

Introduction

The firms in the market economy—40 years of research at IUI

by Gunnar Eliasson

“Now suppose that the capitalist engine keeps on producing at that rate of increase for another half century starting from 1928 . . . the depression that ran its course from the last quarter of 1929 to the third quarter of 1932 does not prove that a secular break has occurred . . . because depressions of such severity have repeatedly occurred”.

“One way of expressing our result is that, if capitalism repeated its past performance for another half century starting with 1928 this would do away with anything that according to present standards could be called poverty, even in the lowest strata of the population, pathological cases alone excepted”.

Joseph Schumpeter

A similarly accurate prediction was made already in 1930 by Lord Keynes in his essay *Economic Possibilities for our Grandchildren*. During the 50 years that have passed, the capitalist engine in the advanced industrial nations accomplished even more than predicted by Schumpeter and Keynes, despite an intervening world war.

These scenarios were formulated during and just after the Great Depression to counter the prevailing mood. They illustrate the possibility—and necessity!—of looking beyond short-run problems in making long-run forecasts.

The economic situation at the end of the 1970's is highly reminiscent of that 50 years earlier. The risk of misinterpreting the situation is as large as it was 50 years ago. Economic indicators generally point down and the task of the forecaster is as difficult now as it was then.

The industrialized countries have been through the backwater of the oil crisis after a long period of high and stable growth, but they are now facing renewed problems.

The future demands large adjustments economically for individuals, institutionally and culturally. To a large extent the story is about the capability of the *market technology*—or to use Schumpeter's term “the capitalist engine”—to support a return to high and stable economic growth in the 80's. What adjustments are needed on the part of business and individuals to achieve that? Many people are worried about the problems arising from a sudden slow-down in economic growth in a society that has been attuned for decades to a steady growth in prosperity. On the other hand, some people

have even advocated “zero growth” during the recent green wave of economic romanticism that now seems to have come to an end. However, nobody seems to be able to visualize such a new society or know what to do about the situation.

A historical resumé seems appropriate the year IUI (The Industrial Institute for Economic and Social Research) celebrates its 40th birthday as a research institution. It was founded in 1939 for the simple reason that business leaders regarded prevailing knowledge about industrial economic life to be of insufficient depth and quality, particularly among political decision makers in society. Few would want to change that assessment today after some 5 years of economic-political blundering in almost every Western economy, even though everything is now staged at a higher level of sophistication. The 40-year history of IUI as a research institution naturally illustrates the problems formulated some 40 years ago by Joseph Schumpeter. A pertinent question, however, is whether the blunders should be blamed on the politicians or the economics profession.

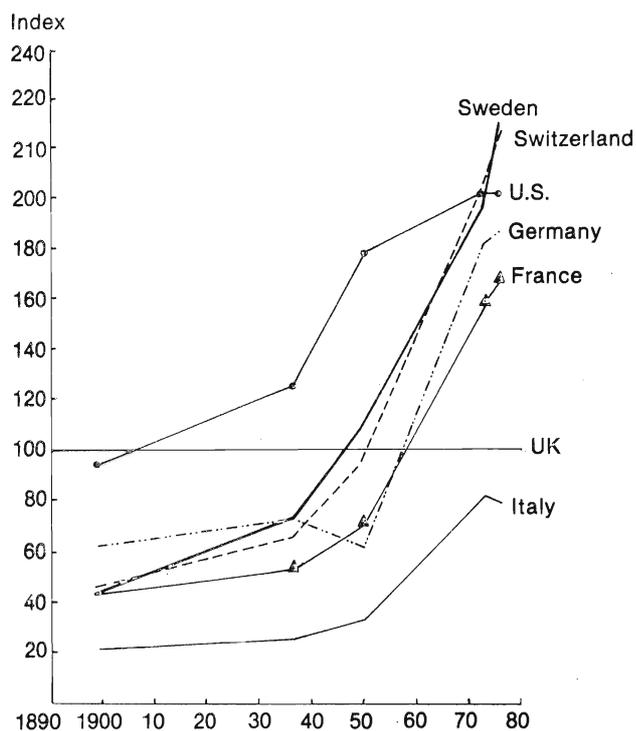
1. Choosing the 80's

Schumpeter saw no apparent obstacles to a continuation of the preceding 50 years of economic growth in the United States—despite the then current economic disaster—provided the capitalist market economy was allowed to operate rather freely. *Individualism and democracy*—two inherent qualities of Western life—are closely linked to the philosophy behind the *market economy* and its efficient operation, its ability to generate and distribute fairly a growing product of desired composition and to offer a spectrum of choices and opportunities.

However, Schumpeter voiced pessimism for the long run future. The inherent nature of capitalism was to undermine its own existence through its very efficiency and success. Success in the materialistic dimension would lead to the creation of institutions with interests contrary to rugged individualism and market competition and would permit interests and talent to turn to non-material pursuits. Large scale production technologies at the same time would make the single entrepreneur and innovator superfluous. Eventually both democracy and economic prosperity would languish. This dismal development foreseen by Schumpeter still lies in the future but the direction of change has been as Schumpeter predicted. The problems he formulated have unavoidably become central ones in the current economic debate and therefore also in the IUI economic assessment of the 80's.

What, then, are the economic prospects for the 80's? Is the exceptional Swedish performance during the last 100 years relative to other countries in Figure 1 about to be changed for the worse? If so, why? Is the growing public sector the villain in Schumpeter's scenario? To what extent do the politicians have a “choice of the 80's” as indicated by the title of the recent

Figure 1. *GNP per capita in different countries, 1890—1975*
Index UK = 100



IUI medium term assessment? This question in turn opens up a second one: What will be the relevant domain of IUI research during the 80's? Relevance in matters of the long term economic and political choice has always been a crucial factor in allocating resources for research within the Institute.

