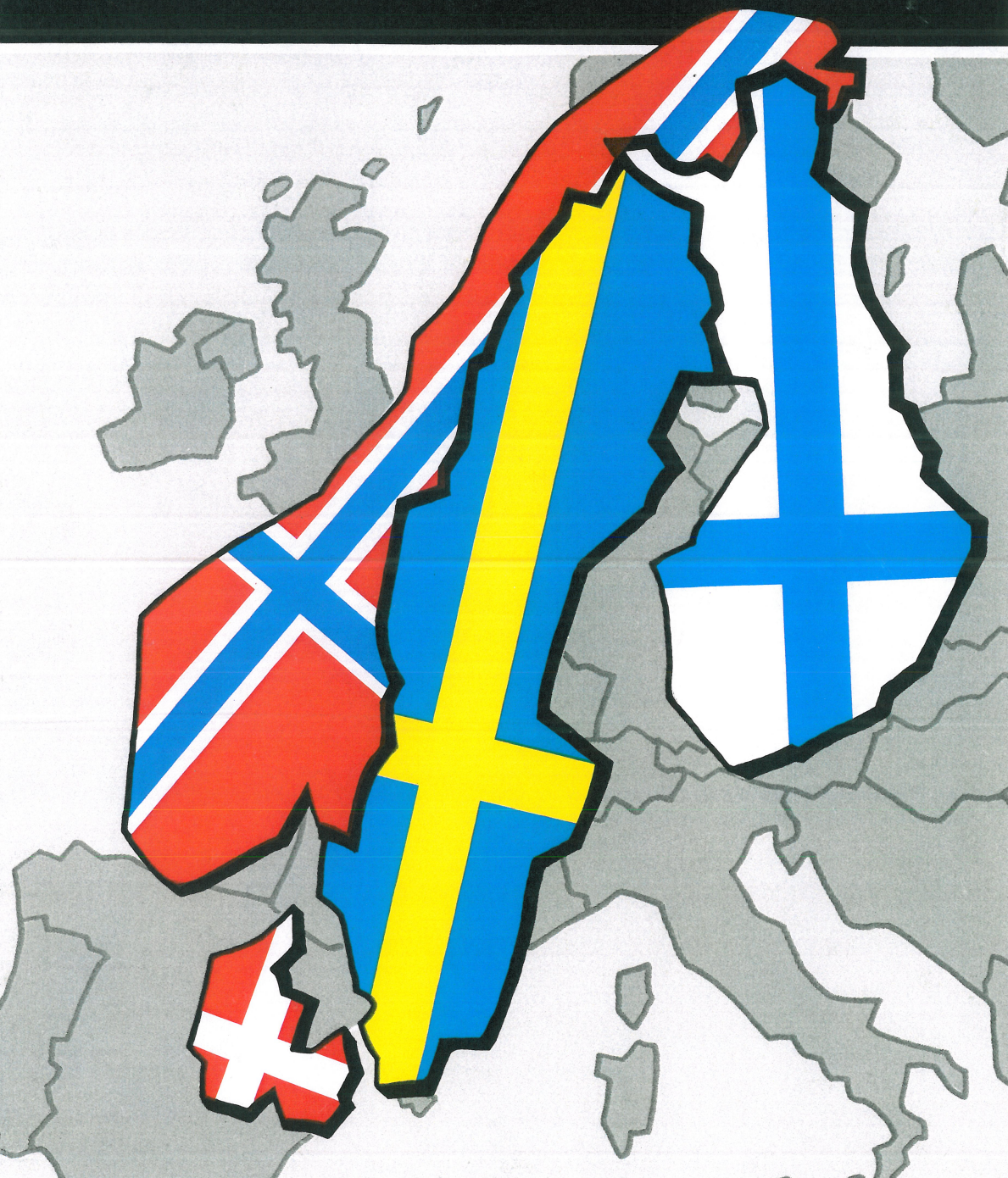
Growth and Integration in a Nordic Perspective



GROWTH AND INTEGRATION IN A NORDIC PERSPECTIVE

ETLA, Helsinki
IFF, Copenhagen
IUI, Stockholm
NØI, Bergen

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FOREWORD

For the third time The Nordic Perspective Group, formed by four research institutes in Denmark, Finland, Norway and Sweden, has conducted a comparative growth analysis of the four Nordic economies. The first study entitled "Economic Growth in a Nordic Perspective" was published in 1984. The second was published in 1987 under the title "Growth Policies in a Nordic Perspective".

This study addresses European integration as a main theme. We discuss the increased international division of labor expected from the European internal market, the changing role of intra-Nordic integration and the problems related to growth and structural change in individual countries. The separate country chapters present updated and in-depth analyses for each Nordic economy.

The book is a result of a series of seminars during last two years. The authors of the country chapters are: Uffe Palludan and Anders Bjerre for Denmark; Juha Ahtola for Finland; Per Heum, Ole Berrefjord and Karl-Ove Tvedt for Norway; and Lars Oxelheim for Sweden. The international outlook chapter has been written by Paavo Suni at ETLA. The introductory and summary chapter containing the assessment of the Nordic economies and the evaluation of the integration effects was drafted at ETLA by a small working group (Markku Kotilainen, John Rogers, Pekka Ylä-Anttila and Mikael Ingberg). The figures have been drawn by Arja Selvinen and Arja Virtanen at ETLA.

Gunnar Eliasson at IUI, Arne Selvik at NØI and Pentti Vartia at ETLA have participated at various stages in completing this study and served as editors for the book. It is our hope that the book will prove useful to the business community as well as to policy makers, researchers and students.

January 1990

Pentti Vartia	Uffe Palludan	Gunnar Eliasson	Arne Selvik
ETLA	IFF	IUI	NØI
Helsinki	Copenhagen	Stockholm	Bergen

THE NORDIC PERSPECTIVE GROUP

is a joint research team that was founded in 1981 and operates out of the four Nordic research institutes:

ETLA – The Research Institute of the Finnish Economy, Helsinki.
IFF – The Institute for Future Studies, Copenhagen.
IUI – The Industrial Institute for Economic and Social Research, Stockholm.
NØI – The Institute of Industrial Economics, Bergen.

The group meets regularly. It monitors long term structural tendencies among the Nordic economies. Research resources are pooled for special studies of particular problems. The aim is to take an integrated view of the entire Nordic economic system. Two joint studies have already been published.

Economic Growth in a Nordic Perspective (1984)

and

Growth Policies in a Nordic Perspective (1987)

The latter includes special studies on the Nordic financial markets and on the growth and size distributions of Nordic manufacturing firms.

GROWTH AND INTEGRATION IN A NORDIC PERSPECTIVE, Helsinki: ETLA (The Research Institute of the Finnish Economy, Helsinki); IFF (Institute for Future Studies, Copenhagen); IUI (The Industrial Institute for Economic and Social Research, Stockholm); NØI (The Institute of Industrial Economics, Bergen), 1990, 255 p. ISBN 951-9206-52-3 (ETLA), ISBN 91-7204-334–2 (IUI).

ABSTRACT: The book consists of two sections: the first part deals with the effects of European integration on the Nordic economies and the second gives detailed surveys on growth, performance and prospects for the four countries – Denmark, Finland, Norway and Sweden.

The study gives an overview of the close-knit economic relations between the Nordic countries and describes the recent economic developments and structural changes in the Nordic area. Comparisons with respect to the OECD and EC regions are presented. The challenges and opportunities posed by the European integration process are studied from several points of view: labor and capital markets, trade, firm behavior and fiscal harmonization. The country surveys show that the economic performance of the four Nordic countries and the policy problems they face are likely to be quite diverse during the first few years of the 1990s.

KEY WORDS: Economic growth, integration, Europe 1992, Nordic countries, economic policies.

CHAPTER I

Growth and Integration in a Nordic Perspective

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1. Introduction

1.1. The Structure of the Book

This book has two main themes: integration and growth. In Chapter I we evaluate the importance of the ongoing integration for the Nordic economies from the point of view of economic growth. The initial structure of the economies as well as the degree and the forms of present integration are of great importance for both the adjustment process related to the emerging internal market and future growth performance. Hence, section 2 of Chapter I reviews the existing supply composition, international dependency and economic policy positions of the Nordic economies.

Section 3 discusses Europe 1992 and the policy problems still to be solved related both to the completion of the internal market and to the external policies of the EC towards non-member countries.

Chapter II gives an international economic outlook up to the early 1990s including assumptions for the country projections.

Detailed growth projections for each of the Nordic economies are presented in Chapters III-VI.

1.2. Background

The past decade has seen a worldwide trend towards liberalization and deregulation of western economies. This trend is a natural continuation of the process of freeing the international trade flows, which has taken place, e.g., under the auspices of GATT. There has obviously been an increase in political awareness about the need to give more leeway to market forces throughout the western world, starting with Great Britain and the U.S.

The trend towards deregulation has taken several forms. On the one hand, competition has been increased at home by enhancement of competition policies, measures to increase productivity of the public sector have been introduced (privatization) and financial markets have been deregulated. On the other hand, competition has also been increased by opening up borders in areas where markets at home have been too small for real competition to arise.

Deregulation of markets probably has had and will have many positive effects on the western economies. Economic efficiency is likely to improve if the trend towards deregulation continues. But more competition and increased international dependency of the individual economies have also brought about problems regarding economic policy. The possibilities for small open economies to pursue an independent economic policy have been diminished. This is true especially in the area of monetary policy. The increased competition again has raised the question of tax wedges and other anomalities created by the government. In an international context tax and other regulatory arbitrage possibilities have received increased attention.

Thus, in general deregulation is strongly associated with harmonization of standards and legislation – either planned or through markets. After all, standardization of units of measurement and specifications, for instance, to allow interchangability of parts in production has been a key issue in the industrial evolution. Standardization is not limited to production technologies, but concerns also social institutions. For example, in the field of social policy there will be a host of difficult problems to be solved as the integration process proceeds. The nations are increasingly forced to compete against one another, e.g. with tax systems, in offering attractive environments for firms and professionals (see Eliasson 1988b).

The trend towards increased competition – combined with a political quest for a strong Europe – has already led to increased economic integration in Europe. The economic integration of Europe is an ongoing process which has been taking place for a long time. The EC Commision's White Paper of 1985 concerning the creation of the European internal market by the end of 1992 should thus be seen as an integral part of that process and as a political declaration that it will be continued.

The 1992 discussion has also been very important for other reasons. It has focused the attention of the public and of politicians on issues of competition, financial integration and tax harmonization. Deepening EC integration affects the Nordic economies in many ways. The EC countries are their main trading partners. Indirect effects through trade are magnified through active participation in the European economic integration. The increasing role of Nordic multinational firms and the integration of financial markets serve as illustrations.

Furthermore, because the process is bound to be slow, Europe 1992 will probably not have strong direct effects through, for example, actual harmonization measures before 1992. However, for the firms in the Nordic area the expectations of what will happen after 1992 already affect the decision making (see Braunerhjelm 1990). In this respect the uncertainties related to further integration represent important complicating factors in designing the business strategies of the firms.

Nordic countries are already strongly integrated in the Western European economies. Furthermore, these countries form an area with close economic relations, similar welfare levels, and a common cultural and social background. They formed as early as in the beginning of the 1950s a passport union and a common labor market, and more than one fifth of the exports of each country goes to other Nordic countries. There are many institutions, where practical harmonization of laws and policies takes place. As a matter of fact, the official Nordic cooperation covers all areas except foreign policy and defense. It is thus clear, that further integration of any Nordic country on the European level will be extremely relevant in the Nordic context.

As a member of the EC, Denmark is already participating in the 1992 plan. Finland, Iceland, Norway and Sweden belong to EFTA.[1]) They

[1] EFTA (The European Free Trade Association) consists of six member countries: Austria, Finland, Iceland, Norway, Sweden and Switzerland.

have, however, clearly expressed their willingness to somehow participate in the EC 1992 project. At the same time they have not been prepared to apply for membership in the EC. They are negotiating via EFTA to form a "European Economic Space" (EES), an area of economic integration between the EC and EFTA countries.

The EES negotiations are at the time of writing, in December 1989, in an active phase. The probability of an agreement has increased during the negotiation process, but the final result is unclear. If the EES idea fails, the main options for the Nordic EFTA countries would be joint or bilateral integration agreements with the EC, or membership.

1.3. Points of Departure and Basic Arguments

In writing this book we have had in mind four aspects of economic integration: The long-standing trend towards integration of various international markets, the European internal market program, intra-Nordic integration and, finally, the viewpoints of individual Nordic economies.

International market integration forces institutions to change

It is our view – as has been emphasized above – that the European integration policy is a part of a worldwide trend towards liberalization and deregulation of markets. The form of integration is not only a matter of political decision making on the government level. It is very much an endogenous process of integrating markets where independent decisions of firms and individuals have an important role to play (cf. Eliasson and Lundberg 1989).

Financial markets of the 60s and 70s were regarded as instruments of cheap financing, domestic markets being insulated and low interest rate policies pursued to the benefit of the investors and the public sector at the expense of private savers. The regulation, however, proved to be inefficient.

Worldwide integration of financial markets has forced exchange controls to be dismantled. The removal of controls (among the Nordic countries there are still some controls left in Finland and Norway) has caused the interest level to increase, placing a curb on, e.g., public expenditure expansion. Access to virtually unlimited liquidity has, however, spurred heavy spending by consumers and a strong increase in household indebtedness. The asymmetries of the tax systems have further stimulated this. As a consequence, tax reforms have been undertaken in each of the Nordic countries. Up ahead we see two additional institutional consequences of this. High market-priced finance in competition with international business is forcing also governments to look after their finances. Second, and for the same reason, the huge transfer payments of the welfare economies, notably in Denmark and Sweden, have to be curbed, forcing – during our projection period – a reduction in income egalitarian ambitions.

European policies create new opportunities

The 1992 plan is important also for the non-EC Nordic countries. This is not so much because of the emerging competitive threat of the internal market, but because of the opportunities created by an expanding European market (cf. Norman 1989 and Braunerhjelm 1990).

According to the results – though preliminary – of some studies on the effects of EFTA countries becoming part of the internal market the potential gains for EFTA economies might be larger than those for the current EC members (see Norman 1989). The EFTA countries, however, would not seem to lose much if they stayed outside the internal market. This conclusion, however, is reached when comparing to the past. If compared to what will happen if the EFTA economies are part of the rapidly expanding EC economy, the costs of staying out may be large. In addition, Norman's (1989) study omits the effects of firms' choice of location, which makes it inappropriate especially for Sweden, where the problem of staying outside the EC internal market is exactly the large-scale exodus of firms into EC that would follow (see Braunerhjelm 1990).

Intra-Nordic integration matters

The Nordic economies have long traditions in intraregional integration, the accumulated experiences of which constitute a valuable asset in further European integration.

The technological competence of firms is a decisive factor for competition in future global markets – whatever form the European process may take. In both our previous Nordic studies (1984 and 1987) we emphasized the potential importance of further integration of Nordic factor markets for individual firm competitiveness. These types of gains are more easily realized the more similar the cultural and institutional background the participating countries have. Europe 1992 only strenghtens this conclusion.

Thus, we argue that Nordic industries would have been stronger today if faster Nordic integration of capital markets would have occurred and advanced industrial knowledge would have been more efficiently allocated over the Nordic economies through the markets for ownership and control.

Currently, Swedish firms seem to be allocating their investments not only out of Sweden, but out of the entire Nordic area. For Finnish and Norwegian firms, however, the Nordic markets represent a much more important region in the light of recent investment behavior (see section 3.5).

Similarities and differences in effects on individual Nordic countries

The most obvious single factor causing differences in the effects of the integration process across the Nordic economies is, of course, the Dan-

ish membership in EC. There are, however, a host of other dissimilarities in the structures and current economic situation which will have a bearing on the integration process and the adjustments needed in face of deregulating Europe.

Alongside with the similarities in welfare levels and social institutions there are many differences, especially in the industrial bases of individual Nordic economies. The most important of these can be found in company and industry structures of these countries. It is our view that these differences are manifested in divergent patterns of firm behavior we can observe on the Nordic scene. Also the labor markets differ enough to justify expectations on differences in the future course of development. The existing tax systems exhibit some dissimilarities too. These issues are dealt with in sections 2 and 3.

The current economic situation varies across the Nordic economies implying also differences in economic policies during the coming 4–5 years covered by our forecast. Denmark and Norway – showing slow growth during the last years of the 1980s – are getting on faster growth paths at lower inflation, while Finland – the high performer of the past – is experiencing a slowdown in growth and difficulties related to a high cost situation. Sweden is seeing a repeat, so far, of its earlier low-growth high-inflation performance, attaining the lowest ranking in the growth performance among the four Nordic countries.

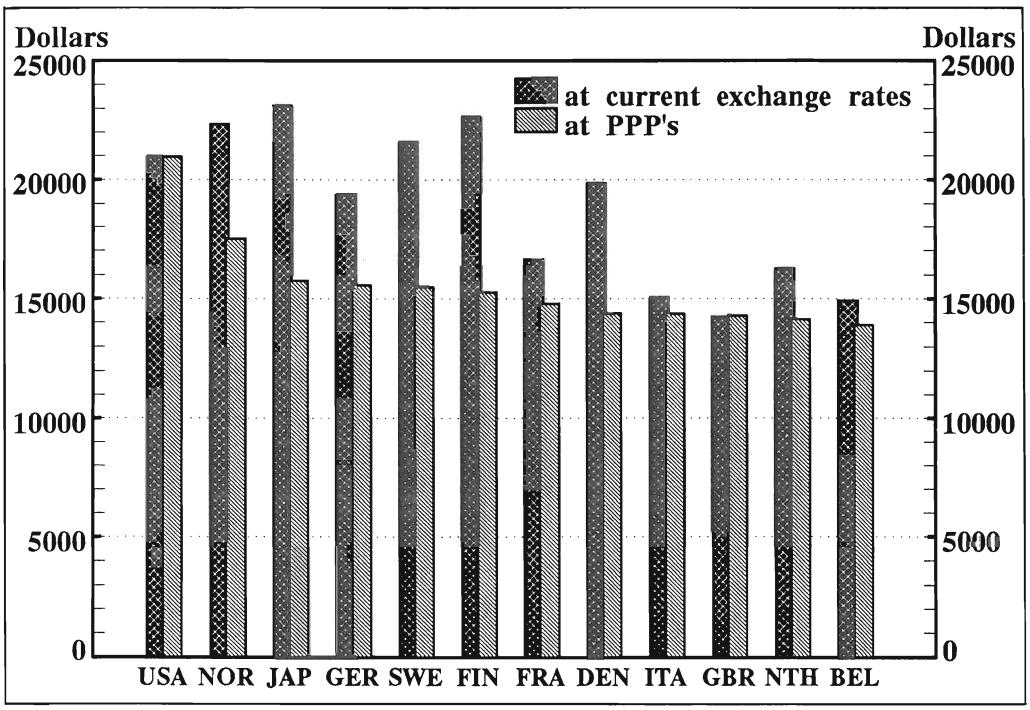
Denmark's membership in the EC has affected and will affect economic policies and policy options strongly. In the rest of the four the degree of policy autonomy is also likely to decrease.

2. The Nordic Economies

2.1. Wealthy Economies

Nordic countries are on the periphery of Europe, but in the "center" globally, at least since the Second World War. For example, Basalla (1967) includes these countries among the small circle of European nations, which served as home for modern science during the 16th and 17th centuries. In the 20th century income levels in these countries have exceeded the average European levels. During the postwar period the Nordic area as a whole has experienced extraordinarily fast economic growth. In the fifties only Sweden could be counted in the club of the richest nations in the industrial world, but since then the other Nordic countries have caught up. Measured in terms of GDP per capita Norway in fact surpassed Sweden, while Finland leapfrogged Denmark during the 1980s.

Figure I:1. GDP per capita at current exchange rates and at current purchasing power parities (PPP's), US dollars, 1989.



Source: OECD National Accounts and ETLA's estimates.
Note: GDP per capita figures at current PPPs have been calculated by converting national GDP figures into dollars using purchasing power parities rather than exchange rates. This means that a given amount of money, when converted into different currencies, will buy the same basket of goods and services in all countries. Thus, PPPs are the rates of currency conversion which eliminate differences in price levels between countries. The estimates for 1989 have been made at ETLA.

Table I:1. Nordic economies in 1988.

