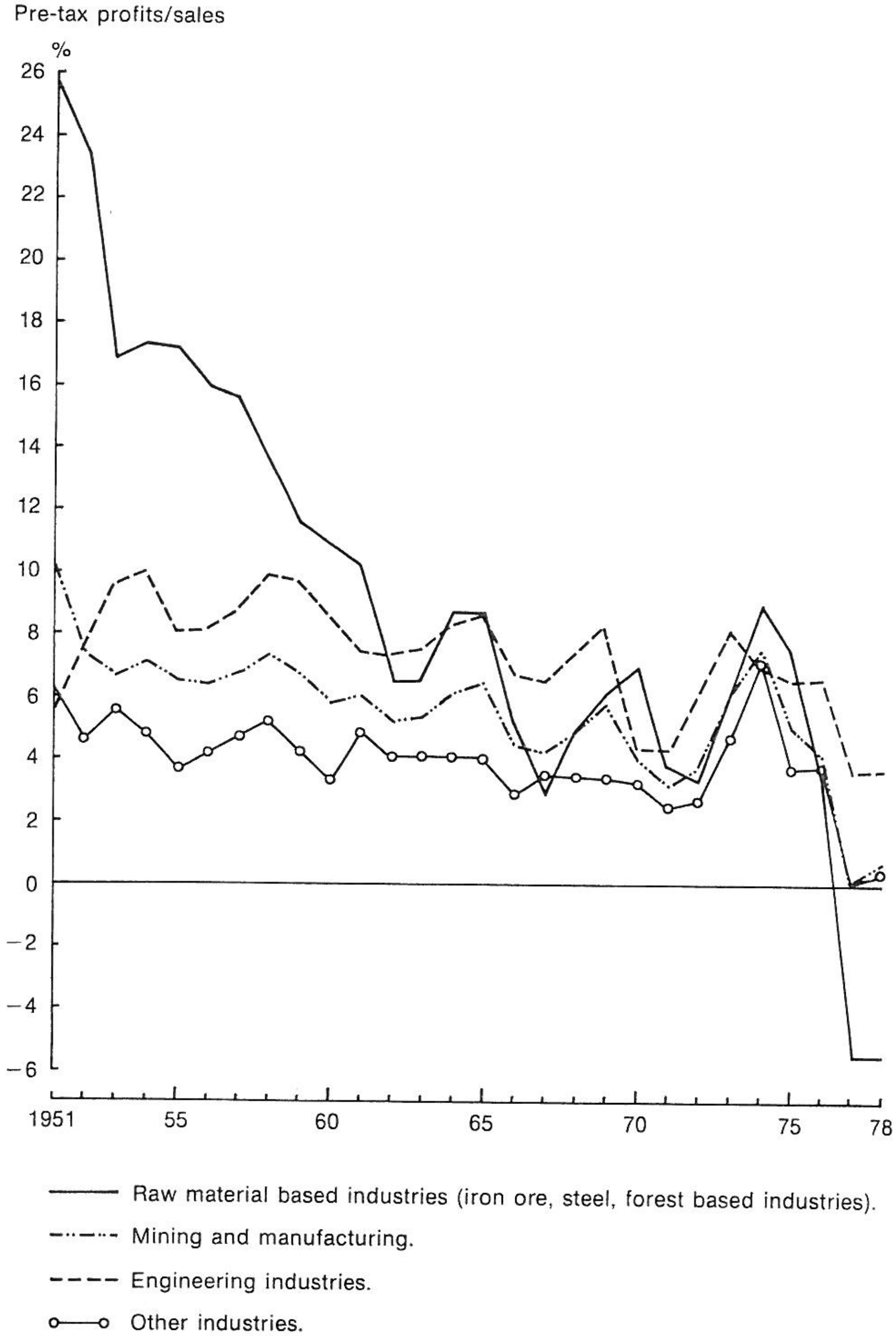


Figure 7. Profit margins in industry 1951—1978.

Figure 6 illustrates the problem. It shows that while the share of resources devoted to the raw material based industries in terms of both labor and investments has remained constant as a percentage of total industrial employment and investments, their shares of gross profits and value added have declined since the mid-1950's. At the same time, the shares of the engineering industries have increased in terms of both inputs and output.