2. Industrial Economics

The Industrial Institute for Economic and Social Research (IUI) is a unique institution in at least four respects. IUI is the only privately financed research institute in social science in the Swedish academic environment. It is almost 100 percent privately financed. In this sense IUI research is very much like research at the private universities in the U.S.

The board of directors of IUI has always been composed of top executives in Swedish industry. They authorize research projects that have been initiated within the Institute, within the Board or elsewhere. From then on the completion of the research project and final publishing is at the sole discretion of the researchers and the Managing Director of the Institute, who decides on the publishing.

Over the years the IUI has produced the largest number of dissertations of

any research institute in economics in Sweden—two during 1979.

For a long time the IUI was the only research institute in social sciences engaged in applied economics in a broad spectrum of areas.

This year the Institute celebrates a 40 year research tradition. Over the years IUI has grown to be one of the largest research institutions in economics in Sweden.

3. IUI—the Beginning

The need filled by IUI is as acute today as it was considered to be towards the end of the 30's, namely the need for accurate and operational information on the mechanics of our industrialized economy. The idea to start an independent, non-profit research institution supported by private sources was formulated by the president of the ASEA corporation, Sigfrid Edström, after a discussion with the prime minister of Sweden, Per Albin Hansson. To begin with, the charter of the Institute was not very clearly formulated. However, it soon became clear that professional economists could only be recruited and do a high quality research job in an environment with strict scientific requirements. The scientific and independent character of the Institute was further enhanced by its organization separately from other industry organizations and with its own board of directors.

4. Research Orientation

During the first years of war and regulated economy the activities of the Institute were dominated by gathering statistical information, rendering services to companies and public bodies, participating in Government committees and helping companies to cope with regulations.

Under the direction of Ingvar Svennilson (president 1942-49) research gradually moved in the direction of more comprehensive and complex research ventures that have been characteristic of IUI research ever since. Svennilson especially initiated research on industrial structure along the lines that have later come to be termed "Salter analysis". During this formative period the principle was established that the results of all research projects authorized by the board of directors should be published and individually signed.

Over the years, the Institute has conducted research in most areas within the domain of applied economics. Not infrequently the borders have been crossed to other academic disciplines, such as economic history, business administration, fiscal law, sociology and engineering.

The studies on sectors of industry gradually became systematized within the framework of the Government's medium term surveys in which the Institute participated for many years. These surveys were initiated after the war as a condition for Sweden to become eligible for Marshall aid, which Sweden eventually decided to decline. Ingvar Svennilson—and between 1948

and 1950 Jonas Nordenson—headed the Institute during these years. To begin with measurement of production structure and change took a large share of research inputs. The first Swedish input-output project was conducted within the Institute, as well as extensive productivity measurements. Later, during the 60's, Lars Nabseth (president 1966-72) extended research to the diffusion of innovations, technical change and economic growth, and during the 70's research in this area has also taken up energy problems.

During the last few years studies on industrial structure and change have been further updated and reorganized. Thanks to new statistical data bases coupled with new mathematical techniques we have been able to link such studies back to the pioneering micro oriented studies that Erik Dahmén concluded in the early 50's. The broad historical approach in Dahmén's study has again been applied in a recent study on technical change together with the Royal Swedish Academy of Engineering Sciences and in the recent medium term assessment, *Choosing the 80's*, both published in 1979. The trend is clearly away from traditional sector analysis towards micro based studies, where decision units are the objects of observation. Here technical problems of measurement as well as inadequate theory have earlier constituted stumbling blocks.

If we look at the economy from the production side, IUI research can be said to have covered almost the entire economy over the years. Besides mining and manufacturing, *agriculture* has been the subject of two extensive inquiries together with the *transport* and the *service* sectors. The *construction* sector as well as the problems associated with the *housing* market have been investigated several times.

It is interesting to note in this context that more resources have been devoted at IUI than in any other research institution in Sweden to the study of the *public sector* (for instance the pioneering work by Erik Höök (1962)). In this field as well as in *fiscal policy and taxation*, several well-known studies have been produced during the 70's.

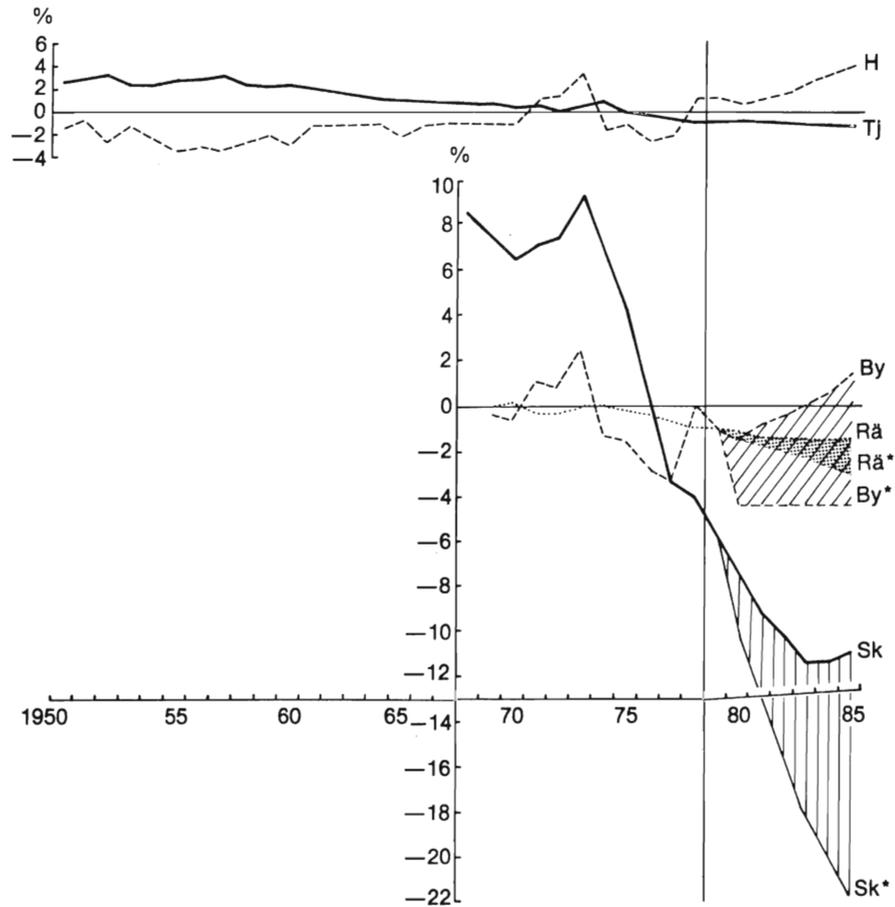
This orientation may seem somewhat odd for a research institute bearing the name: the *Industrial* Institute for Social and Economic Research. However, it is characteristic of the wide spectrum and continuous change that have become hallmarks of IUI research.