	Denmark	Finland	Norway	Sweden	Nordic	USA	EC
GDP, billion 88 $	107.5	105.1	92.2	178.5	482.3	4 880.6	4 745
Inhabitants, million	5.1	4.9	4.2	8.4	22.7	246.3	324.8
GDP, share, %	22	22	19	37	100		
GDP per capita 88 $	20 912	21 266	21 654	21 546	21 345	19 558	14 687
GDP per capita at PPPs, Nordic average = 100	93	95	112	101	100	134	86
Share of world total exports, %	1.0	0.8	0.8	1.9	4.5	12.0	40
Contribution to GDP, %							
– Agriculture, forestry, fishing	4.9	6.2	3.1	3.3		2.0	3.1
– Oil and gas		..	8.3	..			
– Mining and quarrying	5.4	0.3	0.3	24.6		19.3	25.0
– Manufacturing	28.1	23.4	16.2				
– Electricity	1.8	2.6	10.2	3.5			
– Construction	8.1	8.5		7.9			
– Private services	38.3	42.5	39.4	36.5		68.8	62.4
– Public services	17.7	16.5	15.5	24.4			
– Correction item			7.0				
Infant mortality per 1 000 live births	7.9a	5.8b	8.5b	6.8a		10.4b	
Telephones per 1 000 inhabitants	783a	615a	622c	890d		650c	
Automobiles per 1 000 inhabitants	367e	386e	459e	431e		728e	

a 1985 b 1986 c 1984 d 1983 e 1987

The high income levels of the Nordic countries are also reflected in various social indicators, some of which are presented in Table I:1.

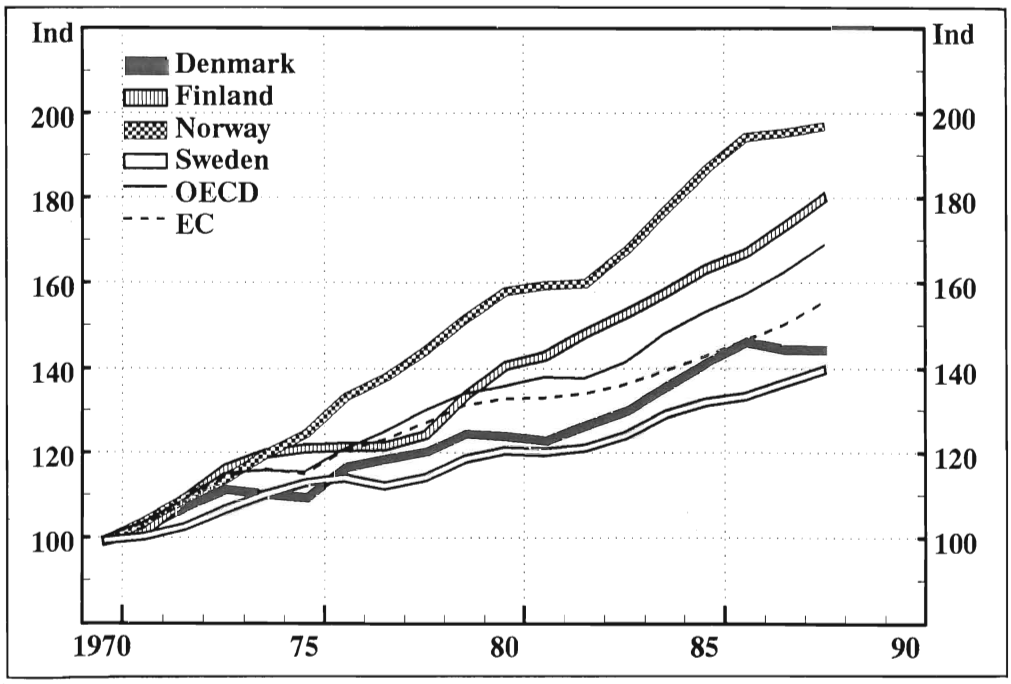
The present GDP per capita comparisons based on current exchange rates give a somewhat misleading picture of the welfare levels of the Nordic countries, since the Nordic currencies at the moment are overvalued in relation to most European currencies (cf. Figure I:1).

During the last couple of decades Finland and Norway have shown, internationally speaking, strong economic performance, while the performance of the Swedish and the Danish economies has been less outstanding (Figure I:2).

The reasons for the strong performance of Finland and Norway differ, however. In Finland especially growth in industrial production was the engine for growth up to the late 1980s, whereas the development of large petroleum sector accounts for the favorable Norwegian growth in GDP over the last 15 years.

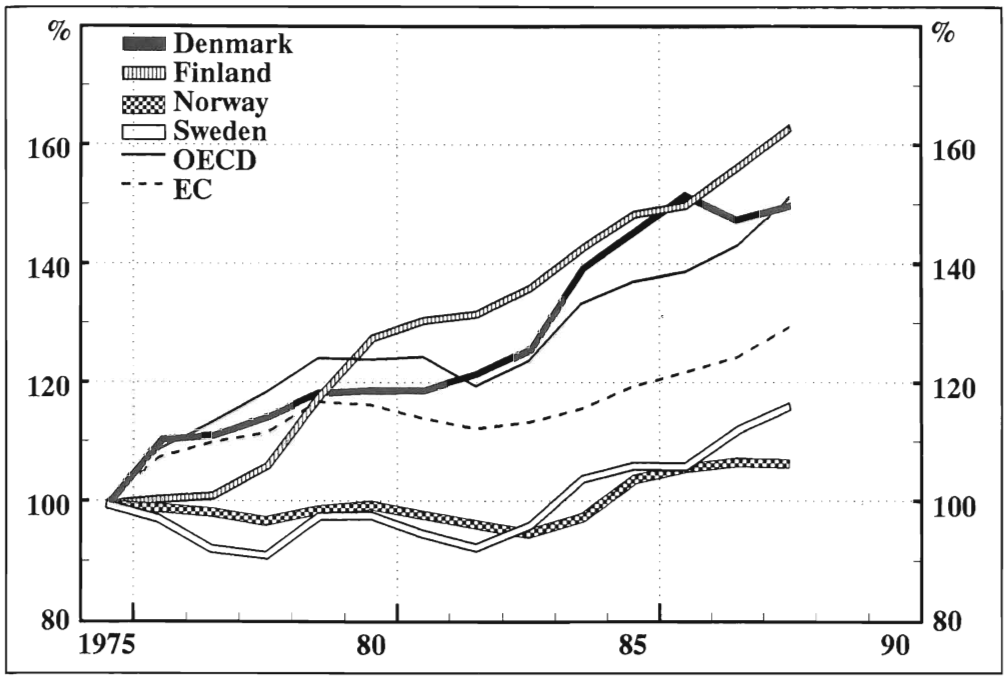
Norwegian economic prosperity has been built on oil and natural gas. This has had a positive effect on the Norwegian economy in terms of GDP growth, but also a crowding out effect on manufacturing industry. The most negative effect is the increased vulnerability of the economy. The Norwegian economy is now extreemly dependent on the

Figure I:2. GDP volume in the Nordic countries, OECD and EC (1970=100).



Source: OECD Annual National Accounts

Figure I:3. Volume of industrial production in the Nordic countries, OECD and EC (1975=100).



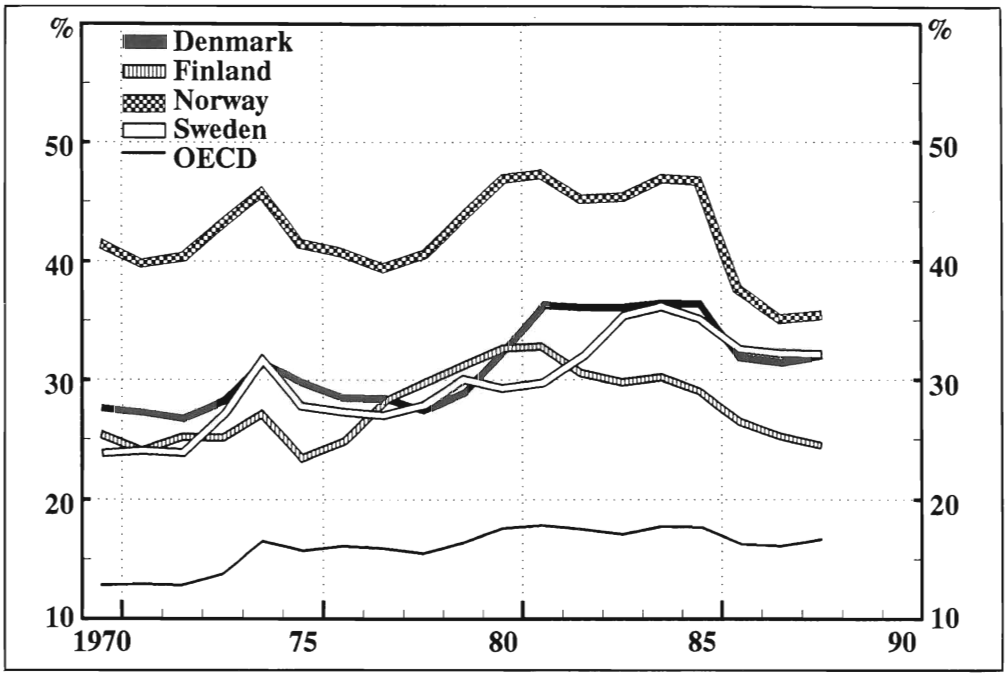
Source: OECD Annual National Accounts

future success of the oil sector. The fact that a totally new sector has been created has led to a fight over scarce resources, and parts of the traditional manufacturing sector have been the losers. Norway has experienced extraordinary employment growth during the period after the Norwegian oil production started, which has also boosted inflation.

2.2. Dependency on International Division of Labor

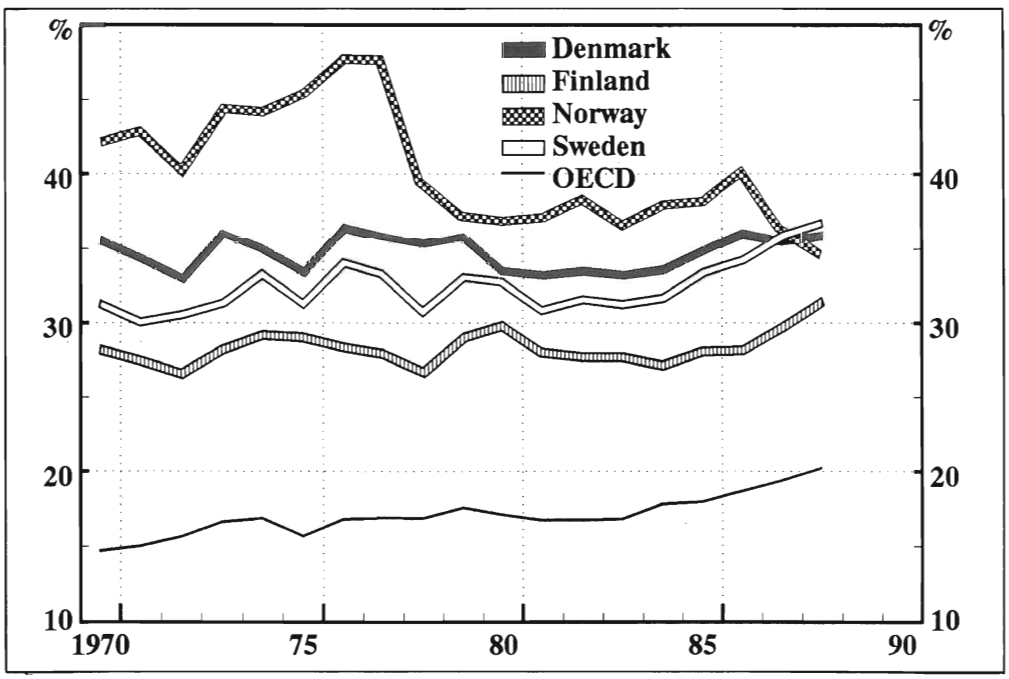
In the small but advanced Nordic countries exports as a percent of GDP vary between 25–35 %. Norway is by far the most open economy of the four (see Figures I:4 and I:5). During recent years the export shares have been declining in all the Nordic countries due to unfavorable developments in terms of trade in the case of Norway, and due to excess domestic demand in the case of the other three economies. The expansion of domestic demand has exposed Sweden and especially Finland to serious external accounts problems, which considerably restrict the future growth prospects of these economies (see sections 2.5 and 2.6, and Chapters IV and VI). In Denmark the same problem has been chronic for a very long period. All in all, recent years have, once again, shown the vital importance of export industries in the Nordic economies – the sectors exposed to global competition have shrunk too much in size and are

Figure I:4. Exports of goods and services, % of GDP (current prices)



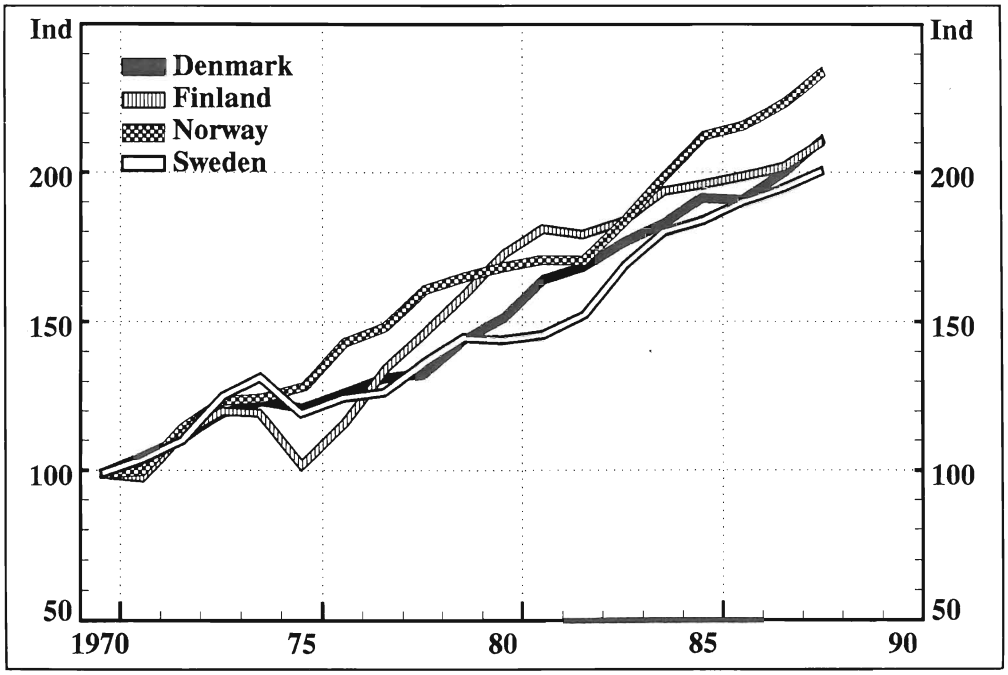
Source: OECD Annual National Accounts

Figure I:5. Imports of goods and services, % of GDP (current prices)



Source: OECD Annual National Accounts

Figure I:6. Volume of merchandise exports (1970=100)



Source: OECD Annual National Accounts

Table I:2. Five most important export items (at two-digit SITC level), % of exports of goods in 1988.

	Product group	Denmark	Finland	Norway	Sweden (1987)
01	Meat and preparations	10.0			
03	Fish and preparations	6.0		7.0	
24	Wood products		5.2		
33	Petroleum and paper products			24.0	
34	Gas, nat. and manufact.			11.3	
64	Paper and paper products		27.1		10.9
67	Iron and steel		5.0	3.9	5.8
68	Non-ferrous metals			12.3	
72	Machinery for special industries		5.8		4.9
74	General industrial machinery	7.6	4.1		7.8
78	Road vechiles				15.4
82	Furniture	3.7			
89	Manufactures, NES	5.8			
	Total	33.1	47.1	58.6	44.0

Source: National Foreign Trade Statistics.

currently too small to support steady growth of current high living standards in the future.

All Nordic countries show concentrated export patterns. Norway has the thinnest and most vulnerable export base being heavily dependent on oil revenues. About two thirds of total exports consist of oil, gas and other energy and raw material based products like metals, pulp and chemicals – the rest being mainly services. Denmark is at the other end of the Nordic spectrum (see Table I:2). Still the five most important Danish export items (at the 2-digit SITC level) represent as much as one third of its total exports. Sweden and Finland fall between the two extremes, with Finland showing a higher export concentration than Sweden.

By European standards the Nordic countries are also geographically quite heavily specialized in their exports (see Table I:3). Norway is showing the highest score also in this respect: Five countries account for two thirds of total exports. Sweden exhibits a bit more diversified regional export structure than Denmark and Finland.

All Nordic countries have the UK and Germany among their most important trading partners. The EC area as a whole is certainly the most important export market for the Nordic firms. The share of the EC in total Nordic exports is more than 50 % ranging from about 45 % in Finland to over 60 % in Norway (see section 3.2.).

In addition, intra-Nordic trade is of great importance: more than 20 % of total exports in each country ends up in the Nordic region. This share has, however, slightly diminished throughout the 1980s. Sweden is most dependent on other Nordic countries for exports. Sweden is also a particularly important export market for the other three countries.

There is some evidence that intra-Nordic trade has influenced Nordic export patterns and competitiveness more strongly than the mere size of the trade implies. Intra-Nordic trade seems to have had a positive impact on the gradual transformation of Nordic exports from raw material

Table I:3. Exports to five most important customer countries, % of total exports, 1988.

Denmark		Finland		Norway		Sweden	
FRG	17.6	Soviet Union	15.0	Great Britain	26.7	FRG	12.1
Great Britain	12.2	Sweden	14.1	FRG	12.9	Great Britain	11.2
Sweden	11.5	Great Britain	12.9	Sweden	12.2	USA	9.9
Norway	7.0	FRG	10.8	France	7.5	Norway	9.3
USA	5.8	France	5.3	Netherlands	7.2	Denmark	6.9
Total	33.1		58.1		66.5		49.4

Source: National Foreign Trade Statistics.

based products toward advanced industrial goods in the 1960s and 1970s. The Nordic "home market" has provided a growth base for some new, technology-intensive products at the early stage of their life cycles. Nordic economic integration seems to have spurred production of such products as pharmaceuticals, plastics, telecommunication equipment (the most important example being mobile communication system) etc. This lends support to the idea that the more similar the participating countries are, the more likely economic integration is to enhance innovation (see Fagerberg 1989a and 1989b).

Exports in the Nordic countries are concentrated companywise as well. In Finland, Norway and Sweden the ten largest exporters are responsible for 40–50 % of total merchandise exports. Moreover, the contribution of large firms to exports and other foreign operations has been steadily increasing in these countries (see Firm Dynamics...1990).

The international dependency of the Nordic economies has been increasing via direct investments abroad even more than through trade flows. These developments have especially characterized Sweden, where the foreign direct investments are already about 25 % in relation to domestic fixed capital formation of the business sector. The corresponding figure for Finland in 1988 was about 12 %, for Denmark about 6 % and for Norway much below that. Looking at the manufacturing

Table I:4. Ten largest export companies 1988, % of total merchandise exports.

Denmark		Finland		Norway (1987)		Sweden	
ESS-Food	3.1	Kymmene	6.1	Statoil	18.2	Volvo	11.5
J. Lauritzen	2.9	Enso	5.9	Norsk Hydro	10.7	Saab-Scania	6.6
MD Foods	2.4	Outokumpu	5.4	Esso Norge	3.6	Asea	5.4
Danfoss	2.4	Nokia	4.7	Phillips Petroleum	3.2	Stora	4.3
Novo	2.1	Metsä-Serla	4.1	Elkem	3.0	Mo och Domsjö	3.7
Tulip	1.6	Rauma-Repola Yhtyneet	4.1	Elf Aquitaine Fina	2.9	Nobel Industrier	2.8
FLS Industries	1.6	Paperitehtaat	3.7	Exploration	2.5	Electrolux	2.3
Rockwool Internat	1.5	Tampella	3.6	Total Marine	1.7	Svenska Cellulosa (SCA)	2.2
Sophus Berendsen	1.4	Wärtsilä	3.2	Orkla-Borregaard	1.3	Sandvik	2.1
De Danske Sukker-fabrikker	1.4	Neste	2.9	Norsk Agip	1.2	Nordstiernan	1.9
TOTAL	20.4		43.9		48.3		42.8

Note: Danish company level data is hard to come by. There might be some firms which have larger exports than those mentioned in the list. The data used in the table is partly estimated by IFF on the basis of total foreign sales figures.

industry only, the figures are clearly higher: in Sweden in 1988 as much as 70 %, in Finland about 25 % and in Norway more than 10 %.

One of the factors explaining the accelerating internationalization of business – mainly seen in the cases of Sweden and Finland – is the firms' reaction to the pronouncements about the European internal market. These questions are dealt with in more detail in sections 3.3 and 3.5.

2.3. Welfare Economies: A Large Public Sector

The Nordic economies are not only wealthy economies, they are also economies which often are characterized as welfare states. In the post-war period the "state" has taken larger and larger responsibilities outside traditional tasks of administration, defense and maintenance of law and order. Production of services and transfers related to health, education, housing and many social services have been growing particularly fast. Table I:5 shows that there are still considerable differences in the magnitude of the public sector in the Nordic countries: Sweden and Denmark have exceptionally large public sectors compared to other western industrial countries, while Norway and Finland are closer to the international average. This is, however, a result of public sector expansion during the 1970s. At the beginning of the 1960s the public sectors of Sweden and Denmark were relatively small by western European standards.