A look at the development of profit margins yields a similar impression. Figure 7 shows that while there has been a slight decrease in profit margins in manufacturing industry as a whole over the period 1951—1978, the raw material industries display by far the most dramatic decline. Figure 8 shows that among the raw material industries, the mining sector (especially iron ore mines) has suffered a decline from profit margins in the 65 to 70 % range in the early 1950's to losses of 30—35 % at the end of the 1970's. But the steel industry, too, shows a falling curve throughout most of the period, especially the last few years. Even though the forest-based industries present a U-shaped curve, profit margins in the zero to five percent range in such capital intensive industries are hardly satisfactory.

The structural problems of the Swedish economy

It has been shown above that many of the structural problems afflicting the Swedish economy today have roots far back in time. The business upturn since the latter half of 1978 has helped solve some of the problems. However, with a projected government budget deficit for fiscal year 1980 of Skr. 55 billion (corresponding to about 11 % of GNP) a projected balance of payments deficit corresponding to 2.4 % of GNP in 1980, and a likely inflation rate of at least 10 %, it is clear that the Swedish economy still has a long way to go before it can be said to be in any sort of balance.

The main structural problems seem to be the following. The non-market sector of the economy has grown too large. The export oriented sectors (mining, manufacturing, and some services such as shipping and construction) are too small to generate the needed exports, particularly in view of the dramatic oil price increases of the past few years. Many of our traditional export sectors are having