The *demand* side of the economy has been as extensively covered, in particular in a series of studies during the 50's under the direction of Ragnar Bentzel (later president of the institute, 1961-66) on *private consumption* and the determinants of *income distribution*. These studies were later continued in more specialized forms by Jan Wallander (president 1953-61).

Determinants of *investment*, investment finance, rate of return measurements, and *capital and credit market* analysis have, of course, always been an important area of IUI research.

Traditionally IUI research has been organized around a number of individuals occupied with their own projects carried out relatively in-

Figure 2. *External balance of Sweden, 1950—1985*
Percent of GNP at factor cost



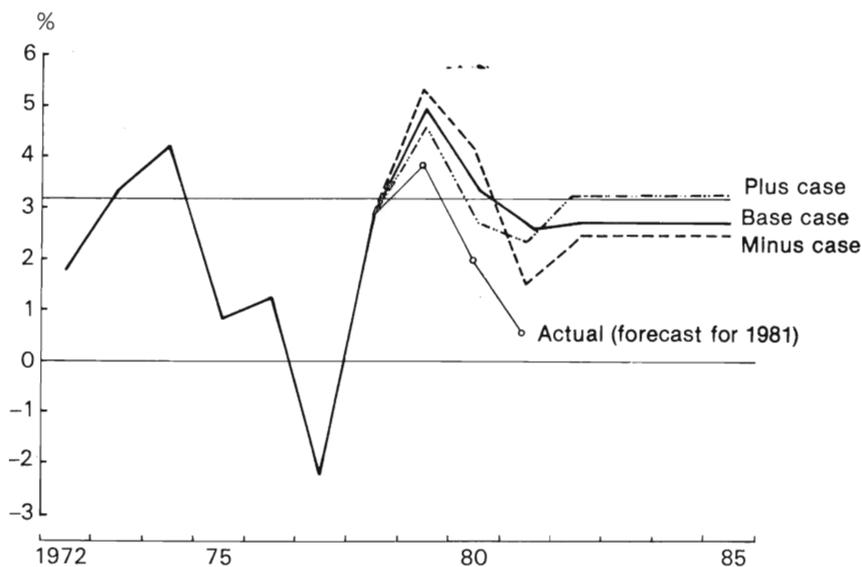
H = Trade Balance
Tj = Service balance excl. capital services
By = Current account balance excluding net interest payments
Rä = Net interest payments
Sk = Net debt position vis à vis the rest of the world including trade credits

Note: By is the current balance from the main reference projection in the long term survey. The actual current balance for 1980 will turn out considerably worse than calculated, as illustrated by By*. Rä* and Sk* are simple illustrations of what will happen if policy authorities are unable to improve the current balance from the 1980 position for 5 years — a situation that has certain similarities with the Danish development during the second half of the 70ies.

dependently of other projects. Larger problem areas that concern the entire economic system and its place in an international market environment have emerged as important during recent years. Such problems cannot be handled by one individual alone. The first step towards systems research was taken when IUI (headed by Lars Wohlin 1972-76) in 1976 published the first medium term assessment in direct competition with the Government medium term survey. A continuation along these lines seemed natural as the world economic system moved into a state of serious disequilibrium. Inflation—a typical economic systems problem—took on ominous proportions both internationally and in Sweden. Also, the role of the industry sector was rapidly changing in a world characterized not only by inflation but also by rapidly growing public resource use and a political orientation towards far-reaching ambitions concerning the equalization of incomes and control of production. On this situation was superimposed a growing external balance problem in the wake of the 1973-74 oil crisis (see Figure 2).

It suddenly became critical not only to understand what was going on and

Figure 3. *Business cycles, growth and economic policy*
Annual percentage change of GNP



Note: The *plus case* represents a recommended policy with very restrictive fiscal and monetary measures, including substantial withdrawals of subsidies to industry during the business upswing 1979/80. The inflationary wave would be partly curbed through a consequent upward drift of the exchange rate. The *minus case* consisted of a lax "inflationary" policy package. Actual development has in fact been even worse than the *minus case*.

what it meant for the future, but also what it implied for the market environment of the traditional business unit during the 80's.

During the last four years the Institute has moved in the direction of studying these types of problems more intensively. The problems addressed can be summarized with Schumpeter's old question: What kind of future does the capitalist market system have, being based on private ownership and individually acting institutions? To what degree does the level of wealth and its distribution generated by such an economic system satisfy the median voter that impresses his will on the parliamentary decision process? The comprehensiveness and complexity of such research necessitate organization of research in teams.