During the 1980s the public sector's share has been more or less stabilized in Sweden and Denmark, whereas it is still growing in Finland and Norway. Tax rates (total taxes/GDP) in Sweden and Denmark are over 50 %. A sign of the activities of the welfare state in the redistribution of income is that a very large share of the public budget goes to transfers to the private sector. In Sweden they add up to one third of GDP, which is the highest ratio among the European countries.

All the Nordic countries have in recent years had changes in their taxation, a theme to which we will return in section 3.7. A general direction in the tax reforms has been the same as in many other countries: towards broader tax base and lower tax rates.

The tax reforms in the Nordic countries are related to many problems, if not the crises, of the rapidly growing welfare state. Higher tax rates have led to large distortions in the allocation of resources between various sectors, in the allocation of time to work and leisure, in the allocation of income to saving and consumption, etc.

The marginal "social return" of public projects in areas like health, education and infrastructure was, of course, larger after the war, when public sectors were much smaller than they are today. The situation has changed, and socially much more profitable projects for the nation are to be found outside the public domain. As politicians are elected by voters, out of which a larger share is directly dependent on the growth of the public sector activities, a vicious circle that may be difficult to break has been established. Current reforms in many European countries indi-

cate, however, a trend towards privatization of parts of the public sector – although the process is still slow. This trend is seen also in the Nordic countries.

2.4. The Manufacturing Base: The Engine for Growth

Divergent growth performance across the countries

Sweden was industrially the most advanced amongst the four Nordic countries just after the war. Sweden was able to stay outside both world wars and the manufacturing companies could benefit especially from the high international demand in the interwar reconstruction period – utilizing its industrial capacity built in the beginning of the 1900s. Finland was then at the other extreme of the industrial spectrum – manufacturing output per capita was well below that of the other Nordic economies. However, over the past four decades manufacturing output has been

Table I:5. Public sector activities.

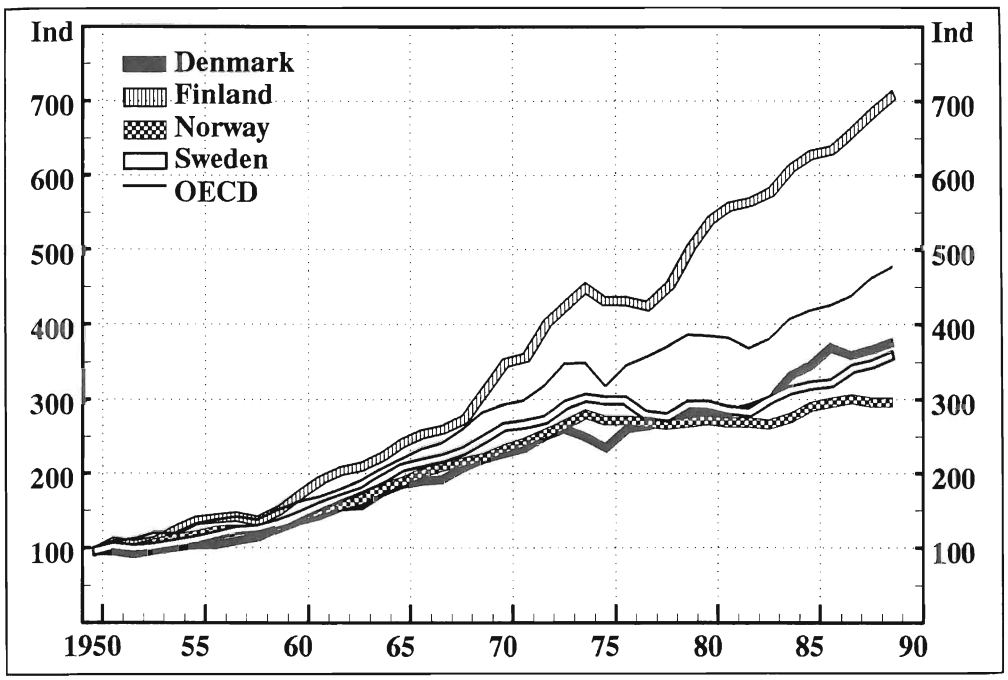
	Denmark	Finland	Norway	Sweden
PUBLIC CONSUMPTION				
– share of GDP, % in 1988	26.0	20.2	20.6	27.3
– trend in share 1975–1988	Decreasing	Increasing	Increasing	Decreasing
– per capita in USD, 1988	5 447	4 295	4 481	5 684
PUBLIC INVESTMENTS				
– share of GDP, % in 1988	2.6	3.3	3.7	2.4
– per capita in USD, 1988	545	693	805	504
GDP, bill. nat. curr.	724	440	594	1077
Public consumption, bill. nat. curr.	188	89	123	294
Public investment, bill. nat. curr.	19	14	22	26
Population, mill.	5.1	4.9	4.2	8.4
Exchange rate, USD	6.73	4.186	6.517	6.129
TRANSFERS TO PRIVATE SECTOR				
– share of GDP	17.6	14.3	23.4	32.5
– per capita in USD	3 678	3 040	5 070	6 796
TAXES				
– share of GDP, %	52.2	37.7 (44.5)*	48.1	56.3
of which				
– direct taxes	31.3	16.9	17.8	25.1
– social security contributions	1.1	4.8	13.0	14.3
– indirect taxes	19.8	16.0	17.3	16.9

*) Employers' compulsory payments to private pension funds defined as taxes.

growing much faster in Finland than in the other three countries and also compared with the OECD area on the average (Figure I:7 and Table I:6). Currently, the relative size of manufacturing sector is approximately the same in Finland and Sweden – about 25 % of GDP, in Denmark and Norway the corresponding figures are substantially lower (Figure I:8).

The major differences across the Nordic countries in manufacturing growth performance appear since the mid-70s. Swedish and Norwegian manufacturing experienced a ten-year period of practically no growth at

Figure I:7. Volume of manufacturing output in the Nordic countries and OECD (1950=100)



Source: OECD

Table I:6. Manufacturing output in the Nordic countries and in the OECD, average annual change in volume, %.

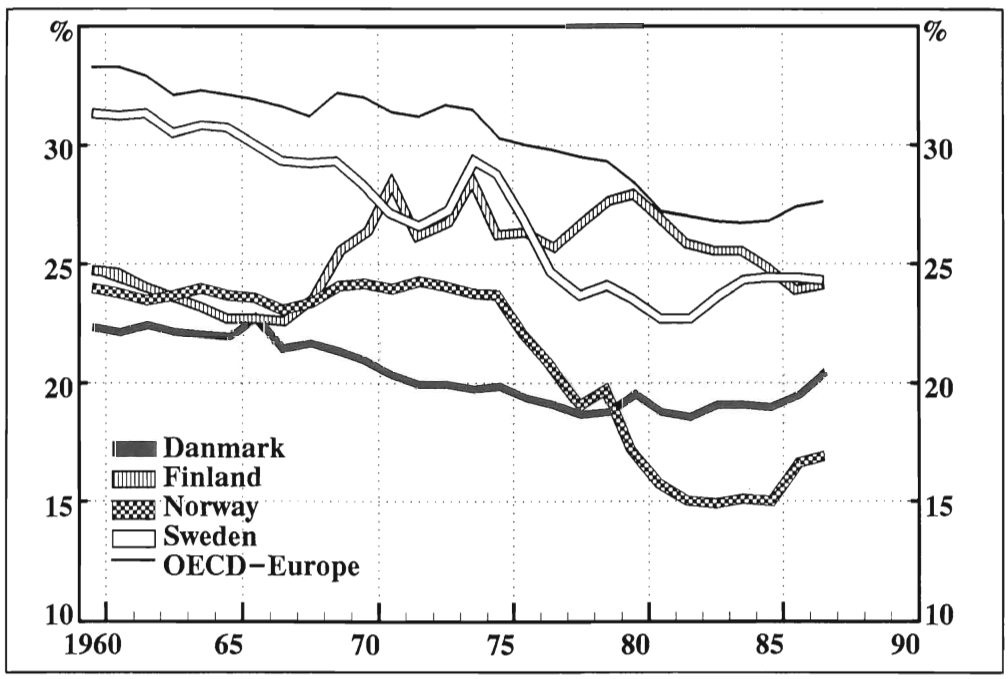
	OECD	Denmark	Finland	Norway	Sweden
1950–88	4.1	3.5	5.2	2.9	3.4
1950–65	5.4	4.4	6.2	4.6	5.2
1965–74	5.3	3.3	7.1	4.4	4.1
1974–88	2.0	2.7	3.0	0.4	1.0

Source: OECD

all. Finland, on the other hand, after an intermediary break, surged ahead of the OECD average. In Denmark the post 1974 growth has, on the average, slightly exceeded that of the OECD area, but the performance during recent years has been poor. Swedish manufacturing regained growth after the devaluations in the early 1980s and has been struggling with overheating during the last couple of years. Norwegian manufacturing output has been growing slightly after 1983 in the shadow of the oil sector.

Adding manufacturing employment developments to the picture gives a new dimension to differences in the growth processes of Nordic manufacturing industries. Finnish manufacturing grew rapidly both in terms of employment and output until the early 1980s showing a pattern of extensive growth compared to the OECD area as a whole. Contrary to this, in the other Nordic countries manufacturing employment has been declining much faster than in the industrial economies on average (see Figure I:9). Finnish manufacturing seems to have come to the phase of decreasing manufacturing employment as late as in the beginning of the 1980s, i.e. some 10–15 years later than the manufacturing in the OECD countries on average. At the same time, during the past couple of years, there are signs of reindustrialization in the other Nordic countries in the sense that the share of manufacturing (as conventionally defined) in GDP has been on a bit higher level than in the beginning of the 1980s.

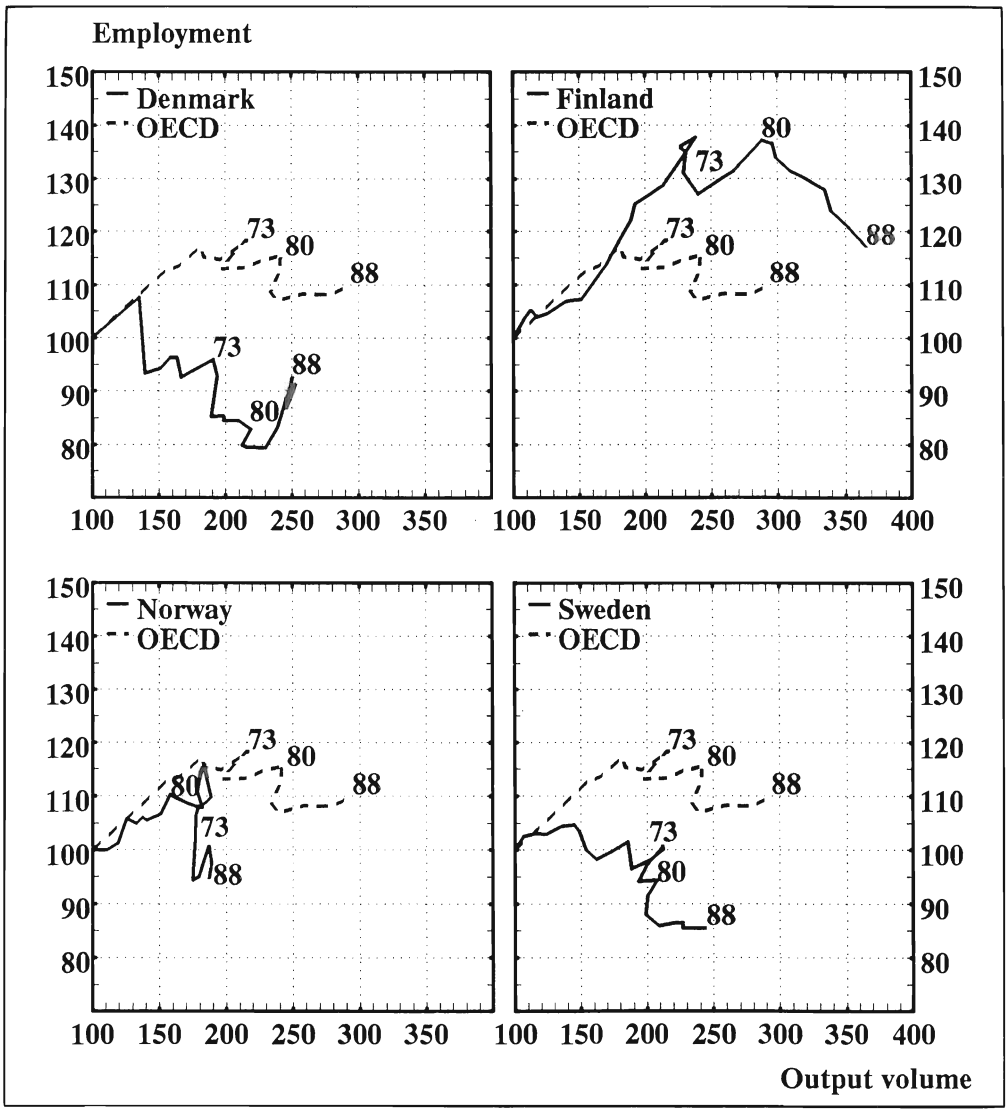
Figure I:8. Share of manufacturing in GDP in the Nordic countries and OECD Europe, %



Source: OECD Annual National Accounts

Looking at the course of development in the manufacturing industries on the basis of the official statistics, however, tells only a part of the story. Manufacturing is not any more an easily definable entity – it is well known that manufacturing companies have gradually been moving service production, which previously was carried out in the user firm, to specialized service producers. On the other hand, the internal production of services has been increasing too, but obviously at a slower pace than the externalization of service production. Hence, the statistical picture of manufacturing is much too narrow. If all service production

Figure I:9. Employment and output in manufacturing, 1960–88 (1960=100).



Source: OECD Annual National Accounts and Labour Force Statistics

integrated with manufacturing goods' design, production and distribution is added in, the picture may change dramatically. In Sweden (cf. Eliasson et al. 1989) the redefined manufacturing sector accounts for about half of the GDP and it has not been decreasing since the beginning of the 1950s. If Swedish foreign manufacturing value added is taken into account, the share of the sector has been increasing.

Thus, the entire concept of deindustrialization might be meaningless. The problem of growth and efficiency is more a problem of structural (organizational) change within industries and firms than a question of shifts between industries.

Furthermore, all that was said above on growth performance concerns only the domestic part of manufacturing activities. An increasing part of the growth of Nordic industrial companies is taking place abroad. So, when looking at the future prospects of the manufacturing sector, the emerging linkage to knowledge-intensive service industries and the increasing internationalization of business are of growing importance.

However, the domestically operating manufacturing sector is still the core of the "growth engine" of all the Nordic economies – maybe with the exception of Norway. Denmark, Finland and Sweden are facing problems with their external balances. In these countries manufactured goods account for 80–85 % of total exports. In order to meet the requirement of balancing the external accounts, major surpluses in the trade of goods are needed, since there is a structural imbalance in the other items in the current account. Hence, the growth prospects of these economies are firmly tied to the export performance of industrial companies.

In Norway the role of the manufacturing industry is seen from another perspective: the manufacturing base has to be diversified in order to reduce the risk exposure of the economy created by the dominant role of the oil sector. This point is strongly emphasized in the Norwegian country chapter where growth prospects are analyzed in a long-term perspective.

Summing up, it seems that the growth engine, the manufacturing industry, has in all Nordic countries lost some of its growth generating capacity. Below some aspects of the supply composition, productivity performance and competitiveness are examined. We study factors explaining – at least to some extent – the differences in growth rates. Issues related to the ongoing integration process and manufacturing growth projections are dealt with in Section 3.

Production structures

The Nordic manufacturing structures exhibit quite different patterns and changes over the past ten years (see Table I:7). Denmark has a strong base in agrobusiness (agricultural production and food industry) and another, but less important, in engineering and electronics. A fair share of Finnish manufacturing is continuously contributed by the forest based industries, which account for 40 % of total Finnish merchandise exports

Table I:7. Value added in manufacturing by branches of industry in 1976 and 1986, per cent.

	Denmark		Finland		Norway		Sweden	
Branch of industry	76	86	76	86	76	86	76	86
31 Manufacture of food, beverages and tobacco	21.6	22.6	14.4	13.8	10.9	15.8	9.8	10.1
32 Textile, wearing apparel and leather industries	6.8	5.2	8.8	6.6	4.4	2.6	4.1	2.4
33+34 Forest industry	7.0	7.6	17.4	20.6	14.3	12.3	15.7	14.5
331 Manufacture of wood and wood products, incl. furniture	4.4	5.0	6.9	6.7	8.9	7.3	7.2	5.7
341 Manufacture of paper and paper products	2.6	2.6	10.5	13.9	5.4	5.0	8.5	8.8
342 Printing, publilishing, etc.	7.1	6.9	7.2	8.3	6.9	9.9	5.3	6.2
35 Manufacture of chemicals and chemical, petroleum, coal, rubber and plastic products	12.2	14.1	10.5	10.4	10.4	10.6	9.5	13.4
36 Manufacture of non-metallic mineral products	6.9	5.7	4.2	4.2	4.2	4.0	3.6	2.8
37+38 Basic metal industries and manufacture of fabricated metal products, machinery, etc.	36.9	36.2	36.8	35.2	48.1	44.2	51.5	50.2
371 Iron and steel basic industries	1.5	1.2	3.3	3.3	4.9	3.0	4.5	4.3
372 Non-ferrous metal basic industries	0.5	0.4	0.9	1.0	5.3	6.3	1.3	1.4
381 Manufacture of fabricated metal products, excl. machinery	6.1	8.0	5.7	6.0	6.8	6.7	8.7	8.1
382 Manufacture of machinery, except electrical	12.9	13.0	11.8	11.2	9.8	13.8	13.3	12.1
383 Manufacture of electrical machinery apparatus, etc.	6.1	6.2	5.6	6.7	6.9	7.4	8.6	8.5
384 Manufacture of transport equipment	7.9	4.7	8.8	5.6	14.2	6.4	14.1	14.3
39 Other manufacturing industries	1.5	1.7	0.7	0.9	0.8	0.6	0.5	0.4
All manufacturing industries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Value added in national currency, (Mill.)	42 785	118 924	30 817	75 798	32 655	70 406	95 084	229 210
Value added in US dollars, (Mill.)	7 078	14 698	7 975	14 952	5 985	9 521	21 829	32 176

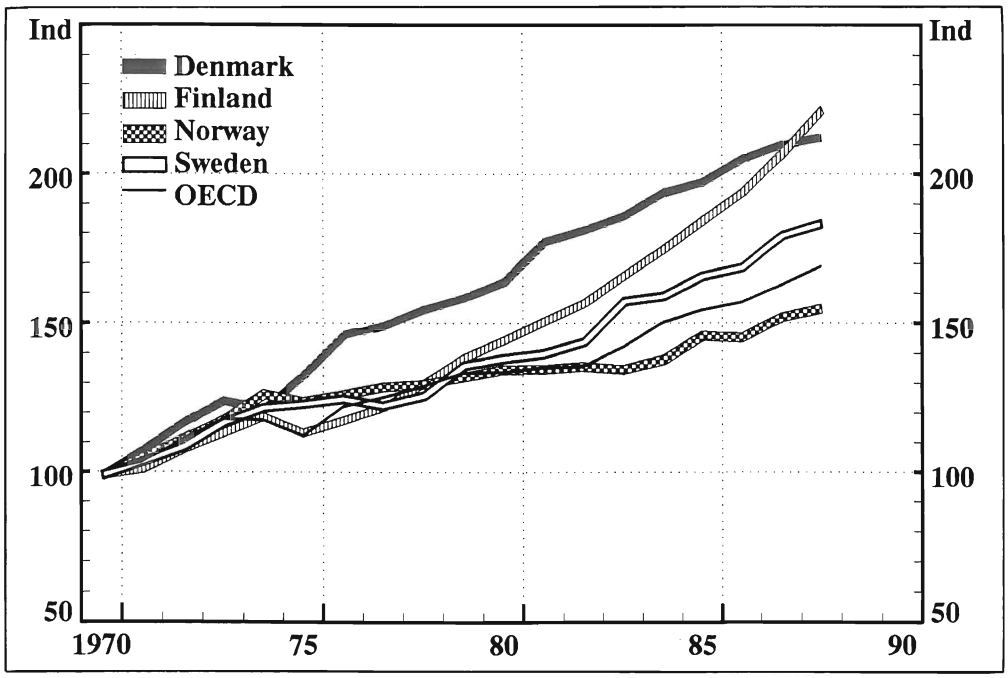
Source: Yearbook of Nordic Statistics 1978 and 1988.

and about 20 % of total manufacturing output. Furthermore, these shares have been growing during the last couple of years after a long period of a decline. However, the product ranges of forest industry companies have substantially changed during the last 10–15 years towards high-quality grades – hence, part of this production is knowledge-intensive as opposed to raw-material based basic industry (cf. Vuori & Ylä-Anttila 1987). In addition specialized engineering is becoming more important in the Finnish industrial structure.