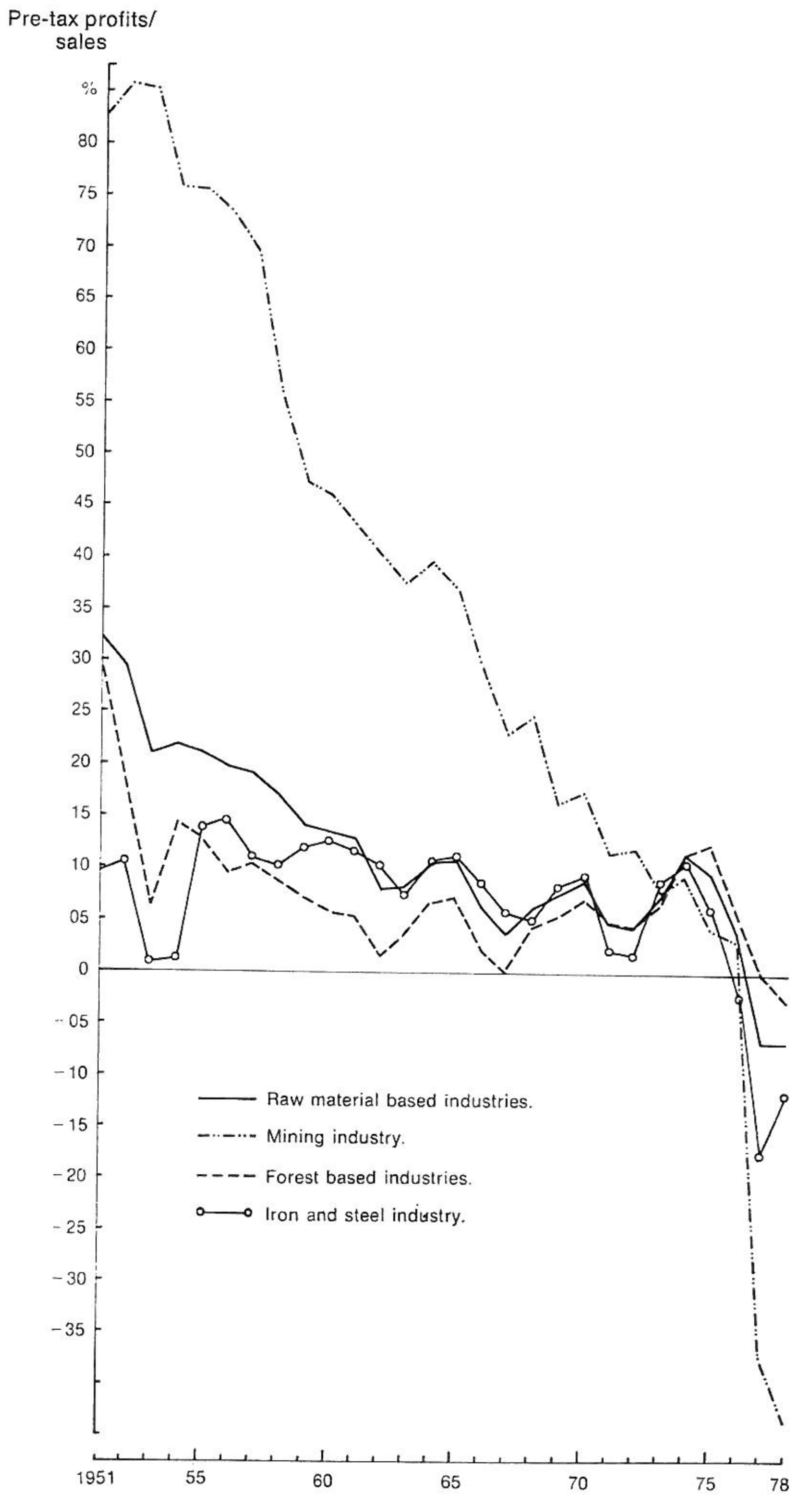


Figure 8. Profit margins in raw material based industries 1951—1978.

difficulties today: iron ore, steel, shipyards, shipping, paper and pulp. Together, these represent approximately one-half of Swedish exports. The other half of our exports — mostly engineering goods — still seem to be competitive, but they are simply not large enough to balance our imports.

The reasons for the structural problems vary from one sector to the next. To mention just a few: worldwide overcapacity constitutes the major problem in shipping, shipyards, and steel; the emergence of new competitors in the past decade or so has put iron ore, steel, shipyards, shipping, paper and pulp, and textiles and apparel in defensive positions. Internal structural problems in the form of old and small plants present difficulties in the steel and paper and pulp industries, among others. Growing economies of scale put small Swedish firms at a disadvantage in many industries.

A downward trend was noted earlier for industrial profit margins during the post-war period, particularly the latter half of the 1970's, when quite unsatisfactory levels were reached. This makes a strong improvement in firms' expectations of the future yield of invested capital one of the most crucial problems in Swedish industry today. The expected yield must again become sufficient to stimulate new ventures and to give firms the possibility of attracting new capital.

To the extent that the downward trend in the profit margins is due to generally worsened external growth conditions in most industrial countries in the latter part of the post-war period, not much can be done beyond adjusting our demands and expectations for both private and public consumption. To the extent that it has other causes, however, action is needed. One such factor is inflation. The deleterious effects of inflation on resource allocation were discussed above. A low rate of inflation is necessary to improve profitability and to facilitate the structural adjustment that is needed.

If Sweden is to maintain its rank among the foremost industrial nations in the long run, a strong re-orientation of Swedish industry is required in order to substitute for the loss of production and exports which would be the result of a continued diminished role of our raw material sectors. Investment will have to gravitate from raw material based, capital intensive production to areas which require knowledge rather than machines. But it has to be emphasized that this re-orientation must take place within industry and follow the market signals. The government can facilitate the adjustment through general economic policy directed at holding down the rate of inflation, maintaining a suitable exchange rate so that Swedish production costs do not go out of line, etc. But massive government ventures in particular sectors run great risks of becoming bad investments. They easily become too heavily oriented to traditional areas where our competitive advantage is diminishing; it is difficult to find areas where governments in other countries are not making similar efforts:, and new areas are seldom suitable for extremely large investments. It is not the *volume* of investment that matters, but the quality.

Increased inflation, less market economy, increased adjustment needs — a vicious circle?

It was noted above that the rapid inflation in recent years has aggravated the adjustment problems in the economy. At the same time, the adaptability of the economy has diminished due to the fact that the share of the economy guided by market principles has diminished. The question is whether we have entered into a vicious circle. The lack of adjustment indicated by market signals leads to increased demand for government action which involves yet another part of the system being removed from competition and which brings forth further inflation, etc. There is considerable risk that the more the market guided sector shrinks, the larger becomes the part of the total adjustment burden which it has to absorb.

It is easy to find examples of the effects of inflation combined with inflexible institutional arrangements, e.g. in the area of taxation. The high level of ambition as regards equality of income distribution leads to highly progressive tax schedules and high marginal taxes. In order to stimulate mobility in the labor market, very large before-tax wage differences are required. The combination of these institutional factors with great adjustment needs involves great risks of inflation. The combination of double taxation of corporate profits and high marginal income taxes yields similar results, i.e. immobility in the market and inflationary pressures.

Our analysis has shown that Sweden, like other OECD countries, faces considerably worse external growth conditions than earlier during the post-war period. Changing competitive conditions require considerable adjustment. At the same time it seems clear that the internal growth conditions in the Swedish economy have worsened in the sense that several factors which earlier facilitated smooth and rapid adjustment without inflation no longer do so. These circumstances will probably play a decisive role for the development of the Swedish economy in both the medium term and in the longer run.