Not only economic theory but also mathematical and numerical techniques linked to computer technology are required. No single individual has the necessary competence in all these fields. The theoretical and conceptual framework must be further developed. Some of this work has begun within the micro (firm) to macro modeling project and has been applied also in the Institute's medium term assessment.

5. The Medium Term Economic Assessment (Choosing the 80's)—A Teamwork

a) Policy making in the mature welfare state

The lack of relevant facts about the machinery of the entire national economy is even more pressing today than it was in 1939 when the IUI was started. At that time new legislation appeared at a much slower pace. Before the war, the rules and laws constituting the economic environment were more stable and reliable, the public sector was small both relatively and absolutely and policy making at the top was quite different and less ambitious. Economic regulations during the war, however, changed the situation drastically. Today the decision makers have to cope with nominal business risks as well as growing uncertainties about the political side of their economic environment. Some war-time legislation, such as exchange controls, still remain in operation. New political signals about which future principles should apply to an economic system began to be heard during the second half of the 60's—not only in Sweden but also in many other mature industrial economies. The ambitions to guide and manipulate economic development in great detail on the part of central authorities have increased strongly, but the knowledge of the economic system required to accomplish this has increased even faster; the state of economic art and knowledge have simply not been able to keep pace. The problems we had to cope with in the medium term economic assessment thus indicate areas where further research is needed and hence the orientation of future research at the IUI.

One of the main problems that had to be faced in the study had to do with the limits of central administrative control in a national economy of the ad-

vanced and highly differentiated Swedish type. In fact, our apparent inability to guide even our own economic models to desired ends offers food for thought. One conclusion is that too high an ambition in this regard during the past 10 years may explain a large part of the economic mess of today. To some extent this problem is common to all industrial nations. The conditions for economic growth worsened throughout the industrial world during the 70's. Political ambitions regarding the supply of low-priced welfare services have been lagging in the downward adjustment to economic reality. Therefore, this adjustment is now forced upon the economies in a less predictable fashion through inflation, instabilities and uncoordinated, reluctant policy making that further aggravates the inefficient utilization of capital and human resources.

b) Supply side economics—a forgotten art?

Whether a severely shaken (unbalanced) economy could be reined in and rapidly growing social economic tension released without shifting the economic system toward a more centrally planned economy has been a matter of discussion not only in Sweden. Such a change of the rules of the economic game would mean abandoning the "Swedish model" that has been so successful in the past. This type of scenario had to be analyzed since it constituted the prime political choice for the 80's. The medium term assessment was, however, constructed around a set of much more optimistic assumptions.

Roughly speaking, the main scenario worked out was a slow growth period well into the 80's, with a gradual upward adjustment towards a long term trend slightly below the long term trend from the late 19th century (see Figure 1), but far below the extreme growth rates of the 60's. This was a relatively optimistic scenario in international comparison. There were, however, two preconditions. First, the relatively open Swedish free market system with a high degree of foreign competition and strongly reduced ambitions on the part of authorities to manipulate the production system and reallocate the fruits of production was a must. Second, a rapid and substantial structural adjustment during the initial business upswing was required, necessitating a very tight policy forcing inferior production plants to close down earlier than otherwise. How to realize this economic adjustment socially and politically is, however, still very much an open question. For example, according to a recent Government proposal, each average Swedish family will be required to pay more than \$ 400 per year for 3 years to 15,000 shipyard employees for them to retain their jobs. This represents the same number of people as were transferred out of Swedish agriculture *annually* during the past 30 years!

c) The "old Swedish model"—the efficient industrial policy model?

Success in choosing the 80's as suggested in the IUI study hence demands a

return to the old “Swedish model” formulated in a number of studies within the Swedish labor union movement after the war and enacted by a continuum of Social Democratic regimes until the late 60’s—thus postponing the dismal Schumpeterian vision discussed earlier. This return would involve an extensive and immediate dismantling of the heavy subsidies to bankrupt industrial plants aimed at short-term protection of employment. In fact, simulation experiments on the micro-to-macro model developed at the Institute (see p. 104) suggest that it is not so much the waste of investment money in maintaining the plants that reduces economic performance as the subsidized maintenance of production for a long time at no or negative returns to invested capital. Such subsidies keep people in the wrong jobs and prop up the average wage at an artificially high level and reduce growth incentives in other sectors. The simulation experiments indicate that there are no grounds for the argument that because of a seemingly stagnant economy there is insufficient expansion to absorb labor released from firms “on welfare”. The malady, stagnation, so to speak depends on the cure. There is an enormous social waste of resources for the benefit of a select few. Even if these subsidization policies were immediately reversed—except in a brutal alternative adjustment scenario—Swedish manufacturing would enter the mid-80’s with an obsolete production structure compared to earlier days. From this follows a slower growth rate than earlier during the postwar period.

These conclusions give rise to the following questions:

1) How will firms adjust to slower growth—perhaps even slower than we have projected?

2) What exactly is happening to the Swedish mixed market economy, one of the most successful industrial engines for the last 100 years?

It is clear from the IUI medium term assessment that the dramatic worsening of our external balance during the 70’s (see Figure 2), combined with an industrial structure, were suddenly and unexpectedly made economically obsolete by strong relative price changes, presents a difficult set of adjustment problems. Only if the general public, stimulated by the politicians, is willing to absorb the costs, can the adjustment be made. So far, this has not been demonstrated and the public budget has been cumulating deficits of a relative magnitude never seen before. One could say that the sophisticated part of our (internationally oriented) industry is too small today to support our present standard of living. Since spring 1979 the Swedish inflation rate has also exceeded the assumptions made in the basic case of the medium term assessment.