In the same way as Denmark is an agroeconomy, Norway could be characterized an energy-economy or a petroeconomy. Manufacturing is based on a relatively narrow spectrum of industries in machinery and in production exploiting hydroelectric power. The experiences of the past 15 years show a substantial reallocation of labor and capital input from traditional export industries and import competing industries to the oil sector.

The Swedish industrial economy is hard to describe by referring to a single dominating industry or industrial complex. On the contrary, there are several of them. Sweden has a well diversified engineering industry (incl. the automobile industry); the other important industrial blocks are forest industries, and mining and steel industries (cf. Carlsson et al. 1981 and Fredriksson 1988).

Figure I:10. Labor productivity in manufacturing in the Nordic countries and OECD (1970 = 100).



Source: OECD Annual National Accounts and Labour Force Statistics

So, there are major differences in the industrial structure across the Nordic economies. However, when looking at the structural changes over the past ten years some similarities can be found: there is a clear tendency towards knowledge-based industries and to further internationalization of business (see Eliasson 1988). These issues will be dealt with below to some extent.

Productivity and investment

Manufacturing industries in all the Nordic economies were hit by the widespread productivity slow-down in the late 1970s. There are, however large differences between the countries. Both the labor productivity and total factor productivity (TFP) have been growing much faster in Finnish manufacturing than in the other three countries (see Figure I:10 and Firm Dynamics... 1990). The average annual growth rate of TFP in Finnish manufacturing in 1979–86 was more than 2 %, the corresponding figure for Sweden being less than 0.5 % and for Denmark and Norway around 1 % (OECD 1988, see also Vuori 1988).

The high productivity growth in Finland is explained by rapid growth in output and, on the other hand, by structural adjustments and rationalization leading to reductions in the manufacturing labor force. In addition, the manufacturing investment activity has been steadily increasing in Finland throughout the 1980s – especially investment in intangible assets has been growing very fast (Figure I:11). In Sweden, for example, the fixed manufacturing investment is still below the 1977 level. The increase in total factor productivity can be explained to a large extent by growth in R & D expenditure and fixed capital accumulation affecting productivity via technological embodiment effects.

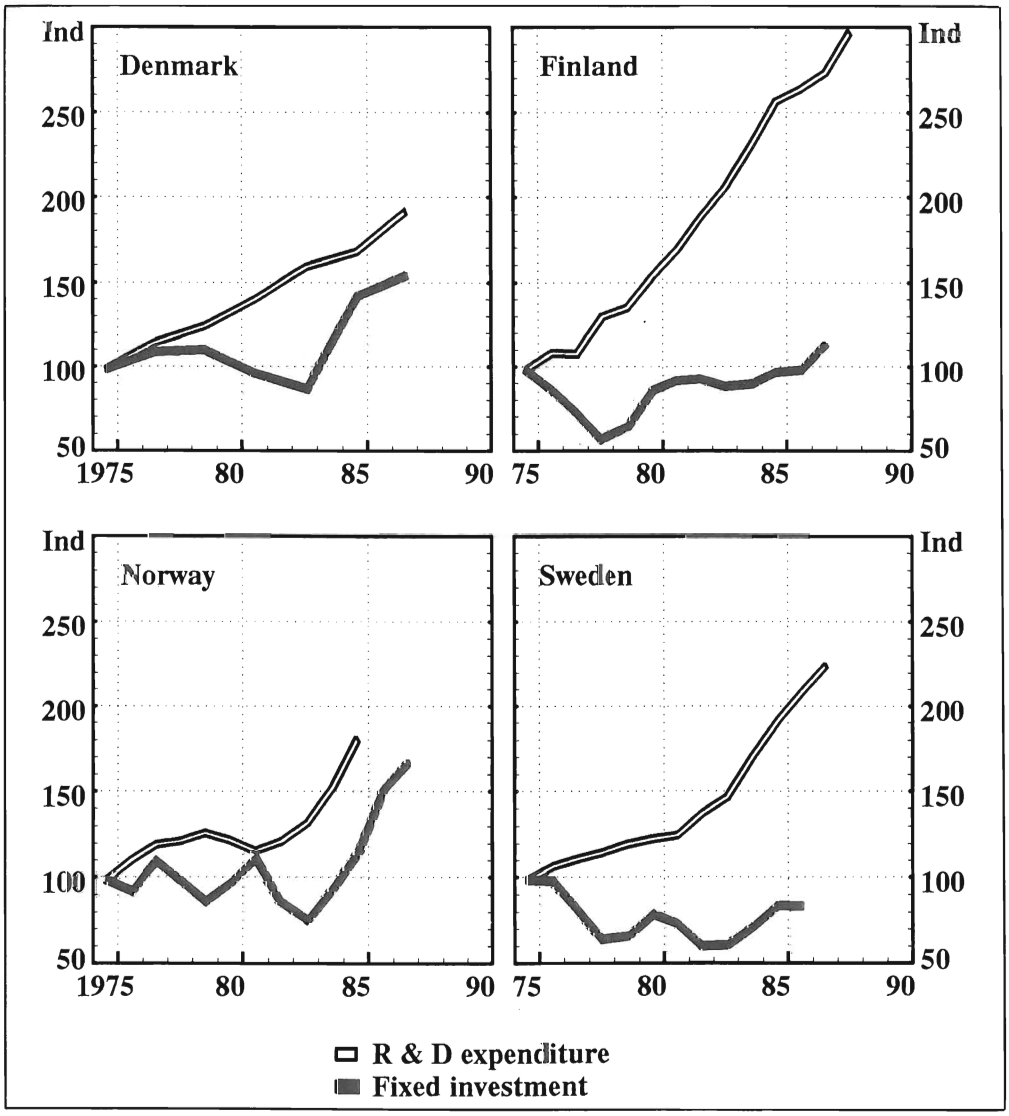
However, the level of labor productivity in Sweden is still clearly above that in the other three countries. Danish and Finnish manufacturing productivity levels are approximately the same, Norwegian manufacturing being at the low end of the Nordic spectrum (see Kallinen 1990).

Company structure

A dynamic economy is characterized by a continuous restructuring of business – old companies grow and change or die away, new companies are established and grow or are taken over by other firms.

The company structure of the four Nordic countries has undergone major changes during the past decade. All the countries have seen a surge of mergers and acquisitions – consequently the role of large firms has been increasing. On the other hand, the number of new entries has been growing – contrary to what happened in the early 1970s. New entries in Finnish manufacturing have been relatively much higher than in the other three countries: the number of new business starts around mid-1980s was in Finland about 3 times higher than in the late 1970s. The corresponding figures for the other Nordic countries are clearly below this (see Firm Dynamics... 1990 and also Figure I:12).

Figure I:11. Volume of R & D expenditure and fixed investment in manufacturing (1975=100).



Source: National Accounts and National R & D Statistics. R & D expenditures deflated by GDP price indices.

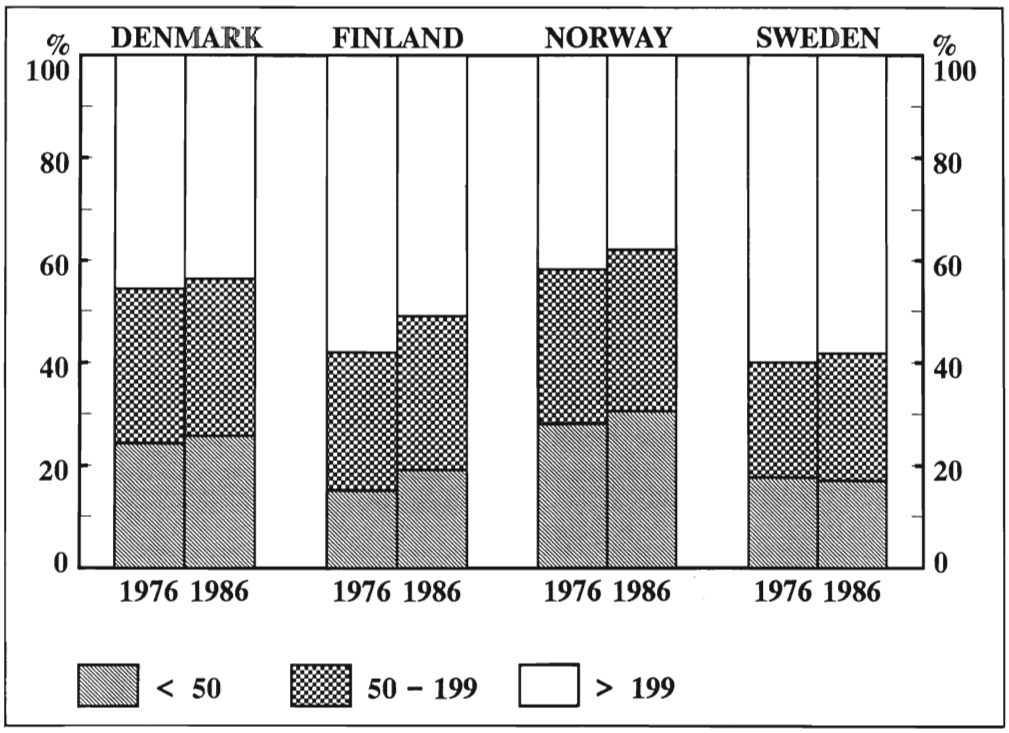
The figure I:12 displays the differences in the existing plant structure: in Swedish manufacturing the "large" establishments (with more than 200 employees) have a clearly more important role than in the other Nordic countries. Norway is at the other end of the spectrum: about one third of total manufacturing employment is in small business (i.e. in establishments employing less than 50 persons). In Finland the employment in the small business group was the lowest in the mid-1970s, but has clearly increased since then as a consequence of the new entries and/or the decentralization of activities of existing firms.

The differences as well as the changes in the role of the large companies across the Nordic economies are presented in table I:8. The dominance of large corporations is by far the clearest in Sweden and also the changes in this respect have been most visible (cf. Jagren 1988). The evidence based on the data from Finnish, Norwegian and Swedish manufacturing show that the contribution of large (30 largest) manufacturing companies to exports and R & D activity has been growing faster than their contribution to domestic employment and output (Firm Dynamics...1990).

The average size – in terms of employment – of the 30 largest companies is in Sweden around 25 000, whereas the corresponding figure for Finland is a bit more than 10 000, for Norway 5500 and for Denmark 4600.

Keeping in mind the ongoing merger wave in the Nordic economies, it might be a bit surprising to observe that the average plant and company sizes are not increasing – Sweden being the only exception (see Firm Dynamics...1990 and Carlsson 1988). Table I:9 displays the course of development in average plant size in the Nordic manufacturing and engineering industries.

Figure I:12. Number of persons engaged in manufacturing by size of establishment, % of total employment, 1976 and 1986.



Source: Yearbook of Nordic Statistics

The same phenomenon – declining average plant size – is visible in many other economies too (see Carlsson 1988). It has been argued that the main factor explaining the shift in the size distribution of firms and plants is a new emerging techno-economic system, the core of which is flexible technology. There is a growing amount of evidence that the flexible technologies are more conducive to smaller rather than to larger firms (see., e.g., Diwan 1989 and Carlsson 1988). The minimum efficient scale is decreasing especially in engineering where the flexible manufacturing technologies are widely adopted and where diffusion of flexible systems (FMS) has been fastest.

There are two mechanisms at work influencing the size distribution. One is often referred to as "vertical disintegration" or adoption of a strategy of flexible specialization leading to disinvestment and decentralization of activities (see, e.g., Piore & Sabel 1984). The second is the growing number of new business starts based on flexible automation with lower (unskilled) labor intensities than the traditional mass production. New tecnologies impinge heavily upon the organizational structure of

Table I:8. Share of employment of the largest manufacturing companies in total manufacturing employment, 1974/75 and 1986/87.

	Denmark		Finland		Norway		Sweden	
	1974	1987	1975	1987	1974	1987	1974	1986
10 largest	11.6	15.8	22.3	34.3 (28.6)	16.9	31.9 (23.3)	41.0 (24.2)	58.6 (32.2)
20 largest	16.7	22.7	33.6	52.9 (43.1)	22.9	39.9 (30.1)	52.3 (33.1)	76.8 (39.7)
30 largest	20.8	27.2	40.1	61.5 (50.7)	27.7	44.4 (33.7)	59.3 (38.8)	85.3 (43.5)

Source: Firm Dynamics... 1990. The figures in parenthesis indicate the share of the largest companies' domestic employment in total manufacturing employment.

Table I:9. Average plant size in manufacturing (SIC 3) and in engineering (SIC 38) in the Nordic countries, number of persons engaged.

	Denmark		Finland		Norway		Sweden	
	Manuf.	Engin.	Manuf.	Engin.	Manuf.	Engin.	Manuf.	Engin.
1976	58	75	83	109	44	57	78	95
1986	57	64	75	80	45	53	85	99

Source: Firm Dynamics... 1990

firms and maybe more importantly on the industrial organization and the nature of competition. In the industry structure the elements of a network economy are emerging, a growing part of companies' activities fall between markets and hierarchies forming a network, based on various types of contracts. A competitive edge is – to an increasing degree – created through production of custom-made goods manufactured in small batches, addressed to meet the specific needs of buyers.

There is some evidence that the diffusion of new flexible technology has been quite rapid in two of the Nordic countries (Sweden and Finland) and the efficiency of FM systems is high in international comparison (see Ranta and Tchijov 1990 and SITRA 1990). This fits to the Nordic industrial operating environment quite well: a high level of social infrastructure, including education, is often argued to be a prerequisite for adoption and efficient running of FM systems.

All in all it is evident that Nordic company structures are in transition. Large companies are strenghtening their position in R & D activities and in foreign operations, but at the same time there is a growing number of new small firms changing the other end of the size distribution. The scale economies to be reaped in the traditional production are to an increasing extent substituted by interproduct economies, maybe more conducive to small firms exploiting flexible manufacturing technologies.

Competitiveness

Despite the growing importance of non-price factors in maintaining competitive positions the traditional unit labor cost measurements are worth examining. A large part of exports from the Nordic countries still consists of products whose export prices are to a large extent exogenously determined. Hence, the course of domestic costs in relation to developments in competitor countries determinate their competitiveness.

In this respect the recent developments in the Nordic manufacturing industries have been less favorable (see Figure I:13). The inflationary pressures have constantly been stronger in the Nordic economies than in the OECD area on average – as will be indicated below. Sweden has lost most of the competitive advantages gained through large devaluations in the beginning of the 1980s. In Finnish manufacturing the relative unit labor costs have been rising throughout the second half of the 80s clearly faster than in the competitor countries – in spite of the rapid productivity growth. At the moment the price competitiveness is some 15–20 % below the long-run average. During recent years Norway and especially Denmark have been performing a little bit better.

Despite deteriorating price competitiveness all the Nordic countries were able to increase their export market shares somewhat after the mid-1980s. A constant market share analysis shows that the increases in Finnish and Swedish market shares were due to changes in product composition and (real) competitiveness. In Sweden the market distribution had a positive impact too. In Denmark the increases have been due to changes in market composition. Norway lost export market shares of manufactured goods up to 1986, but has regained them to

some extent since then – the current market shares are, however, clearly below the early 1980s levels (cf. Fredriksson 1988).

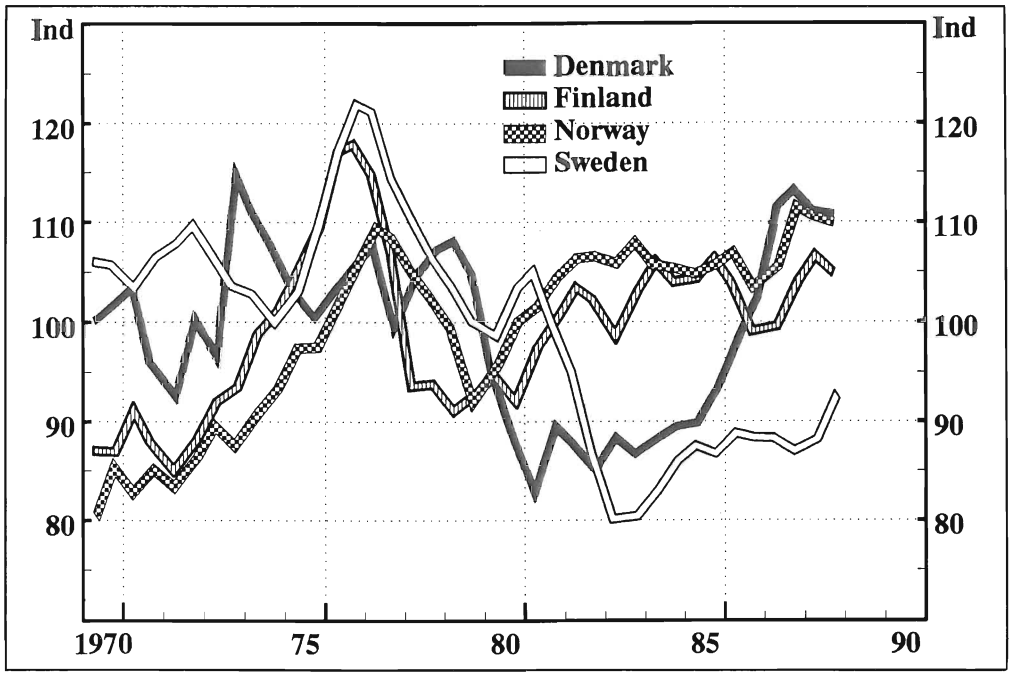
At the same time as Finnish exports to Western markets grew rapidly the exports to the Soviet Union fell drastically troughout the second half of the 1980s. In 1988–89 Finnish market shares declined in the major Western export markets. Swedish market shares seem to have started diminshing during the same years.

The export performance of Finnish and Swedish industries was fairly robust in nominal terms from 1983/84 up to 1988. However, it was not good enough to prevent the current accounts of these economies from showing a considerable deficit. In Finland also the trade account went into the red in 1989. The export capacities of these countries – and of Denmark – are not able to keep pace with the fast growing imports during the upswings. That constitutes a structural problem to be solved somehow during the 1990s.

2.5. Macro Policies: From Devaluations to Fiscal Restraint

Even if the main export markets for the Nordic countries are very much the same, cyclical developments have in recent years diverged significantly.

Figure I:13. Relative unit labor costs in Nordic manufacturing industries (1970–88=100).



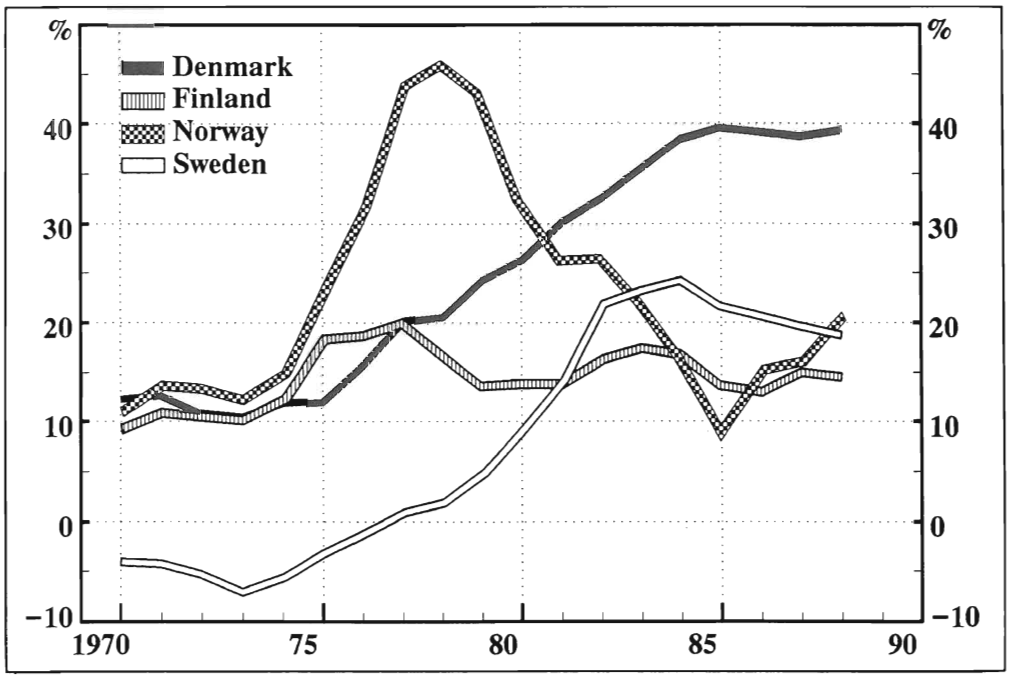
Source: OECD Main Economic Indicators

On the one hand, growth rates in Finland and Sweden have been high compared to the average of the 1980s and the two economies are showing clear signs of being overheated. Both economies exhibit serious labor shortages especially skilled labor – ,accelerating inflation and a deteriorating current account. Lower growth rates in these two countries are expected even if the international outlook is relatively favorable.