6. The Firm in a Slow Growth Economy

A characteristic but paradoxical feature of modern economic theory is that it does not contain firms in the sense of decision makers and that markets do not exist in the form of a dynamic adjustment process. General equilibrium

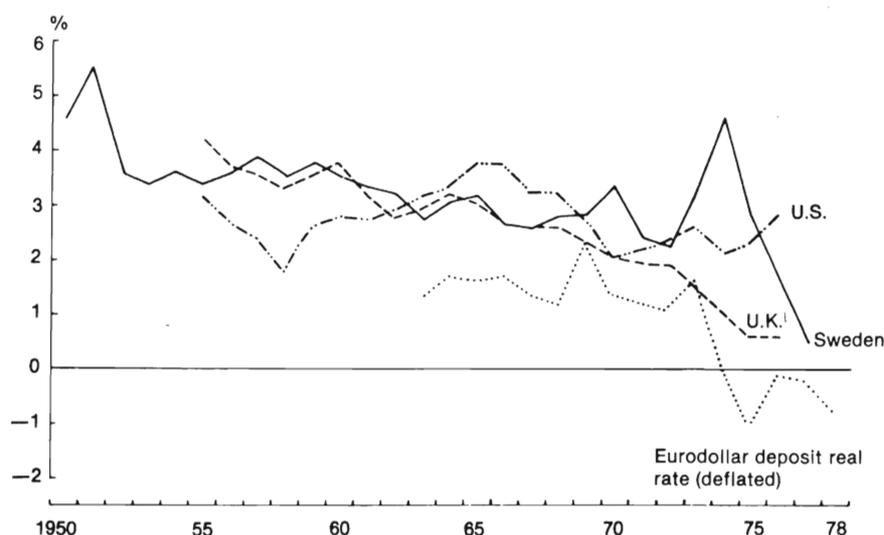
theory has been predominantly concerned with the conditions prevailing when micro units are in a market equilibrium situation. When relative price changes and supply responses to price changes are not explicit and endogenous in theory and analysis, the firm or the producer can play no important role in the economy. He has been assumed away and the moving force of the economy is transferred, as in most macro economic theory, to the state who controls total demand. This is of course an appealing economic doctrine for the central bureaucrate, although not well supported by empirical evidence. How could such a one-sided view gain such terrain in Academia? How could the firm simply be disregarded for such a long time? Analysis on the micro-to-macro model of the Swedish economy developed at the Institute suggests strongly that the organization of the dynamic market process and the endogenous long and short run supply decisions of firms are decisive for the performance properties of the entire economic system. Disruptions of the market pricing mechanisms caused by events in the world economy or by domestic policies too easily lead to the development of a mismatch of the supply and demand mixes, instabilities, misallocation of resources and inefficient utilization of existing human and capital resources. Economic developments both in the OECD area as a whole and in Sweden during the 70's do not seem to contradict these so far "theoretical" conclusions. The results in fact strongly underline the notions implicit in the publications by both Schumpeter and Keynes quoted above, namely that one should not unduly base one's views about the future on mechanistic reasoning from the supply side. As Keynes expressed it, the growth problem is an economic one. Where the economic machinery is properly organized and incentives and creativity are sufficient to produce the maximum total to everybody's desires we need not be overly concerned about seemingly prohibitive supply obstacles. To both Keynes and Schumpeter and some 150 years earlier Adam Smith this meant a policy application of what we have termed the *market technology*. Paradoxes abound, however. While the Swedish policy orientation during the successful postwar period was clearly a market one, most of the remedies suggested for the afflicted economies of the 70's are of an entirely opposite kind. Whichever road we opt for we have too little useful economic theory to bring coherence and relevant information to guide us. Theoretical research at the Institute should therefore be concerned with the micro decision units in the market processes of the economy, and empirical research will have to be oriented in the direction of micro-based information.

7. Can the Swedish Policy Model Really Be Abandoned?

The Swedish policy model started from the assumption that a decentralized market organization of the production system is efficient. The market forces, hence, should be stimulated through the design of the policy system.

This was the idea of industrial policy making in Sweden during the 50's. There should be no central bureaucratic meddling with the decisions at the investment and production levels. This principle also presumes that inferior firms are in the wrong market or are badly managed and should be allowed to go bankrupt or be purchased by somebody else on commercial grounds. The criterion for success should be the attainment of some internationally determined profitability target (cf. Figure 4). The Swedish economy was guided by these principles until the middle of the 70's. Regional policy ambitions around the middle of the 60's represented the first instance of side stepping the Swedish policy model.

Figure 4. *Real returns to total assets, before tax in U.S, U.K. and Swedish manufacturing*



Source: Eliasson, G., "Profit performance in Swedish Industry", *Industrikonjunkturen Hösten 1976*, updated with more recent data at IUI.

Deviations increased in number from then on as the economy began to lose momentum and vitality. Fortunately for Sweden, most industrial countries participated in this downward slide.

As pointed out earlier, the basic philosophy behind the Swedish policy model was formulated in the early 50's within the Swedish labor union movement. This philosophy formed the backbone of the economic policy of the Social Democrats through most of the 60's. There was no reason to socialize the means of production and to abstain from the benefits of an efficient market organization of the production system for reasons of doctrine.

With a high performance production system ('a capitalist engine' to use

Schumpeter's term), ambitions of the policy authorities could be oriented towards the distribution of the total output produced.

a) A dual economy

Until the last few years a very small share of manufacturing output and assets was publicly owned. However, if one looks at the share of output in the economy that is protected from direct competitive pressure from foreign and domestic firms it is large by international standards. To this sector protected from market competition belongs almost the entire public sector that today employs more people than manufacturing industry in Sweden.

This does not imply that the Swedish people do not demand the services produced in the public sector. On the contrary. Health care, education and retirement schemes are demanded to an increasing extent with general economic wealth. This is well known from international comparisons. Nor is the concern about who runs the production of such services. The problem is how it is organized, namely under centralized authority within the public sector, production being effectively shielded from outside competition and hence likely to be less efficient than if organized on a more decentralized basis.

In this regard, the following conclusions may be drawn from the medium term economic assessment of the IUI:

First there exist better production solutions to the above problem than the highly centralized production organization within the public sector. The size itself of the public sector relative to the entire economy makes this problem critical. These solutions do not necessarily violate the ambitions concerning welfare and distribution set by Swedish Governments during the 70's. One reason for this is that a major share of income distribution policies in Sweden involves a reshuffling of benefits over the life cycle of the individual rather than between different individuals. This makes public financing alternatives based on individually based insurance principles adequate and efficient. Another reason is that a deteriorating macroeconomic situation is not a good basis for ambitious welfare and distribution policies.

Second, during the postwar period international competition directed towards Swedish goods production has increased strongly.

Third, financial systems of the industrial countries including Sweden have become increasingly integrated and efficient through the growth of an international credit system. This means, among other things, that the international interest rate has become a norm for investment calculations throughout the world and also in Sweden, to an unprecedented extent.

Fourth, the rapid growth of the public sector, sheltered from both domestic and foreign competition, has forced up wages throughout the system and reduced the relative size of the industry sector that has to absorb a growing structural adjustment burden that relates to the entire economy. The conflict between distributional ambitions and growth has finally led to

an economic impasse in the late 70's, the breaking of which may be critical for the future economic success of the Swedish economic system.

This points to three areas of public policy research that have emerged as critically important, namely:

- The economics of local government—by far the most expansive part of the public sector in most industrialized countries,
- the effects of taxation on the supply of labor, and
- instabilities created by positive and negative taxation and regulation in the market price determination process.

The public sector of advanced welfare economies can be characterized as a huge body for incomes policies. About the potential effects of such policies economic theory and empirical analysis until now provide little guidance. This is one reason why IUI research is moving in the direction of remedying this situation.

b) How to make public production more market oriented?

Guaranteed output and employment levels pose part of the problem of insufficient market guidance of the economy. Well into the 70's the demand for labor largely determined the level of employment in private industry. The Swedish policy model involved helping labor to move through labor market policies to jobs where they were most needed and obtained the largest marginal product in a market sense. Thus, employment in the agricultural sector was reduced from more than 600 000 employed in 1950 to just above 200 000 at the end of the 70's, labor migration on a scale far larger than the more modest adjustments necessary within industry today.

The so called "solidaric" wage policy on the part of unions—combined with a highly progressive income tax and rising payroll taxes—increased the speed of structural change. Those industries that were unable to maintain profitability through higher prices or increased labor productivity were simply forced to fade away.

Despite hardening international competition for a relatively shrinking export sector the adjustment burden was shared fairly equally between labor (unemployment, job change) and capital owners (losses) until the middle of the 70's.

The 70's signifies a break with this tradition in so far as labor began to be increasingly protected by legislation from being forced to move. Probably as important, however, were the extremely erroneous expectations about future labor needs and ability to pay high wages on the part of firm managers during the first round of extreme inflation in 1973/75. Add a new mood of "social responsibility" among business leaders when it comes to laying off workers and it is easy to see that almost the entire adjustment forced on the Swedish economy during the past oil crisis years has been absorbed by business profits, especially in the export sector.

An implicit "employment guarantee" of the Swedish type suggests that

exaggerated wage demands on the part of wage and salary earners involve smaller risks than before of losing a job. While the total adjustment pressure on the economic structure has increased, the sector that has to make the adjustment has shrunk relatively. Therefore, a new element of instability and tension has crept into the Swedish economic system. Of course, a situation like this is incompatible with as high and stable a long term growth rate as that prevailing during the 60's.

c) Socialization through the back door?

As a consequence many large corporations for the first time have come close to bankruptcy. The government has stepped in with subsidies to prevent large, concentrated shutdowns. (Shipbuilding is the prime example). A number of industrial companies have been "taken over" by the government in recent years for the same reason. Without a clear demonstration case where a large plant is allowed to close down on commercial grounds in the near future, it will become increasingly difficult politically to let inferior production plants die. Then managers and capital owners will probably interpret the relief from market pressure as a political insurance of their assets. Unpleasant internal rationalizations then will not be as immediately pressing. Sooner or later political pressure will build up for a public take-over of control of decisions regarding when and where to invest, since the Government is anyhow footing the bill. This will mean a development towards a new and inefficient organization of the economic side of society—away from the Swedish policy model. Perhaps this is part of the future vision of the semi-planned economy that Joseph Schumpeter once had for the efficient capitalistic system. Some of the West European industrial countries are already close to this scenario. The process began in Sweden by the government making individual business firms responsible for employment, a task earlier vested in the central government. This has in turn forced the government to step in and take over managerial responsibility in a growing number of companies—an absurd mismatch of competence and task.

Schumpeter viewed *capitalism, individualism and democracy* as interlinked concepts. Those who worried about the future of the market economy had equally good reasons to worry about the future of individual freedom and democratic processes—or in short, about the future of western industrial society.

Nobody knows much about the "workings" of such a "new" economy. Experience from countries close to it suggests, however, that it will not solve the current stability problems better than the capitalistic organization of the economy and that it is not likely to lead to a return to a higher and more stable growth rate.

d) What is the optimal degree of control?