On the other hand, Denmark and Norway have recorded a strong slowdown in economic activity. In both countries this slowdown was due to a tightening of economic policies after several years of excessive growth, which led to serious external imbalances and rapidly growing foreign debt. In Denmark, as well as in Norway, domestic demand has declined recently in response to tight policies and unemployment has risen. Since the foreign markets have been strong, adjustments in the current account have been somewhat better than expected at the time when policies were originally tightened. Consequently, also the growth prospects are now somewhat brighter. In Sweden and Finland the tightening of policies is already under way.

All Nordic countries have a considerable net foreign debt (see Figure I:14). Norway's high indebtedness rapidly decreased at the end of the 70s and the first half of the 80s in the period of high oil prices. However, the drop in oil prices changed the situation in 1986. As domestic demand was growing rapidly, but export revenues declined, the change in economic policies gradually became inevitable. Denmark's net foreign

Figure I:14. Net foreign debt in the Nordic countries, % of GDP.



Sources: National Accounts and Central Banks

debt increased gradually from about 10 % in the beginning of the 70s to 40 % of GDP in the middle of the 80s, and the mere size of the debt made the recent Danish "potato cure" necessary. In Finland and Sweden the "dynamics" of foreign debt looks alarming and a tightening of policies is necessary. With deregulation of capital flows and fixed exchange rates the autonomy of monetary policy has decreased and the tightening should take place through fiscal policies.

All Nordic countries have a long tradition of incomes policies and centralized wage negotiations (see Calmfors, 1990). Even if incomes policies alone can do little, it is generally accepted that moderate wage settlement can contribute to solving the problem of growing external disequilibrium.

All Nordic countries have had problems with inflation, which given the exchange rate policies that these countries conduct – leads to worsening of the competitive position in the open sector and problems in the current account. As mentioned in the country chapters, if employment policies are very ambitious and the public sector, or the sheltered sector in general, employs the manpower which is freed from the open sector, this is a mechanism by which the export-oriented sectors slowly become too small compared to other sectors of the economy. As a consequence, the economy hits the constraint of the external imbalance constantly when the imports start to grow during the cyclical upswing. This problem is evident in all Nordic countries – maybe with the exception of Norway.

The Nordic currencies in the post-war period have been weak rather than strong. Finland had a 10-year devaluation cycle with large devaluations in the late 40s, 50s, 60s and 70s. Firms and trade unions gradually learned the rules of the game and began to incorporate future devaluations as corrections in economic consequences of their current actions, making devaluations ineffective. This policy was, hence, terminated by the end of the 70s in order to break the vicious expectations cycle of future devaluations, allowing unemployment to temporarily increase instead.

Sweden, ten years later, after a period of a considerable devaluation in the beginning of the 80s, is facing the same political problem of breaking inflationary expectations of consecutive devaluations by making unemployment the only credible alternative. Also Norway and Denmark devalued in the 1980s, but in both countries the inflation problem is better under control than in Sweden – in part due to tight fiscal policies in the late 80s.

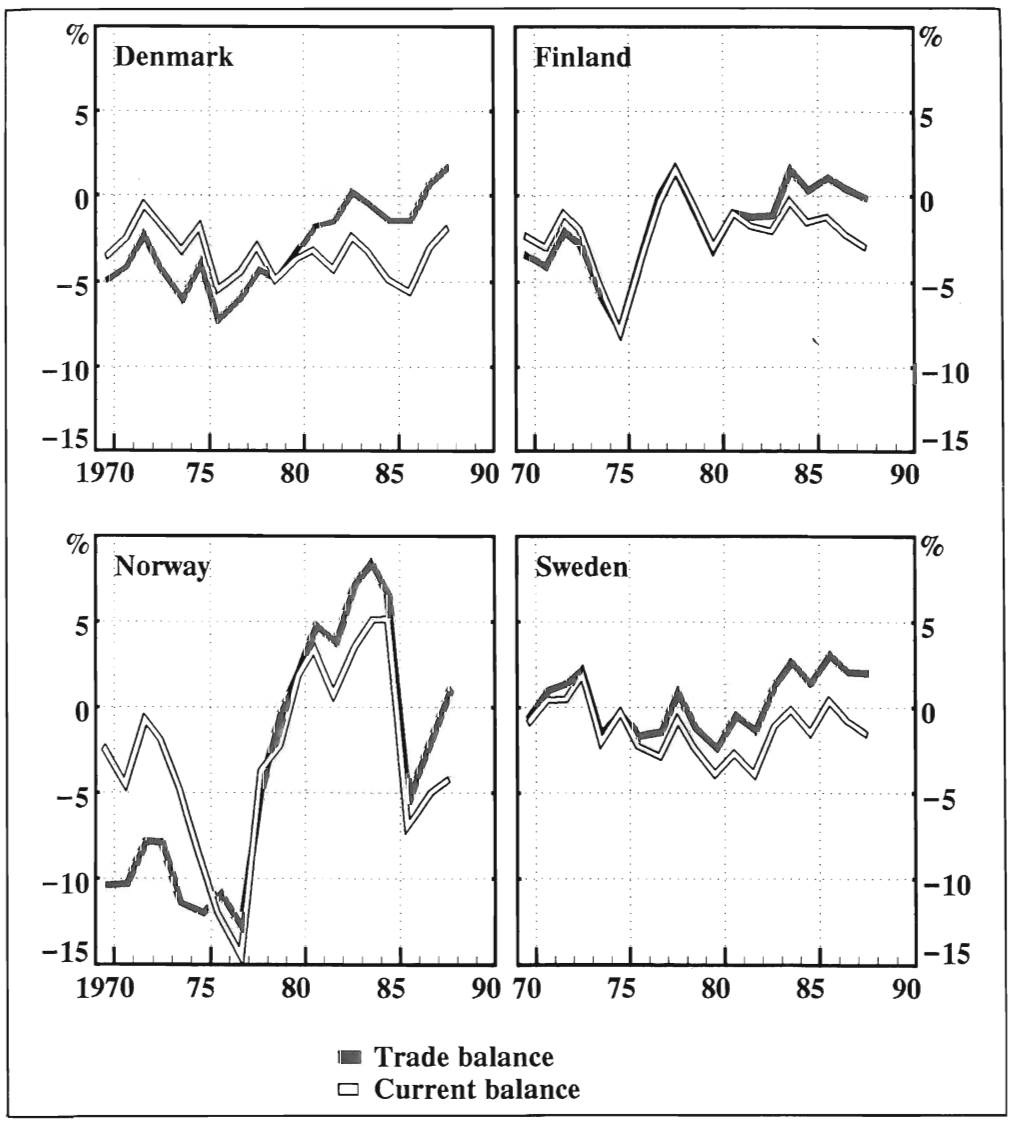
A majority view among economists in the Nordic area at the moment is that the devaluation-inflation spiral should be cut: macro economic policies should shift from devaluations to fiscal tightening.

Because of high inflation rates and current account deficits, interest rates in the Nordic countries have been higher than international rates.

Figure I:15 shows that the difference between the trade account and the current account has grown wider in the 70s and 80s in all Nordic countries. There have been increasing net interest payments abroad be-

cause of large foreign debts. Development aid is also high in all these countries and there have been problems in the trade of services. Due to the high income levels and relative prices (as well as lack of sun) the tourist trade runs a chronic deficit and also income from transportation has suffered because of high relative costs. All the countries have taken or are planning to take special measures to keep ships inside the country. Norway has, so far, been successful in this regard.

Figure I:15. Trade and current account, % of GDP.



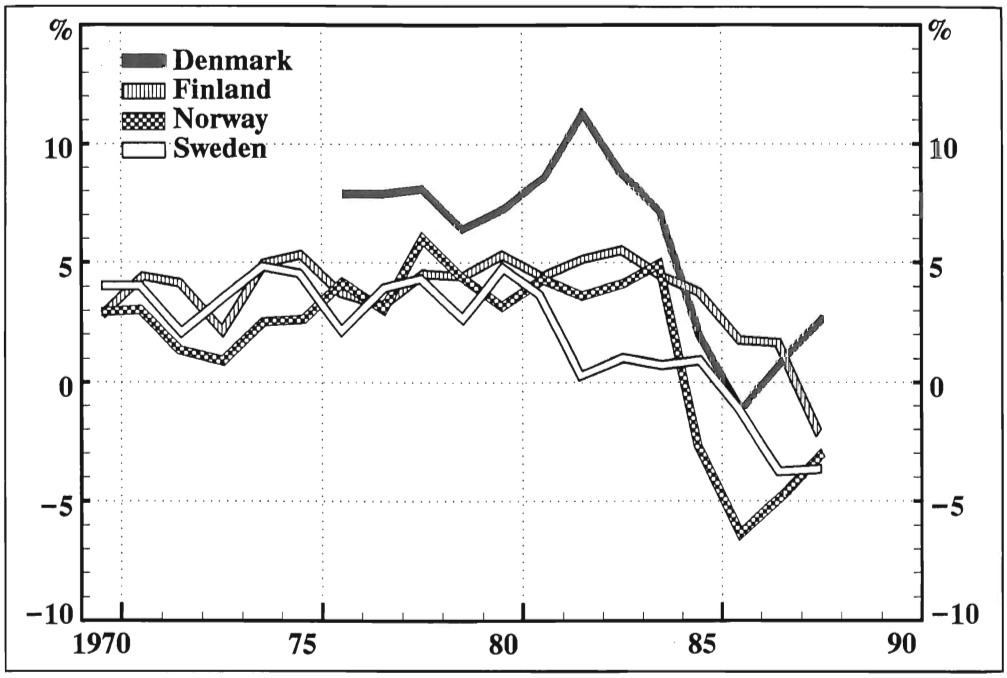
Source: National Accounts and Balance of Payment Statistics

There are several special reasons why domestic demand – particularly private consumption – has grown rapidly in relation to exports, thus causing problems in the current account. Consumption in the middle of the 80s grew rapidly, not only because of favorable real income development, but also because deregulation of the financial markets contributed to a significant increase in credit supplies in all four countries as compared to the former system with credit rationing and regulated capital investments. Deregulation of credits was also one reason behind large increases in prices of housing, land and shores. The rapid increase in wealth again boosted consumption and savings rates declined considerably, becoming negative in all the four countries. With tightening of policies and eventual deflationary tendencies, the developments of the savings rate are likely to be reversed. This can be an important contribution to solving the difficulties in the external accounts.

2.6. Current Economic Situation and Outlook for 1989–1993

Detailed discussions of the current economic situation in each Nordic country with an outlook for 1989–93 are presented in chapters III, IV, V and VI. Chapter II discusses the common international assumptions used in preparing the country projections.

Figure I:16. Households' savings ratio in the Nordic countries.



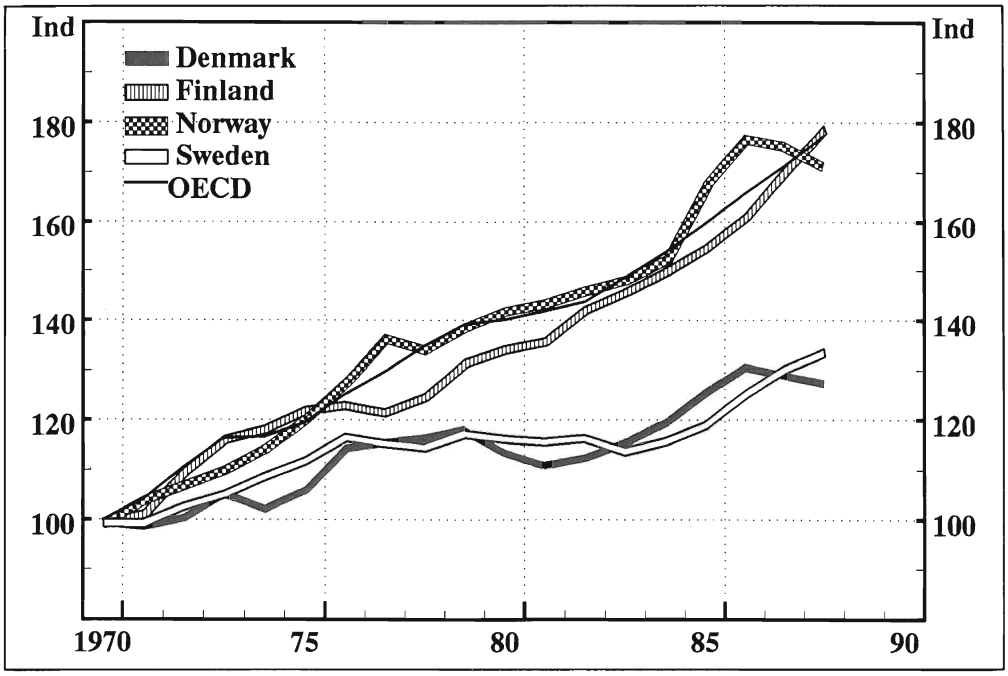
Sources: National Accounts, for Denmark calculations provided by IFF

The OECD countries have experienced a long period of steady growth since 1982. The outlook is still rather promising. Total production is anticipated to grow by 3 percent on an average annual basis during the forecast period of 1989–93. World trade will expand by 5 percent a year on average. The rate of increase in consumer prices will remain around 4–5 percent. Inflation is, however, becoming a greater threat to sustained economic growth. The pace at which consumer prices are increasing has accelerated despite contractive monetary policies. The acceleration of inflation could easily lead to a further tightening of monetary policy, thus jeopardizing balanced growth.

For each Nordic country GDP growth is projected to remain clearly below the OECD average during the coming 4–5 years. Growth prospects for Sweden are the weakest among the four countries. Finland – the high performer in the 1980s – is expected to see the strongest deterioration in the growth rates. For both the economies the external imbalance is seriously restricting growth economic activity has to be slowed down well below that in competitor countries in order to stop the rapid increase in foreign debt.

The differences in growth rates among the Nordic countries will be less marked in the coming years than they have been in recent years. Norway and at least temporarily also Denmark have solved the acute current account problems. On the other hand, Finland and Sweden have to apply the brakes to take some "steam" out of their economies.

Figure I:17. Volume of private consumption in the Nordic countries and OECD (1970 = 100).



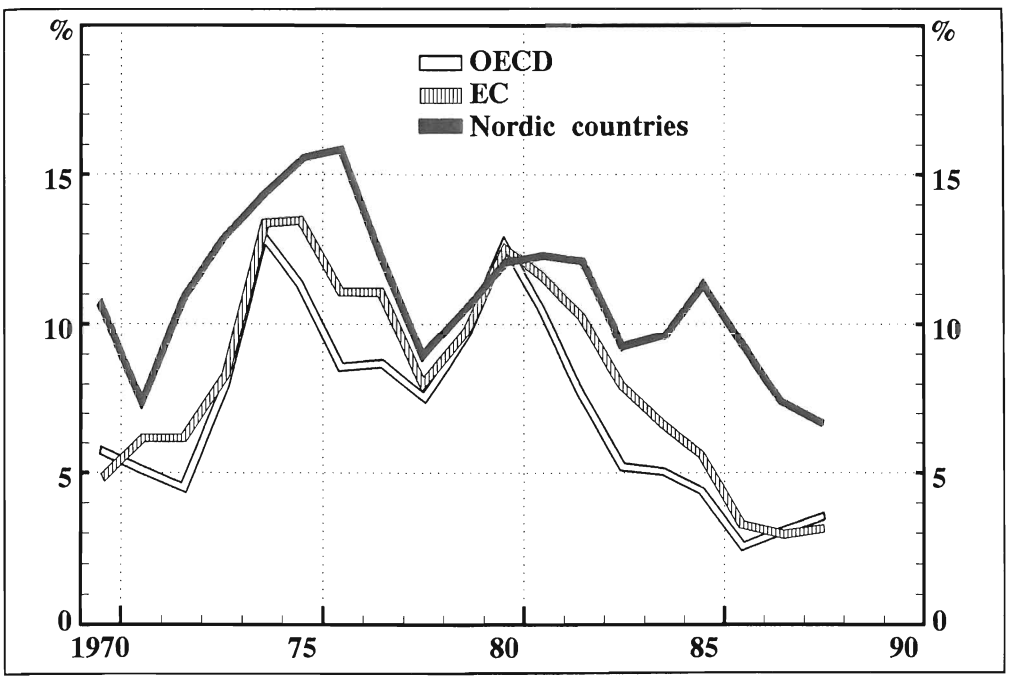
Source: OECD Annual National Accounts

Inflation is expected to run well ahead the OECD average in Sweden and close to the average in Finland and Norway. Denmark is projected to be among the low inflation European countries. Interest rates will remain high in Finland and Sweden – in Denmark and Norway a downward trend is in sight.

In Denmark and Norway the growth prospects are based on rapidly increasing exports. In the case of Denmark international competitiveness is expected to show an improving trend in the first years of the 1990s; in Norway the favorable developments in the oil exports are likely to continue. The Norwegian economy is expected to show substantial surpluses in its current account and Denmark is forecast to gradually improve its external balance showing virtually no deficit at all in the current account by 1993. For the Danish economy this implies very moderate wage increases and low growth in private consumption – the volume of public expenditure is forecast even to fall during the next few years. In the light of the experiences from the 1980s this scenario appears quite optimistic.

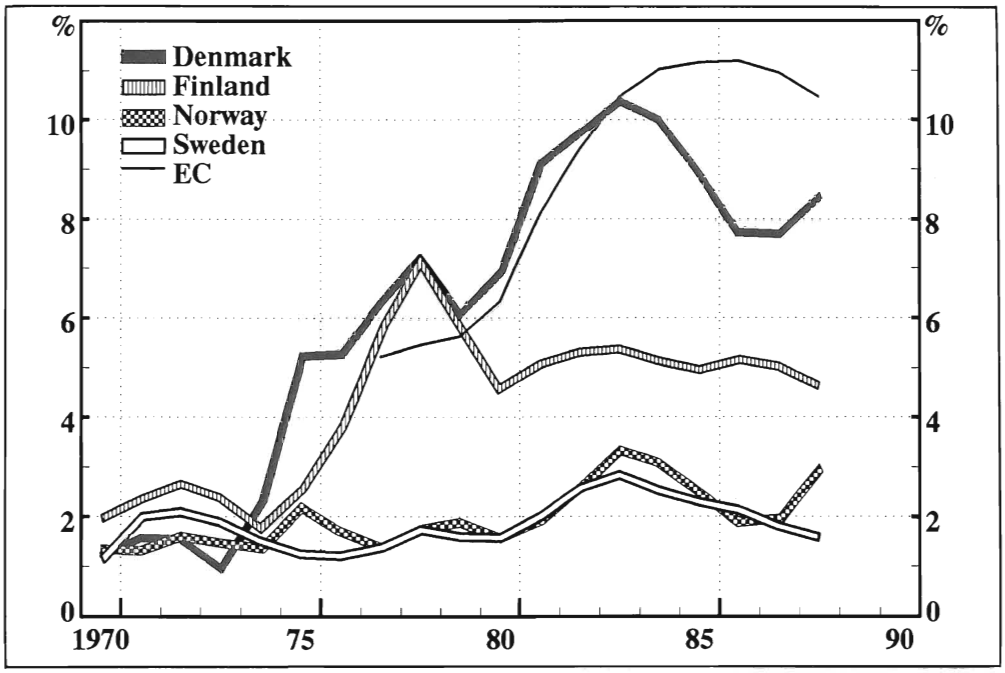
The unemployment rates will stay low in the Nordic countries – with the exception of Denmark. The most marked change compared to the current situation is expected to take place in Finland, where the unemployment rate is likely to increase from its fairly low level (3.5 % in 1989) as a consequence of the significantly deteriorating growth performance.

Figure I:18. Consumer Prices in the Nordic Area, OECD and EC, annual changes, %.



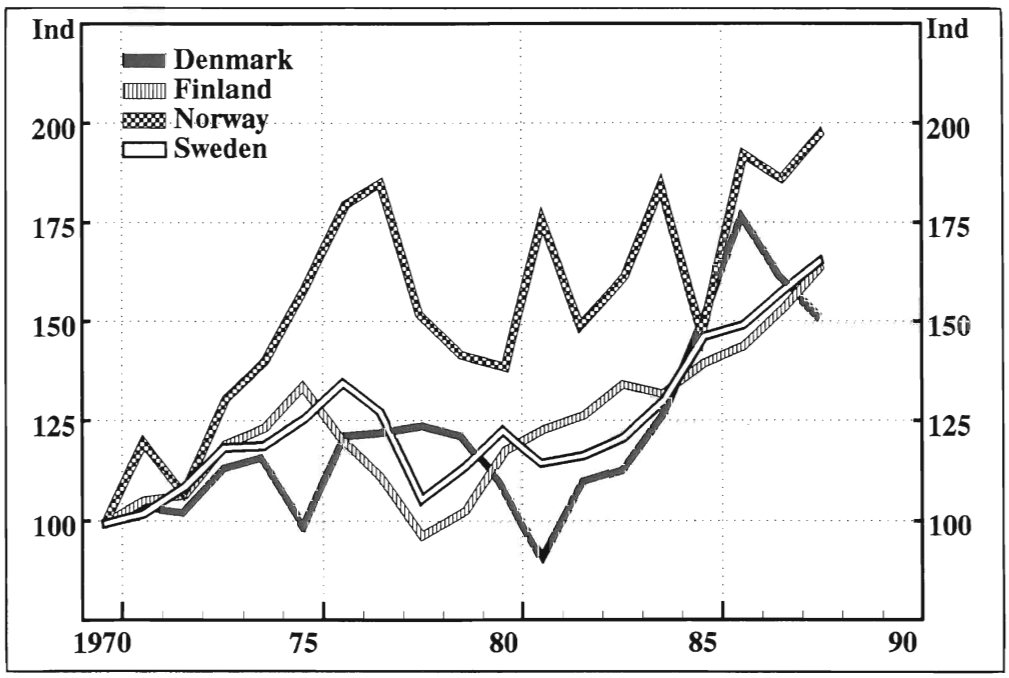
Source: OECD Annual National Accounts

Figure I:19. Unemployment in the Nordic countries and EC, % of labor force.



Source: OECD Annual National Accounts

Figure I:20. Volume of business sector investment (1970=100).

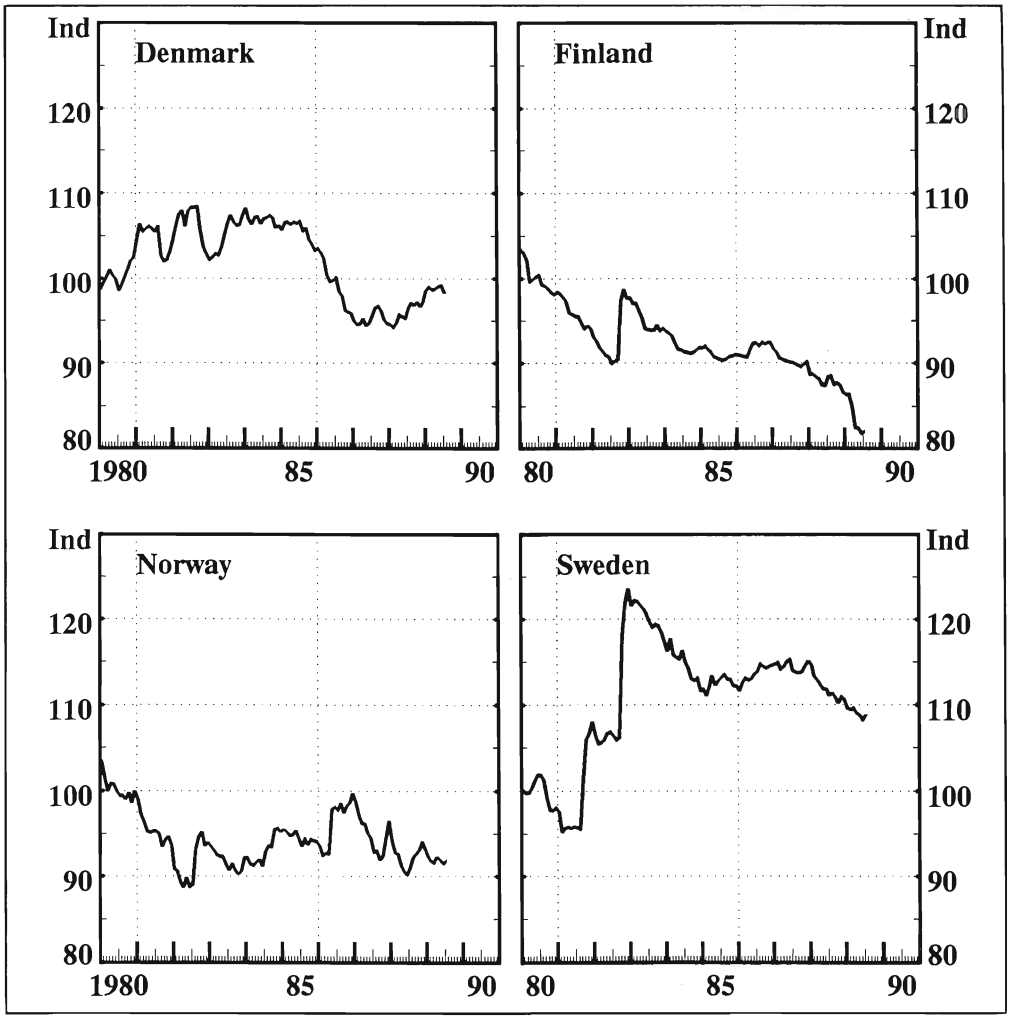


Source: OECD Annual National Accounts

However, the lack of skilled labor will continue to be a problem, which will be also the case in the Swedish labor market. In Norway, where the unemployment has traditionally been very low, the unemployment rates have steadily been climbing during the latter half of the 1980s, in part as a consequence of tightening fiscal policies. There seems to be no immediate return to the low levels of the mid-1980s.

All in all the growth prospects of the Nordic countries are relatively gloomy compared to most other European industrial countries. The medium-term outlook for Finland and Sweden is characterized by fiscal restraint and the urgent need to improve the external imbalances. Denmark and Norway, who faced the same problems in the 1980s, seem to be moving toward more balanced, though fairly slow, export-led growth.

Figure I:21. Price competitiveness in the Nordic countries (consumer prices compared to the OECD average, 1980=100).



Source: OECD

Table I:10. Balance of resources, 1988–1993. Average annual change in volume, percent.

	Denmark	Finland	Norway	Sweden	Nordic
GDP	2.0	2	2.0	1.3	1.7
Imports	3.3	2.5	1.0	4.3	3.1
Total resources	2.4	2	2.0	2.0	2.1
Exports	5.5	2.5	4.0	3.0	3.9
Investments	1.6	0	−1.2	1.9	1.1
– private	2.0	−0.5	−2.0	2.8	1.0
– public	−1.0	2.5	0.0	1.8	1.3
– residential	. .	. .	. .	0.8	. .
Consumption	0.6	2.5	2.0	1.7	1.7
– private	1.1	2	1.5	1.9	1.8
– public	−0.4	2.5	3.0	1.3	1.2
Total demand	2.4	2	2.0	2.0	2.1

Table I:11. Nordic economic balances: Outlook to 1993.

	Denmark	Finland	Norway	Sweden	Nordic
Balance on current account 1993, per cent of GDP	−0.35	−3	3.5	−6.5	−2.6
Public sector consolidated surplus 1993, percent of GDP	3	0.8	4–5	−1.8	1.1
Consumer prices, 1989–1993, average annual change, percent	3	4.4	4	6.5	4.8
Open unemployment 1993, percent of labor force	8–9	5.6	3.5–4	2.1	4.7

Table I:12. Nordic manufacturing, 1988–1993.

	Denmark	Finland	Norway	Sweden	Nordic
Manufacturing output, average annual volume change, percent	3.5	2.5	1.5	2.1	2.4
Manufacturing labor productivity, average annual change, percent	2.1	4.5	2.0	1.6	2.5
Manufacturing investments, average annual volume change, percent	3.3	1.0	0.0	3.0	1.9

3. EC 1992 and the Nordic Economies

3.1. Is EC 1992 Really That Important?

The project of "completing the Internal Market by 1992" is part of a more ambitious program for creating an economically and politically unified European Community, but it is also important in itself. The project of creating a single market is a concrete step forward in increasing economic efficiency. Whether it will be realized in the planned form is still an open question. The distant aim of an economic and political union is even more disputable and not very concrete.

Question marks concerning the fulfillment of the 1992 plan are especially appropriate for the deregulation of financial markets and the removal of industrial subsidies allowing for free takeover actions and unrestricted structural adjustments implied by vigorous competition and efficient markets. Harmonization of tax structures is also an area where progress may be difficult to achieve.

The interesting question from an economic point of view is, whether Europe 1992 can be seen as a potentially successful scheme for deregulating Europe, or as a scheme for building a protective "Fortress Europe". Under the deregulation scenario the potential growth effects could be very large indeed but in the "Fortress Europe" case considerably smaller (Eliasson-Lundberg, 1989).

Computations using traditional static trade models, corresponding most closely to a less competition Future Europe scenario, produce rather small effects, whereas a few results on dynamic simulation models point towards much larger integration effects. The essence of a full scale deregulation of Europe would be to ensure that the globally best firms enjoy free access to European markets forcing a dynamic structural reorganization.

The 1992 project is important for the Nordic countries both because it means essential changes in their major markets and because it will change these countries' mutual economic relations and their economic structures. As a member of the EC, Denmark is already participating in the 1992 project. The other Nordic countries Finland, Iceland, Norway and Sweden are members of the European Free Trade Association (EFTA).

EFTA is actively negotiating with the EC for the creation of a European Economic Space (EES), which would widen the essential elements of the 1992 plan to be applied in the EFTA countries, too. If the EES plan fails, the main options for the Nordic non-EC countries are membership in or bilateral agreements with the EC. Membership has so far been excluded by the governments of these countries for political reasons. (About the integration strategies of these countries, see Möttölä-Patomäki (eds.), 1989.)

The European Economic Space, if realized, will mean reduced barriers to EC-EFTA trade, freer capital movements, establishment of new

companies, and labor mobility. It will also imply harmonization of technical standards, common rules for public procurement and harmonization of economic and social legislation.

Some kind of a public institutional structure is planned to be created for the EES but the forms and the responsibilities of common EC-EFTA bodies are still open. The basic idea is that the EC and EFTA negotiate the solutions to the questions of EES integration as umbrella organizations. This would mean delegation of some decision making power from the national governments to EFTA.

Organizational questions are at the time of writing under work in a joint EC-EFTA institutional committee. There has been some discussion about an EC-EFTA customs union, which would mean a common trade policy in relation to outside countries. At the moment, however, a traditional customs union does not seem to be a probable outcome, mainly because of its discriminatory nature in relation to non-EES countries. At the moment outside tariffs and other trade regulations of the EFTA countries are lower than those of the EC, and losing these advantages would be harmful to Finland, Norway and Sweden.

It has to be remembered that public institutional structures are only one dimension of European integration. A parallel endogenous institutional adjustment, partly in response to expectations about EC 1992, is taking place in markets. Firms are assessing their strategies in a wider, European perspective. While public institutions change only sluggishly, and over generations, firm behavior based on expectations about prospects and risks, is swift and sometimes premature. The multinational corporations can incorporate their expectations on EC 1992 in investment behavior today. They are furthermore quite independent of political decisions. (See Eliasson-Lundberg, 1989; Braunerhielm, 1990.)

From the point of view of the industries of the non-EC Nordic countries, a quick solution in the main lines of the EC-EFTA integration process is important, because it would reduce uncertainty about the future competitive position of these economies. A positive outcome would, for instance, eliminate those direct investments in the EC, which are made "just to be on the safe side".

The positive impacts of the 1992 program and of the creation of the EES as they are likely to be realized will mainly work through the following channels:

(1) the direct cost reducing effect of abolishing barriers to trade (customs formalities etc.),

(2) more specialization in production according to comparative advantages (less distortionary structures),

(3) better use of scale economies in branches where they exist,

(4) increased competition between firms, and

(5) more efficient markets (better matching of supply and demand in goods, services, labor and financial markets).

The total impact of EC 1992 on the output of the EC economies has been estimated by the EC Commission to be 4.3–6.4 % of GDP, on the basis of an essentially static trade model. Better use of scale economies and increased competition are thought to be the most important growth factors, the direct cost-reducing effects being rather modest. The macroeconomic effects of the 1992 program have also been analyzed by Bakhoven (1989). Using the econometric model of the Dutch Central Planning Bureau, and principally the same assumptions as the EC, Bakhoven obtained GDP effects which are only half of those of the Commission. The reason for these differences is that the results of the EC refer to potential gains, whereas Bakhoven has tried to estimate the expected gains – gains which are likely to be realized.

According to the calculations of the EC commission, integration and liberalization of financial markets alone counts for about 1.5 % of the increase in GDP in the EC countries. The remaining 2.8–4.9 percentage points are due to "real side" effects.

The above mentioned calculations are essentially static and contrast sharply with the few dynamic model computations. The so-called dynamic effects are generated through increased innovativeness, technological progress, and more efficient business administration. Because of quantification problems, such effects were not included in the calculations of the EC Commission. (See European Economy, No. 35, 1988.) These effects can, however, be large – especially in the long run.

The positive growth effects on different EC countries are not necessarily the same as they are for the entire EC region. They also differ for the Nordic countries, according to the share of the EC countries in exports, production structure, strength of firms, geographic location, institutional structures etc. [1]) There are also some negative effects, mostly of a temporary nature (adjustment costs). A significant integration of each economy with a rapidly growing and competitive economy is likely to push many low-performing firms out of the market. This is one of the reasons for being somewhat sceptical about the willingness of some EC member countries with many low-performing firms to allow a full-scale operation of globally very competitive firms in the EC market.

3.2. Integration and Foreign Trade

The most obvious effect of the EC integration on the Nordic economies comes through a faster growth of export demand. The EC economies are the main trading partners of all the Nordic countries (Table I:13). In order to exploit this increasing demand, however, those Nordic countries which are not members of the EC need an arrangement like the European Economic Space. Assuming that all Nordic countries have safeguarded their competitiveness in the EC market, two kinds of effects of integration on trade flows arise: (1) trade creation, and (2) trade diversion

[1] There are only few quantitative estimates of effects of the European integration on individual Nordic economies and these estimates also must be interpreted with caution. About the macroeconomic effects of integration on the Finnish economy, see Lahti (1989).

(a shift of trade from outside countries to the integrated area). If no extra barriers to trade will arise in relation to outside countries, trade shifting is supposed to be rather modest. The net result will be increased foreign trade and a greater share of the integrated European countries in Nordic exports and imports.

The main tool in enhancing foreign trade integration is reducing barriers to trade. Existing barriers to trade can be grouped as follows: (1) tariffs, quotas and customs procedures, (2) technical regulations, (3) public procurement and governmental subsidies, and (4) fiscal frontiers. Customs procedures include, for instance, inspection and testing of products, the impact of which is seen both as extra payments and loss of time. Diverging technical regulations mean that exporters have to produce different variants of their products, which means more costs in the form of shorter production runs and multiple marketing programs. Differing technical standards are partly motivated by differing requirements for environment protection, health care, defence considerations, etc. In addition to these "legitimate" reasons, technical standards are also used for purely protectionistic purposes.

Table I:13. Foreign trade by areas in 1988, % shares.

	Exports to, imports from				
Exports from, imports to	Nordic countries[1])	EFTA	EC[1])	Eastern Europe[2])	Rest of the world
Denmark					
– exports	21.3	24.5	49.6	1.9	24.0
– imports	20.1	23.5	51.1	2.7	22.7
Finland					
– exports	21.2	20.4	45.0	16.5	18.1
– imports	18.9	18.9	43.5	14.6	23.0
Norway					
– exports	20.1	16.3	65.2	1.3	17.2
– imports	28.8	23.9	46.2	2.3	27.6
Sweden					
– exports	23.1	19.9	52.2	2.1	25.8
– imports	19.7	16.5	56.0	3.7	23.8
Nordic countries[3])					
– exports	21.6	20.2	52.7	4.5	22.6
– imports	21.6	20.0	50.7	5.2	24.1

[1]) Denmark is included in the figures of both the Nordic countries and the EC. The other Nordic countries are included in the figures of the EFTA countries also. The shares thus do not sum up to 100 %. EC and EFTA trade shares of Denmark and the other Nordic countries are not comparable either.
[2]) Including the USSR.
[3]) Including Iceland.
Source: OECD (1989) Monthly Statistics of Foreign Trade.

Public procurement is often subject to discriminatory practices, whereby authorities systematically favor domestic suppliers. Domestic producers are especially preferred if their prices do not substantially exceed competitors' prices. This preference is motivated by defence, employment, spill-over effects related to research and development, etc. Even if economically motivated, these practices mean an efficiency loss in the absence of the gains created by foreign trade. Motivations and impacts of governmental subsidies are similar to those of domestic preference in public procurement. Subsidies are widely used in steel and ship-building industries of the EC countries.

By fiscal frontiers we mean differences in indirect taxes (value-added taxes and excise taxes). They create costs at the borders of the EC countries, because of the current practice of detaxing goods for intra-Community "export" and re-taxing them on "import". In order to avoid this cost, goods and services throughout the single market must be treated in the same way as goods and services within a member country. This, however, requires approximation of tax laws so that distortions of competition and potential fraud are avoided.

The European Community has a concrete plan for reducing the above-mentioned barriers to trade. Commonly used measures are abolishment of controls, harmonization (or "approximation") and mutual recognition. Because tariffs have already been almost abolished, the main efforts are focused on various non-tariff barriers. The procedure used is that first the EC approves a so-called directive, which thereafter will be integrated to the jurisdiction in member countries. The total amount of directives included in the 1992 program is 279, of which 144 were adopted by the EC Council by January 1, 1990. Only a small part of these has been incorporated into the national jurisdiction. The greatest problems in adopting new directives will probably arise in the area of removing fiscal barriers (see section 3.7.).

Increased foreign trade, as a result of diminished barriers, will raise the output of the EES countries. The impact works through reduced costs directly, through more specialization based on comparative advantages, through better use of scale economies and increased competition. In addition to the above-mentioned effects the welfare of citizens increases with a larger menu of goods available for consumption.

As in the EC countries the effects of better use of scale economies and those of increased competition are obviously the most important for the Nordic countries, too (see Lundberg, 1989; Norman, 1989). The combined effect of the above-mentioned factors is likely to be great in small markets like in those of the Nordic countries. By enhancing import competition integration will obviously reduce possibilities for price differentiation between domestic sales and exports. The result will be welfare gains for the consumers and more specialization in production with a better use of scale economies. (About price integration of the EES countries, see Wieser, 1989a and b.)

Even if reduced trade barriers are a precondition for the other effects, their direct cost decreasing effects are modest. Effects of a better use of comparative advantages are obviously small, also, because production structures of the Nordic countries are rather similar to those in the EC

countries. Trade between the Nordic countries and the developed EC countries is largely intra-industry trade. Important comparative advantages are likely to arise in relation to the southern EC countries, whose production structures are different from the Nordic ones.

Nordic countries obviously have comparative advantages in relation to the EC countries mainly in industries based on the use of natural resources, like forests, ore and energy, and in branches with a highly skilled labor force. The standard static trade model predicts that industries extensively using low-skilled high-wage labor, like the clothing industry, are likely to be losers in the integration process. In the deregulation scenario of integration hence a heavy adjustment in the existing production structures will follow. In reality, however we see a highly complex development that both supports and contradicts these simplified theoretical conclusions.

The effects of European integration are likely to be the greatest in branches with important scale economies, low competition and high barriers to trade. Scale economies exist, for instance, in production of telecommunications equipment, computers, office machines and medical instruments. Increased competition is likely to have large effects in air and road transports, construction, wholesale trade and in the financial sector. Barriers to trade in turn have been substantial in pharmaceutical industry, in some parts of food industry and in the production of railway equipment. (Lundberg, 1989.) (About the impacts of the European integration on domestic trade, see for example, Raumolin, 1990.)

Impacts of integration are likely to be rather small in branches where markets are local or regional. This is the case in retail trade and retail banking, in some parts of the food industry, and in various service activities like restaurants and personal services. These activities are more affected by rising direct investment and increased labor mobility than by direct foreign competition. Even these effects, compared to the size of the sectors, will remain limited.

In the foreign trade of the paper industry, which is a major branch in Finland and Sweden, integration does not seem to have important trade effects, because barriers to trade are already low, unused scale economies are modest and competition is rather free. Internationalization of this branch of industry will, however, continue and the direct investment by the Nordic paper industry in the EC countriers will likewise continue as EC firms specialize in other branches – according to their comparative advantage. On the other hand liberalization of capital movements will also increase foreign direct investments in the Nordic paper industry.

Foreign trade of agricultural products is left outside the EES negotiations. The agricultural sectors of the non-EC Nordic countries will be obviously more affected by global GATT negotiations than by the European integration.

3.3. Integration and Firm Behavior

Towards new combinations

Looking at the expected gains from the completion of the European internal markets reveals that about half of them is estimated to come from the improved efficiency of individual firms. This is mainly associated with the increased exploitation of scale economies and major changes in market and company structures including the elimination of information production costs. New modes of business organizations are expected to emerge: new types of international alliances and cooperative ventures will to an increasing degree replace the dominance of existing corporations (see, e.g., Eliasson and Lundberg 1989).