This is not the end of the problem. Ambitions to regulate income and wealth

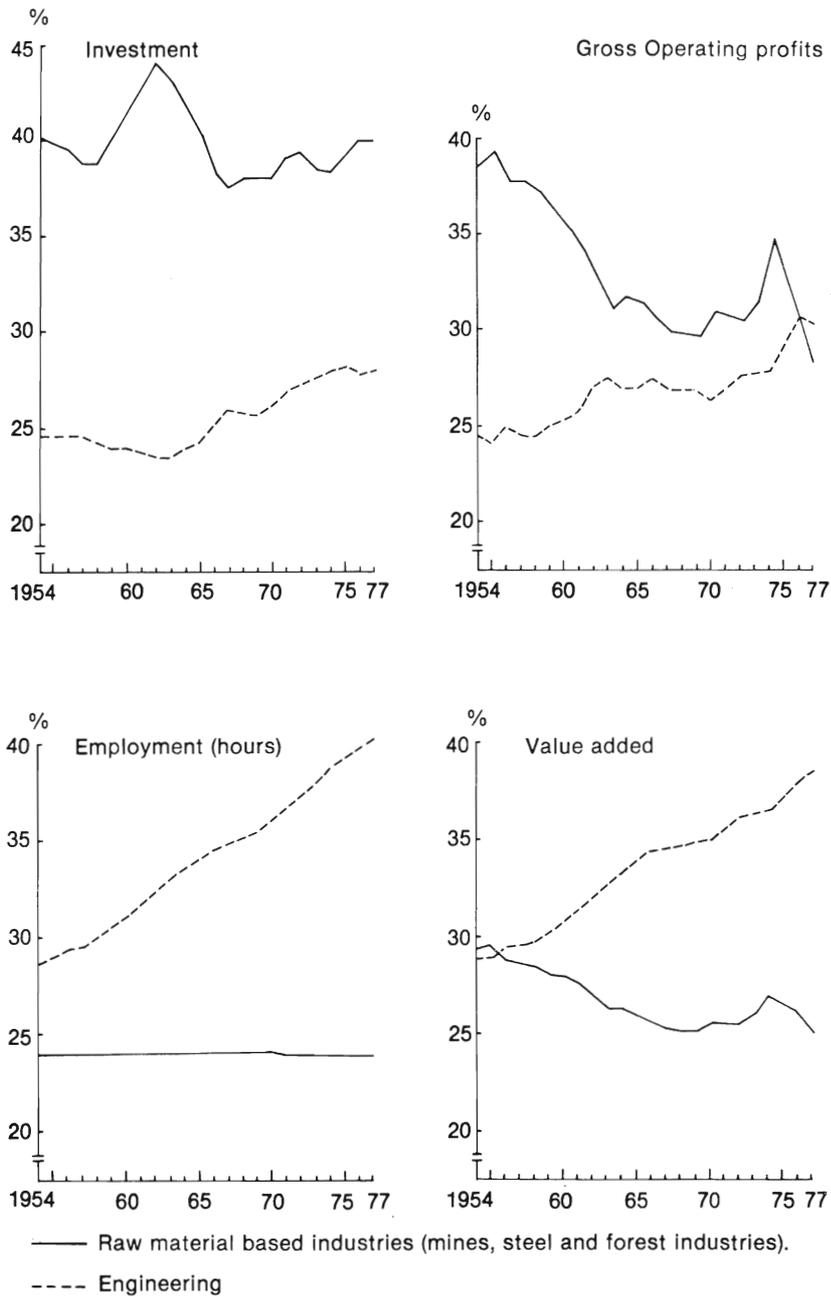
mean that the proceeds of the economic process are increasingly routed through the public sector at the expense of individual saving and wealth formation. The prime target has been to contain wealth accumulation in the stock market, while allowing and even enlarging limited household wealth accumulation elsewhere. As a consequence, pricing in the stock market has become erratic. The performance control function of the market has virtually disappeared, and sometimes the control of large and profitable corporate entities has been for sale at ridiculously low prices. The corporate tax system tends to lock up both investment resources and labor in firms that made high profits in the past, which often means a missallocation of resources when the competitive situation among firms is changing. Figure 5 indicates that the raw material producing sector in Sweden in fact has been attracting too large a proportion of total resources for years. At the same time, increasing inflation in combination with the high marginal tax rates and a high levered gearing rate have made it very profitable to divert resources from industry to private property investments. It is obvious that such a development aggravates the stability problems of the Swedish economy. Part of this problem complex will be studied in the joint taxation project between IUI and the National Bureau of Economic Research (NBER, Cambridge, Mass.), the Ifo Institute in Munich and the University of Birmingham recently started (see p. 00 and article by Bradford and Södersten on p. 00).

All these problems belong to the category of politically sensitive issues that economists have tended to shun but that they now have to deal with when the economic systems get jittery. Very large social values are at stake when fundamental systems changes are undertaken. One can safely say (1) that economists do not have the knowledge today to predict their economic effects and (2) that a fundamental reorganization of research in economics is needed to make this possible.

One can liken the new Swedish policy model of today (public sector and tax system in combination) with a huge income and price regulation system. It is still wrong to say that the market economy is now efficiently checked. Markets are everywhere present in some form: open, grey or black. The interesting question is under what conditions central government interference in the market process improves or worsens economic performance, when high economic growth and a limited skewness of the income and wealth distribution are the prime targets. What is the optimal degree of central interference in the market system?