The effects of this type of restructuring of business are difficult to quantify and are of a long-run nature: they will realize after major changes in industrial organization and the location of production. As competition intensifies, currently existing monopoly rents in several industries will disappear and production costs decrease, essentially allowing for a lowering of prices of many products. The potential for reducing X-inefficiences across the European economic system should be large. The important question is to what extent individual European countries will accept the consequent social adjustment costs.

European companies (incl. Nordic) have traditionally – more than American and maybe recently Japanese multinationals – sought to ensure their competitive positions in several industries by pursuing dominant positions in domestic markets and relying on governments' protectionistic measures against foreign competition. There is evidence of substantial price discrimination in the European markets: firms exploit a dominant position at home in their pricing policies (see, e.g., Norman 1989). This practice will change gradually, if the markets become truly integrated.

Europe has seen a surge of mergers and acquisitions across the borders and this process is likely to continue at an accelerated rate. The companies involved in this merger wave come both from the EC and non-EC countries. It is unclear so far what kind of barriers to direct investment there will be for the non-member countries after 1992, which obviously has affected firms' investment behavior during the last couple of years.

How then are the Nordic companies affected by the integration process? Will the removal of trade barriers within the EC create an effective discrimination against exporters from non-member Nordic countries? How do the Nordic companies regard the intra-Nordic integration in comparison to EC integration? How have the Nordic companies reacted and prepared themselves to the implementation of the internal market in light of the uncertainty concerning the future relations between EFTA countries and the EC? In the Swedish country chapter the instability of rules concerning the functioning of markets and the uncertainty of the degree of future integration are claimed to have had a considerable effect on the firm behavior. Views have been expressed in the public Swedish debate that an increasing number of companies may move the base of their operations out of Sweden.

In what follows we try to answer some of the questions raised above by describing the major changes in the Nordic company structure and investment behavior.

The drift towards internationalization and knowledge-based production in the Nordic business

The initial structure of business importantly affects the expected reactions and adjustments of Nordic firms in face of European integration. Rate of internationalization, industry and size structure of companies are key features in the ongoing transformation process.

Among the Nordic countries the Swedish business – notably the manufacturing industry – is the most internationalized. 30–40 large multinationals have dominated the Swedish industry structure for a couple of decades already. Swedish industry is perhaps the most highly internationalized – in relative terms – among the industrial countries (see Swedenborg et al. 1989). The largest Swedish corporations are giants compared to other Nordic companies. The average size of the 30 largest manufacturing companies in Sweden – in terms of employment – is around 25 000 persons, whereas the corresponding figure for Finland is less than half of this, and for Norway and Denmark about one quarter (cf. section 2.4.). More than half of the employment of the 30 largest Swedish corporations is outside the national borders, the corresponding figure for Finland and Norway being 20–30 % (Table I:15). The growth of Swedish multinationals has been faster outside Sweden than within the country. The pattern in Finland is similar. It seems that the company structure in Finnish industry is evolving in the same way as in Sweden, but with a time lag of many years.

Table I:14. Foreign direct investment (FDI) in relation to total domestic fixed investment of the business sector (BINV) and the share of the EC in total FDI in 1980–88, %.

	Denmark		Finland		Norway		Sweden	
	FDI, % of BINV	EC share	FDI, % of BINV	EC share	FDI, % of BINV	EC share	FDI, % of BINV	EC share
1980	2.7	53	1.7	30	..		..	
1981	3.2	49	1.8	42	..		6.7	43
1982	1.3	21	3.0	38	2.7	58	8.5	45
1983	1.8	31	3.5	41	3.6	46	9.8	39
1984	4.1	31	5.6	26	5.7	45	9.4	54
1985	3.6	51	4.2	39	12.1	20	10.2	30
1986	5.8	41	6.9	36	11.4	35	19.4	30
1987	5.0	57	6.4	62	5.8	62	16.1	52
1988	6.0	59	11.8	44	2.3	35	23.4	69

Source: Central Banks, National Accounts

The rapid internationalization of business continued throughout the 80s in all the Nordic countries: foreign direct investment grew much faster than domestic capital formation (see section 3.5.). The 1992 discussion has certainly added a new flavor to and increased the speed of the longstanding internationalization process. On the other hand, much of further internationalization will go under this heading, even if it would have happened also without the 1992 program (cf. Eliasson and Lundberg 1989).

Nevertheless, the integration process and the announcement of the internal market seem to have affected the pattern and orientation of foreign direct investment of the Nordic companies (see Table I:14). There are differences across the countries, however.

Norwegian direct investments abroad have been fluctuating very much: there was a clear increase in the EC investments in 1986 and they stayed at a high level in 1987, but fell dramatically in 1988. These fluctuations have mainly been due to reorganization of Norwegian shipping industry (see the country chapter on Norway).

Looking at the most recent developments the clearest changes towards the EC area seem to have taken place in Sweden and Finland. The foreign direct investment (in nominal terms) by the Swedish companies to EC have grown almost 7-fold over the period 1985–88, those of the Finnish companies have more than quadrupled, but in Denmark less than doubled. There is the possibility that uncertainty about the form of association with the EC and the assessment on the part of firms that Sweden will not become closely associated with EC is making Swedish firms plan to shift a greater share of their investments into the EC countries than would otherwise be the case (Braunerhjelm 1990).

The companies, especially the Swedish, are, clearly, trying to avoid the potential deterioration of their relative cost competitiveness against the EC companies in the emerging internal market. The same phenomenon, a substantial increase in the number of Swedish-owned subsidiaries in the EEC area, was visible in the 1960s during the period of removal of the internal tariffs of the EEC (cf. Swedenborg et al. 1989).

Table I:15. Share of number of employees in foreign subsidiaries in total employment of the largest manufacturing companies, % (companies ranked according to size of total personnel)

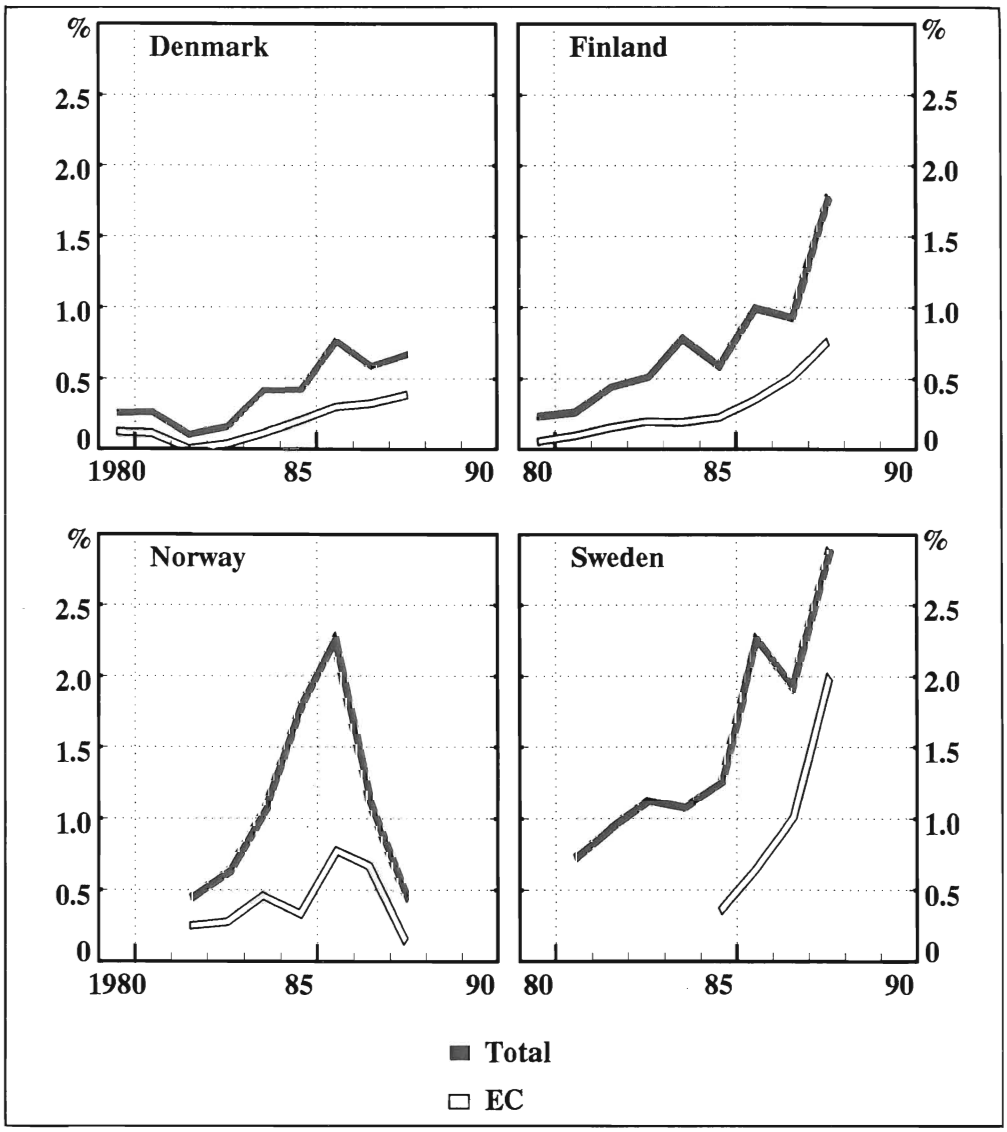
	Finland (1988)	**Norway** (1987)	**Sweden** (1987)
5 largest	42	32	52
10 largest	36	27	54
20 largest	32	25	52
30 largest	30	24	52

Source: Firm Dynamics . . . 1990.

A recent study estimates that production of Swedish owned firms in the EC in relation to the total sales to this area will increase over the next 5–10 years from its current level of about 45 % close to 60 % (Swedenborg et al. 1989, 147). This will mean quite sluggish growth in exports from Sweden due to the substitution effect. The same mechanism is at work in other Nordic countries too, but probably to a lesser degree.

Swedish manufacturing companies carry out larger international operations than those in other Nordic countries and their presence in the

Figure I:22. Direct Nordic investment (net) abroad, % of GDP.



Source: Central Banks and National Accounts

EC markets is increasing rapidly. More than 50 % of total employment of the large Swedish manufacturing firms (cf. Table I:15) is abroad and over half of this is in the EC area. In Finland the corresponding share of foreign employment is around one third and a bit less than half of this is in the EC region. In Norway the figures are probably of the same magnitude, although the exact figures of the EC share are unavailable.

Based on the comparative data from our previous study (see Oxelheim 1984) it can be concluded that the rate of internationalization of large manufacturing companies has been growing fastest in Finland among the Nordic economies. Compared to the beginning of the 1980s the foreign production of the ten largest Finnish companies in relation to total sales has more than doubled.

The dominance of large companies in the manufacturing industries has been increasing in all the Nordic countries. Existing company structures are, however, quite different across the countries. The role of small and medium-sized companies has traditionally been important in Denmark, Sweden being at the other extreme (see section 2.4.). Most of the Nordic companies are, however, quite small in international comparison. There are around 50 Nordic companies among the 500 largest in Europe, most of them being Swedish (cf. Thomsen 1989).

Nevertheless, when relating the number of large companies to the size of the economy (population in the table below), Finland and especially Sweden are ranked high: third and second in the list, respectively.

Table I:16. Large Nordic companies in an international perspective: Distribution of Europe's 500 largest companies by country (companies ranked according to sales)

	Total number of companies among the 500	(Thereof: manufacturing companies)	Number per mill. inhabitants
Portugal	2	(–)	0.21
Denmark	4	(–)	0.78
Norway	42	(1)	0.96
Austria	11	(1)	1.45
Belgium	11	(5)	1.11
Spain	12	(–)	0.31
Finland	14	(9)	2.84
The Netherlands	21	(7)	1.43
Italy	24	(9)	0.42
Switzerland	32	(9)	4.83
Sweden	33	(19)	3.93
France	72	(27)	1.29
Germany	103	(42)	1.68
Great Britain	130	(41)	2.28

Source: Euro Top 500, European Business Press Group.

Looking at the recent developments in the industrial growth and company structures in the Nordic countries reveals some differences: Swedish industrial growth seems to have been based more on the expansion of the old large companies than in the other Nordic countries (cf. Eliasson 1988a and 1988b). The average firm (and plant) size in Swedish manufacturing has been increasing during the 1980s contrary to other Nordic countries. Two different patterns of industry dynamics can be seen on the Nordic scene: on the one hand the strong growth of the Swedish multinationals (mainly via external growth) and, on the other hand, the simultaneous growth of new business starts (and internal growth of small companies) and the strengthening role of large companies in the rest of the Nordic countries (see Firm Dynamics...1990). In Denmark, however, the growth of large companies has been less outstanding than in the three countries.

It is evident that the concentration tendencies will continue as the integration process proceeds in those industries where economies of scale are important or where competition has been restricted (via technical barriers, public procurement, etc.). On the other hand, the comparative advantages of Nordic companies seem to lie more and more in knowledge-based, technology driven industries where scale economies in production are of decreasing importance. This type of high tech production is often based on flexible production and technological competition through custom tailored goods produced in small batches and in small production units. Integration can be an important element in flexible production too – but it has little to do with the 1992 discussion. Rather, the strategy of flexible specialization, associated with new information technology based production, calls for new types of technology based linkages, leading to strategic networks. Cooperative behavior is likely to gain importance irrespective of how the single common market idea is developing. The future markets are affected by changes in both competitive and cooperative behavior.

According to Norman's study (1989) the EFTA firms in general would lose out (and consumers benefit) in the integration process when the dominant positions in the home markets disappear. However, the effects of the emerging cooperative ventures (often based on new technologies) are much more difficult to assess than the outcomes from the enhanced competition.

It is often pointed out that those kind of cooperative cross-border linkages, driven by innovations and new technologies, are more likely to emerge in the economies with the same type of cultural and institutional setting (see e.g. Fagerberg 1989b). This seems to leave some room for intra-Nordic integration in the globally integrating world.

These prospects might, however, concern only a limited number of industries. Although the scale economies are loosing importance in production of many industrial branches, they are of increasing importance especially in R&D and marketing. The Nordic economic area is simply too small for many companies to exploit these types of gains. The rapid (European level) internationalization of research and development activities of several Nordic firms is a good indication of this.

3.4. Integration and the Labor Market

Increasing labor mobility in the EC countries is one of the aims of the single market project of the EC Commission. The 1992 project means a widening and a deepening of the process, which was decided upon in 1957 in the Treaty of Rome and which was formally accepted in 1968. Deepening means, among other things, mutual recognition of national formal education. Widening in turn occurs by integrating Spain and Portugal into the common EC labor market in 1993. Increasing labor mobility is one of the measures with which a more efficient use of resources could be gained. It would also increase the welfare of employees directly by making it possible for them to apply for a job abroad. (For more on labor market integration see, for instance, Lundborg, 1989; OECD, 1985, and OECD, 1987.)

The Nordic countries already have a rather free common labor market. There are, however, limitations which make the market less than perfect. Differences in competence requirements, limitations in public sector recruitment and housing conditions are examples of hindrances in labor mobility. The common Nordic labor market has been especially important for Sweden and Finland in the 1960s and in the early 1970s making it possible for Sweden to attract labor from Finland. In those days Sweden was suffering from shortage of labor. Finland, in turn, had a very rapid increase in her labor supply, because of the post-war baby boom.

European integration will obviously mean increased labor mobility between the Nordic countries and the EC. How wide and deep it will be depends on political considerations. Some formal limitations are, however, likely to remain. Furthermore, many natural barriers to emigration and immigration, like language, culture, distance from home country, education and housing, will restrict labor mobility. Unemployment benefits will, also, limit mobility of workers. More liberal labor mobility would concern citizens of only EES countries. EES countries could, however, have bilateral agreements with third countries on labor market questions.

What would then be the effects of increased labor mobility in the EES area? First of all, only employees and their families would be concerned. Job searching in a foreign country would also be limited in time. At the moment a citizen of an EC country is allowed to search for a job in another EC country for three months. The result would thus not be total freedom of immigration. Equal treatment of foreign and domestic labor would also restrict employers from getting substantially cheaper labor. Extensive use of foreign labor in branches with low-skilled workers is, however, likely to reduce wage demands. Workers from southern EC countries would be recruited more extensively for jobs with low qualifications.

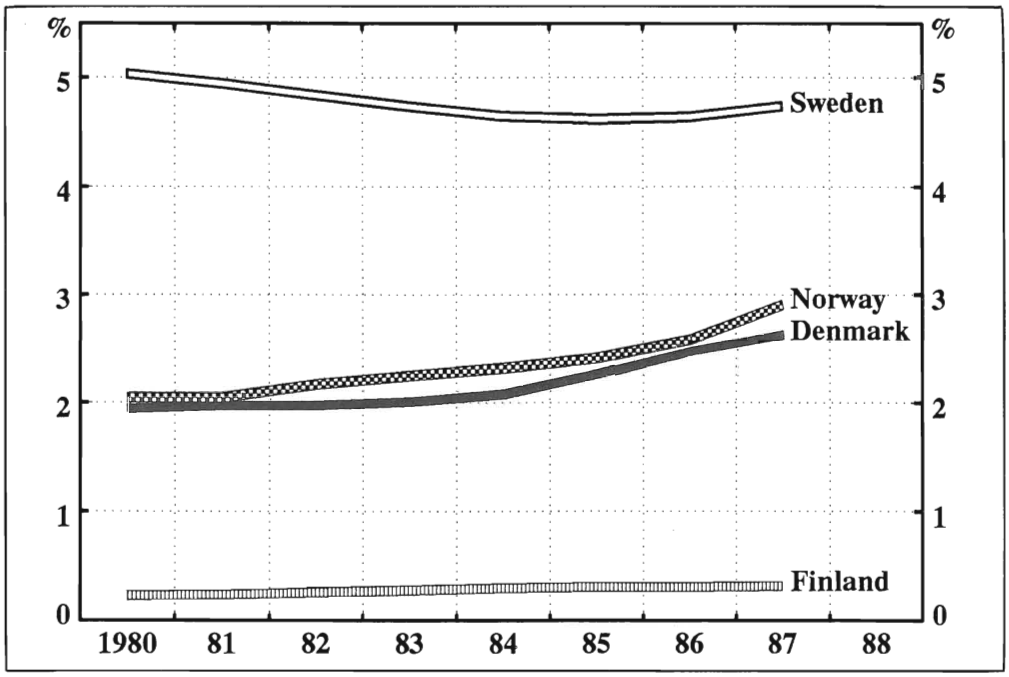
In addition to immigration, a more integrated European labor market would also increase emigration from the Nordic countries. Especially well educated professionals with sound knowledge of languages would be potential emigrants. In order to avoid this brain drain, net earnings of these groups would probably increase to EC levels. Competition for specialists would put pressure on reduction of the high Nordic marginal tax rates, too.

The net result of increased labor mobility on wage levels would be an increase in the wages of high-skilled labor in relation to low-skilled labor. Nordic wage structures would resemble the structure of Germany, where income differentials are greater than in the Nordic countries.

Immigration from low-wage countries to the Nordic countries will increase the return on capital if this factor of production is a complement to labor. This in turn would obviously lead to more investment in the domestic country and less investment abroad. The production structure would also be more labor intensive than with less labor mobility. If emigration from the Nordic countries also increases substantially, this will have a negative effect on productivity.

A more efficient use of labor in the EES area will increase the total output of these countries. This effect will occur in the Nordic countries, too. If there were a net labor inflow to the Nordic countries with corresponding investments, there would be an additional positive impact on the GDP of these countries. This effect would, however, level off as soon as the net immigration stopped. In addition to the immediate immigration effect there would be an indirect positive output effect due to increased fertility caused by permanent migration. The reason for increased aggregate fertility is that immigrants are, on the average, younger than the domestic population.

Figure I:23. Share of foreign citizens in the population in Denmark, Finland, Norway, and Sweden, %.



Source: Yearbook of Nordic Statistics.

Impacts of immigration on the gross national product (GNP) will be smaller than those on the gross domestic product (GDP). The concept of GNP includes returns on foreign investment, and takes into account that part of labor income of foreign workers that is repatriated to the home country. The former increases GNP, while the latter reduces it. The GDP concept is limited to measuring output produced in the home country, since it does not take into account factor incomes transferred between countries.

The impacts of increasing labor mobility on the per capita income of domestic citizens is difficult to estimate. If important scale economies exist in the domestic production, so that an increase in the use of inputs leads to a growing increase in output, the per capita income of domestic citizens will tend to rise, too.

What would then be the impact of increasing labor mobility on different Nordic countries? The crucial questions are (1) to what extent are employees from low-income EC regions likely to immigrate to the various Nordic countries, and (2) to what extent are citizens of the Nordic countries likely to emigrate to high-income EC countries.