The IUI medium term survey considered only the case when the existing market organization of the Swedish economy would be the prevailing system in the future. The time horizon for any other alternative to be instituted was too short. However, it discussed the economic consequences of and the likelihood that the Swedish economic political system by accident would slide into a bad version of a semi-planned economy, because of the apparent inability of the political decision makers throughout the spectrum to reach

Figure 5. *Shares of the Engineering Industry and the Raw Material Based Industries in investment, employment, output and profits in Swedish Manufacturing 1954—1977*
 Percent, moving 5 year averages



operational consensus on the unpleasant adjustments to be made. Three problems were analyzed in particular:

- What means are available to force more productive efficiency into the public sector? Is a disaggregation into competitive market units a solution?
- In what ways does inflation disturb the efficiency of the market allocation process?
- In what ways do taxes, subsidies and regulations affect the total resource allocation in the economy?

We have referred frequently to the “market technology”. The word is perhaps a misleading one. Market forces are always at work, openly or not, depending on the legal and regulative system employed to contain them. We are talking of the efficient use of competitive forces in a decentralized economy and the systems organization that most efficiently reins in all egocentric decision makers to maximize everybody’s well being: the “invisible hand” so to speak. The proposition is that there is a better solution than an explicit, central, visible hand.

The perfect market fiction of economics is of very little help in such endeavors. It says very little about the real, dynamic market process. For some peculiar reason, this seldom seems to have bothered the theoreticians. This means that the long term survey had to develop its own mode of analysis to come to grips with the market instabilities associated with the economic development in the industrialized countries since the end of the 60’s. A theoretical framework of a market economy incorporates legal structures, tax rules, cultural patterns, individual desires and preferences, etc—all things that contain and regulate market forces. The conclusion is that such institutional factors have increasingly become the guiding forces of the economy at the expense of individual desires expressed through the market. There is no way, except through the political process, to tell whether this is a desirable development. Nor is there a coherent theoretical structure to analyze such problems. The contention is rather that developments during the 70’s indicate that the distortive influences of Government interference in the market process are getting out of hand. New research techniques are needed to assess how the optimal market regulatory system should be organized and also to figure out what kind of economic well being is desired. For the time being at least, economics is methodically far removed from such pressing decision problems.

8. The Orientation of Future IUI Research

a) Education

The vitality and transformation that characterize the 40 year history of IUI reflect the competitive environment of the Institute. The research problems chosen have always been close to real world problems. This is the result of an

interested and understanding Board of Directors, competent presidents and a careful hiring policy. The entrepreneurial spirit and the willingness to “innovate” which often arise where people from different backgrounds mix have always permeated the Institute. The policy has been not to create a homogeneous research environment. No one sided way of looking at problems has had a chance to take roots. The reason is that for researchers and presidents alike the Institute has been an institution for education and investment in human capital for people en route to quite varied careers in business firms, organizations, bureaucracies and universities.

b) Internationalization

In recent years, IUI research has become internationalized. This has been considered necessary for the continued high quality and relevance of IUI research. A donation from the Marianne and Marcus Wallenberg Foundation in 1975 has made such a reorientation possible. The international contacts of the Institute have increased considerably. A number of economists—mostly from the U.S.—have spent periods of varying length at the Institute. The program has included: a) lectures and consultation, b) participation in IUI conferences, and c) direct engagements in IUI projects or own research at the IUI. It has been considered important to maintain flexibility as regards the practical arrangements for each visit and to select persons who can make contributions to IUI’s ongoing research.

With this activity several advantages follow. The Institute has acquired an international quality gauge which improves research performance. Personal and professional contacts are established. The international research frontier can be located, and “home grown” research that is not up to standards can be avoided. Finally, IUI research has acquired an indirect vehicle for dissemination. The new conference series of publications is one example. In fact, a growing part of IUI research is currently reported in international professional journals, and 20 percent of IUI books were sold abroad in 1979, representing a sharp increase.

c) Future research

The 80’s will require IUI research to reach beyond the traditional domains of economic research. To preserve relevance at least two new areas have to be covered.

First, the dynamics of entire economic systems is an area of theoretical and empirical inquiry high on the list of demands for information from political decision makers.

Second, problems connected with the optimal hierarchical ordering of decisions in the economy are unavoidably on the menu of IUI research in the 80’s, irrespective of the controversial nature of such problems.

It is paradoxical that so little attention has been paid to the dynamics of

market processes in economics and the behavioral patterns of interacting institutions and individuals. Any attempts in that direction, advocated among others by Joseph Schumpeter, were quenched by the Keynesian revolution in ways that Lord Keynes himself would probably not have subscribed to.

The Institute has also followed the international fashion of research during the past 20 to 30 years. This is currently manifested in a relatively large proportion of traditional macro economic research. The demands to develop new techniques to analyze the micro to macro behavior of entire economic systems will mean a return to the kind of individual firm based research manifest in Dahmén's and Svenilsson's scientific work in an early phase of IUI history. The micro-to-macro model developed at the Institute will be a necessary consistent framework for such analysis.

Systems research is a difficult and novel research activity at the level of an entire economy. A high level of risk taking ought, however, to be a guide line for research that, by definition, aims at the unknown. Such is at least research policy at the IUI. In other words, high quality is not synonymous with successful conclusion of all projects.

Fragmentary research as well as macro economics will be on the agenda for the future as well. While partial analysis can be justified in its restricted context, conclusions of a partial nature, however elegant and deep, may be entirely wrong when generalized uncritically to the national level. Rough macro relationships on the other hand conceal the dynamic features of an economic system and have been demonstrated not to be very useful when rare events occur. However, a wealth of fragmentary evidence on the operation of a national economy exists. The techniques and the efforts to synthesize such fragmentary evidence to reveal the broad overall patterns are missing. The depth of the analysis will have to be concerned with these interactive forces, not with further penetration into even tinier detail. This is difficult and it may not always be considered worthy of academic merit. The economics profession, however, cannot afford to hide behind the protective shields of academia. Economists have to come to grips with the new, difficult and challenging tasks that the policy makers have been facing for years with very little useful guidance.