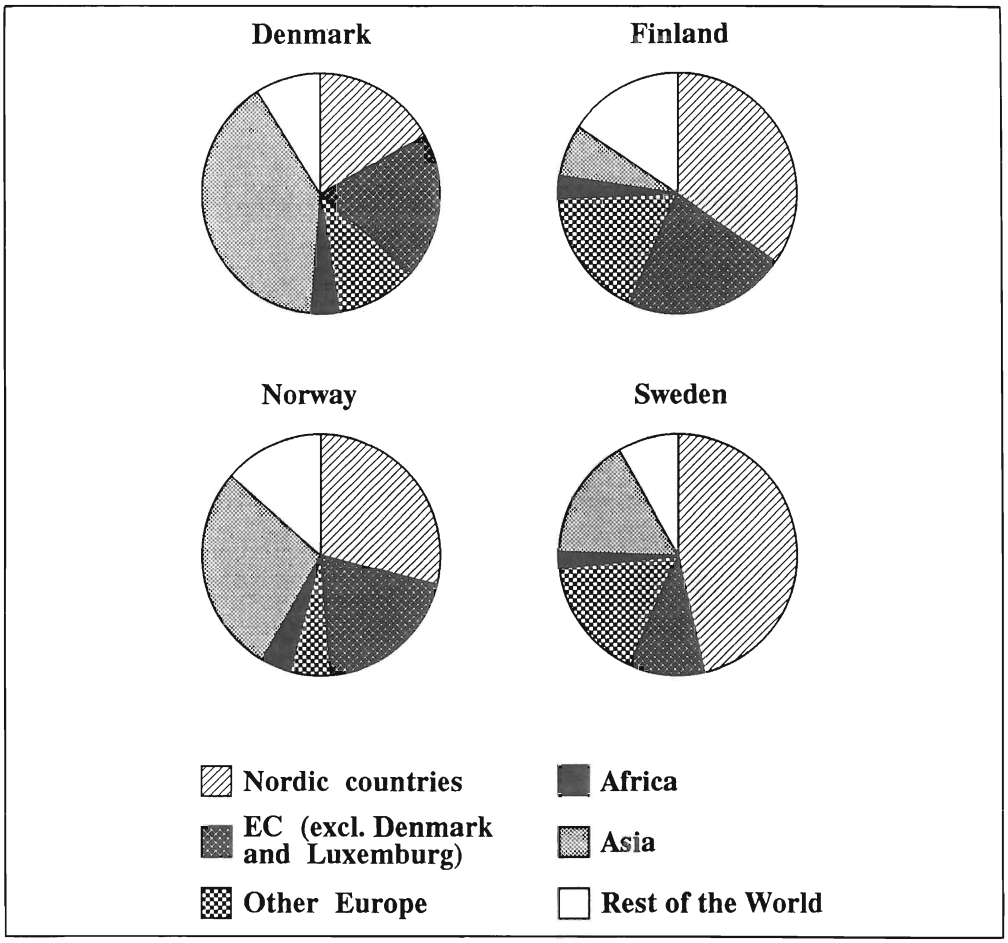
Important determining factors behind labor mobility are, among others, wage differentials between countries, housing conditions, the employment situation in the home country and in the host country, size of the labor market, size of the language area, distance from the home country, similarity of language and culture and existing colonies of own nationality in the host country (see for example, Lundborg, 1989).

Of the Nordic countries, Sweden has the largest share of foreign citizens in her population. In 1987 this share in Sweden was 4.8 %, in Norway it was 2.9 %, in Denmark 2.6 % and in Finland 0.4 % (Figure I:23). It must, however, be remembered that about 45 % of the foreign population in Sweden originates in the other Nordic countries, mainly in Finland (Figure I:24). Only a rather modest share of the foreign population of these countries originates in the EC area. In addition to the Nordic population, Denmark, Norway and Sweden have important colonies of foreigners originating from Eastern Europe and from Asia. Emigration from these areas is likely to increase in the future, too.

Sweden has the largest population of workers from the southern EC countries. In this respect Sweden would be the most attractive host country for southern European immigrants, whereas Finland would be the least attractive. Many other factors influencing labor mobility point in the same direction.

According to GDP per capita, using PPP measures, the ranking between the Nordic countries in 1988 was the following (the Nordic average is 100): Norway 112, Sweden 101, Finland 95, and Denmark 93 (see Table I:1). These measures indicate the attractiveness of various countries' labor market. In this respect Norway and Sweden are the most attractive host countries, but the ranking of all Nordic countries is also higher than the EC average of 86 and clearly higher than that of the Southern European countries. In Greece and in Portugal GDP per capita is less than a half of that in the Nordic countries. Thus all Nordic countries would evidently attract employees from the southern EC countries.

Figure I:24. Foreigners by citizenship in Denmark, Finland, Norway, and Sweden in 1987, % shares.



Source: Yearbook of Nordic Statistics.

The above-presented GDP per capita measure also indicates emigration from the Nordic countries. In Germany, which is the main potential host country, the above-mentioned GDP per capita measure has a value of 97. When all frictions influencing labor mobility are taken into account, it seems evident that Germany will not, on the average, be able to attract much labor from the Nordic countries. But because of a more unequal income distribution in Germany than in the Nordic countries, professionals with a good knowledge of languages might be tempted to emigrate.

3.5. Liberalization and Deregulation of Financial Markets

Liberalization of capital movements

The Nordic countries are already jockeying for position in preparation for the 1992 integration of the EC markets, but the liberalization of the financial markets is turning out to be one of piecemeal change. The gearing up for 1992 should be viewed, however, within the context of the widespread trend of the deregulation of domestic financial markets that has built up momentum in the mid-1980s and of the integration of international financial markets around the world.

The ambition to completely liberalize capital movements, envisioned by the White Paper of 1985, has been expounded upon in the EC Council directives of November 1986 and June 1988. The latter directive includes some more specific recommendations regarding the liberalization with respect to third countries. The members of the EC are called upon to free capital movements with third countries to the same extent as in the internal market, i.e. members are encouraged to apply the principle of "ergo omnes". This extension of the liberalization to third countries, however, is not yet legally binding and certain safeguards remain intact. In any case, the potential extension of the liberalization of capital movements will have far-reaching consequences for Norway, Sweden and Finland.

The liberalization of capital movements will have an impact on both the macroeconomic and microeconomic levels. First, the integration of financial markets will lead to better allocation of financial resources in the form of net cross-country transfers of capital. Capital will be transferred from countries where it is relatively abundant to countries where it is scarce. Second, integration will stimulate competition, ensuring more efficient provision of financial services both between and within countries. Differences in real interest rates between countries will be pared back, and the prices of other financial services, such as for banking, insurance, and equity market activities, will be formed in a more competitive atmosphere.

It has been estimated that the direct effects of the liberalization of capital movements, associated largely with the reductions in the price of financial services, will boost the GDP of the EC countries as a whole by some 0.7 percent. Taking into account the impact of the multiplier effects associated largely with the lower cost of credit, the integration of financial markets is estimated to raise the GDP of the EC countries by some 1.5 percent over the medium to long term, i.e. 5 to 10 years (See European Economy, No. 35, 1988).

The ongoing process of the liberalization of capital movements will naturally have diverse effects within the Nordic countries, depending upon the initial structure of the financial markets. The Nordic financial markets have undergone widespread deregulation and some of the highlights of recent developments in the liberalization of capital controls with regard to direct and portfolio investments are presented in Appendix 2.

It might seem that the impact of the liberalization would inherently

be the greatest for Denmark, as a member of the EC. But Denmark deregulated its financial markets to a great extent early on and thus has a head start on the other Nordic countries in this respect. Denmark dismantled many of its restrictions upon entering the EC in 1973. Denmark has also stretched its lead by liberalizing the remaining restrictions on capital flows completely in October 1988, two years before the EC deadline.

The liberalization of the Swedish financial markets during recent times has been the most dramatic. In 1988 IUI published a study showing that there was little to be gained from foreign exchange controls with respect to economic policy autonomy, but that costs were incurred in the form of a political risk premium meaning higher Swedish interest rates. This risk premium was estimated to be about two percentage points at the time the abolition of the exchange controls was first anticipated (see Oxelheim, L. 1988). At the beginning of 1989 there was an opening up of the equity market as Swedish residents were allowed to invest in foreign shares. At the same time foreigners were allowed to buy unlisted shares, instead of just the listed shares as before. In July 1989 Sweden removed almost all of the remaining foreign exchange regulations. This enables Swedes to invest in foreign bonds and buy real estate overseas. At the same time, foreigners were allowed to invest in Swedish bonds for the first time since World War II. A few foreign exchange restrictions remain, such as that cross-border payments still have to be made through Swedish banks and equity transactions have through a broker, but these are largely for statistical purposes and to prevent tax evasion.

Finland and Norway have also deregulated their markets at a rather swift pace. Interest rate controls, for example, were relaxed in Finland and Norway in the mid-1980s, paralleling the formation of true money markets. In September 1989 the foreign exchange regulations for Finnish companies with respect to foreign investments and borrowing were further relaxed, except for maturities of less than one year. The limits on foreign investments by households will be removed by the summer of 1990. Finland also recently opened up the markka-bond market to foreigners at the beginning of this February. Norway, on the other hand, had opened up its bond market to foreigners in May 1989 after having been closed for some five years.

The general liberalization of the capital movements has played an integral role in facilitating the expansion of the international operations of Nordic companies. Direct investment abroad by Nordic companies, has jumped sharply in during the 1980s. Detailed figures on the net direct investment abroad by Nordic countries as well as net foreign investment in the Nordic countries are presented in Appendix 1. The importance of the direct investment in the EC markets for the Nordic countries is clear as companies try to establish a foothold in the market before 1992.

Coping with 1992

In the light of this general atmosphere of liberalization and deregulation several strategies for Nordic financial institutions can be identified. Four

of these generic strategies that Nordic financial institutions can follow while gearing up for 1992 are as follows:

1) Mergers and concentration within domestic markets,
2) Joint ventures with Nordic financial institutions and/or Pan-Nordic services
3) Joint ventures with non-Nordic foreigners,
4) Joint ventures with other types of financial institutions and/or diversification.

First, Nordic financial institutions may be large in their home countries, but in Europe they are of only small to medium size. As a consequence of the many years of regulation of the financial markets, all of the Nordic countries are overbanked. Banks have been forced to compete with service, and the location or number of banks has been a prime competitive weapon. Throughout the 1960s and 1970s there were mergers and acquisitions which resulted in a reduction in the number of financial institutions. A decline in the number of savings banks has taken place in all the Nordic countries and in the number of commercial banks in Denmark and Norway.

Since December 1988, Danish savings banks have been allowed to reorganize in the form of public limited companies, which has paved the way for them to raise their share capital and even to merge with commercial banks. Danish mortgage banks have also recently been allowed to reorganize into limited company form, which will also spur concentration within the financial markets.

Merger and acquisition activity reached a breakneck pace in the Nordic countries toward the end of 1989 as banks maneuvered for post-1992 position. In October two of the top three Norwegian banks, Bergen Bank and Den norske Creditbank, started things off by agreeing to merge. In mid-November the merger of the two largest Danish banks, Danske Bank and Copenhagen Handelsbank, was announced and subsequently in December these two were joined by Provinsbanken, ranked number six by assets. In November Svenska Handelsbanken made a bid for Skanska Banken, ranked number three and number nine respectively in Sweden. In early December three more major Danish banks, Privatbanken, SDS and Andelsbanken, also decided to band together. This was shortly followed by the bid by Swedish state-controlled PKbanken for Nordbanken, respectively ranked number two and five by assets. It is noteworthy in the latter case that the new bank will retain the name of the smaller of the two, Nordbanken, in order to enhance its image abroad. Only in Finland has the merger and acquisition activity been quiet.

Second, the Nordic financial institutions can band together to generate greater economies of scale. The equity markets of the Nordic countries, for instance, are relatively small by world standards. The Stockholm stock exchange, three times larger than any of the other Nordic exchanges, ranks at number 16 among the major stock exchanges in the world according to market capitalization (FIBV, 1988 Report). Besides generating possible economies of scale, the formation of a closer-knit equity market would serve to redistribute risks across the Nordic countries. The Nordic countries have been exposed to the dangers of wide fluctuations

in oil prices, for example, and Pan-Nordic linkages via the equity markets might help investors hedge against these risks. The Stockholm Stock Exchange envisions their automated trading system Stockholm Automated Exchange (SAX), introduced in June 1989, as someday forming the hub of a joint information system that would interconnect the Nordic stock markets. There are even plans to link the system to London and New York by satellite.

When trying to market securities services to foreigners, brokerage houses can strive to present themselves as a place for one-stop shopping, i.e. that they can cater to the needs of foreign investors by providing Pan-Nordic services. This is prudent because foreigners often tend to perceive the Nordic market as a single entity anyway. Furthermore, some cross-Nordic cooperation among banks already exists in joint ventures such as the Scandinavian Banking Partners, formed by Denmark's Privatbanken, Norway's Bergen Bank, Sweden's Skandinaviska Enskilda Banken, and Union Bank of Finland. The Scandivanian Banking Partners had been listed on the London Stock Exchange until last November when it decided to go private. The joint venture primarily serves as an administrative link between the banks enabling them to provide extensive corporate banking services.

Third, Nordic financial institutions are already looking for a foothold in the deregulated EC market. This will enable them to better serve the Nordic companies expanding their operations southward into the EC, as evidenced by the higher direct investment. They are also doing this, however, in order to continue growing beyond the borders of the cramped domestic markets. But because of their small size they will be hard pressed to compete head-on with the huge European financial giants. The Nordic financial institutions will be inclined to seek partners already established in the EC rather than attempt to cover all markets.

Denmark could turn out to be the stepping stone for Nordic financial institutions and companies going south. This may be especially true with respect to the Danish bond market because of its strong traditions there. After the recent deregulation in the Swedish bond market, some of the first Swedish mortgage bonds have been issued in Copenhagen, and some of the first Norwegian issues were launched there as well. On the other hand, Denmark will be the first stop for EC companies on their way north.

It should be kept in mind, however, that the scope of financial integration and deregulation is wider than for other factors of production. While labor and other factors of production are becoming increasingly mobile in Europe, increased financial integration and capital mobility will tend to be a more worldwide phenomenon. Practically all of the major Nordic financial institutions have, for example, set up subsidiaries and representative offices spread around the world.

Fourth, Nordic financial institutions will branch out by cooperating with other domestic or foreign companies in related businesses. Finnish banks have started to solidify the traditionally informal alliances between banks and insurance companies, including some purported takeover attempts. Finnish banks have even started selling certain kinds of policies for the insurance companies, although they are not allowed to take on any insurance liabilities themselves.

Danish banks and insurance companies that reorganize themselves into holding companies may be able to venture into areas that have traditionally been off limits. One insurance company, for instance, is currently setting up a nation-wide chain of real estate agencies. Furthermore, Danish mortgage institutions have recently been allowed to reform themselves in holding company form. This will allow them to diversify into non-mortgage branches of banking or insurance.

3.6. Nordic Countries and the European Monetary System (EMS)

The European Monetary System (EMS) was created in 1979 to replace the previous exchange rate arrangement called "the snake". The EMS, like the snake, aims at exchange rate stability between the EC currencies. Bilateral EC exchange rates are fixed but adjustable in terms of the European Currency Unit (ECU), which was also created in 1979.

Until now the parities of the exchange rates belonging to the exchange rate mechanism (ERM) of the EMS have been adjusted 12 times. Adjustments have been delayed and have not fully compensated for inflation differentials, which has led to deteriorating competitiveness in countries where price performance has been worse than the average. A less than full compensation for inflation differentials is a crucial element in the functioning of the EMS. Its purpose is to create more "discipline" for domestic economic policies and to strengthen the role of the internal adjustment in the face of external imbalances.

The plans for European monetary integration are, however, much more ambitious than the existing EMS. The more distant objective of the EC is a European economic and monetary union. This far-reaching aim did not progress before 1988, when the European Council, in June, decided to set up a committee chaired by Jacques Delors, President of the European Commission, to investigate concrete steps leading towards this union. The Delors committee published its report in April 1989. The committee presented a program in three stages for the creation of the economic and monetary union. This plan was accepted by the European Council in Madrid in June 1989. According to the Delors committee report the decision to enter upon the first stage should be a decision to embark on the entire process (see Committee for the Study of Economic and Monetary Union, 1989, 24). The British government, however, has not accepted this interpretation.

The first stage involves a widening of the present EMS so that those EC countries which do not participate in the exchange rate mechanism (in particular, Great-Britain) will enter it. It also means harmonization of economic policies and narrowing of differences in economic performance in various countries. Exchange rate realignments would still be possible, even if reluctance to change parities would increase. The first stage is supposed to start "no later than 1st July 1990".

The second stage is to begin after the new Treaty of the EMS has come into force. During this stage the basic organs and structure of the

economic and monetary union would be set up. Certain operational decisions would be taken by majority vote. A limited pooling of exchange reserves would be realized.

The final stage would mean irrevocably locked exchange rates and the attribution to Community institutions of the full monetary and economic competences in questions which are to be delegated to them. Full responsibility for monetary policy would be attributed to a new body, the European System of Central Banks (ESCB). The national central banks "would be entrusted with the implementation of policies in conformity with guidelines established by the Council of the ESCB and in accordance with instructions from the central institutions" (Committee for.., 1989, 18).

The third stage would also mean binding constraints on national budgets "to the extent to which this was necessary to prevent imbalances that might threaten monetary stability" (Committee for ..,1989, 35). Official reserves would be pooled and managed by the ESCB. A single currency could be an element of the economic and monetary union, but it would not be necessary for reaching the ultimate aim, irrevocably fixed exchange rates would be enough.

Denmark is a member of the EMS, whereas the EFTA countries Finland, Norway and Sweden have national currency baskets to which they peg their currencies. In principle, both the EMS and the currency basket exchange rate regimes of the Nordic EFTA countries are variants of a fixed but adjustable exchange rate system. They create medium-term exchange rate stability, which is motivated by the creation of a favorable environment for foreign trade and capital movements. They differ, however, mainly in four respects:

(1) The EMS countries are not able to change their exchange rates unilaterally since a common decision is required, whereas Finland, Norway and Sweden can devalue or revalue based on their own decision.

(2) The composition of the currency basket differs. The ECU basket is common to all EMS countries. The shares of different currencies are based on the economic importance of the respective countries. In Finland, Norway and Sweden the composition of the basket is determined in such a way that it aims at minimizing variations in the competitiveness of the economy.

(3) Inside the exchange rate mechanism (ERM) of the EMS, bilateral exchange rates of the participating currencies are "fixed but adjustable". In the currency basket exchange rate regimes this is the case only in relation to the currency index.

(4) In the ERM both countries will intervene at the margin to keep the bilateral exchange rate inside the exchange rate band. In practice, however, the main responsibility to intervene has been on the side of the weaker currency country. The country, whose currency is under pressure can borrow from the intervention funds of the EMS.

In Finland, Norway and Sweden there has been some discussion

about the relation of these economies to the EMS (see Jakobsson, 1987; Kotilainen and Peura, 1988 and 1989; Utne, 1988; Lybeck, 1989; Sukselainen, 1989; Svensson, 1989; NOU, 1989, and Vredin, 1989). Some of the discussants have suggested a membership in the EMS, while some are more critical. The following reasoning is mainly based on Kotilainen and Peura (1988 and 1989).

The basic question to be answered is whether non-EC countries could join the EMS at all. According to the existing EMS accord it seems to be impossible for non-EC countries to be full members of the European Monetary System. They could, however, according to article 5.2. of that accord, associate with the EMS. Countries without full membership obviously could not use EMS intervention funds, but this could perhaps be compensated for through bilateral borrowing agreements with central banks (Nowotny, 1988.) An association could occur bilaterally or jointly through EFTA as a part of the EES process.

How deep such an association could go is unclear. It is obvious that the second and third phases of the Delors report would be inconsistent with the emphasis put on independence of economic policy in the Nordic EFTA countries so far. The far-reaching supranationalism of an economic and monetary union might also be inconsistent with the neutrality policy followed in Finland and Sweden. If Finland, Norway and Sweden were not ready to apply for EC membership, they obviously would not be ready to apply for membership in an economic and monetary union, either. Assuming the present policies in these countries are to be continued, only an association with the existing EMS, and without a commitment to the second and third stages of the Delors report seems to be realistic. How ready the EC would be to accept this kind of an arrangement is an open question.

In the following we confine ourselves to evaluating the pros and cons of an association with the EMS like it is today.

The main argument in favor of an association with the EMS is the credibility gain it could give for maintaining the existing exchange rate. This gain would materialize both in the short and in the medium run. In the short term, the intervention responsibilities of other participating countries and the possibility to get short-term financing for interventions would make it easier to defend the existing exchange rate against speculation. In the medium term, an association with the EMS would create pressure for policy makers and labor market participants to avoid inflation. This increased credibility, in turn, could reduce interest rate differentials.

An association with the exchange rate mechanism of the EMS would make the currencies of Finland, Norway and Sweden more stable in relation to the EMS currencies. Instability in relation to other currencies, like the dollar and the yen, would, however, increase.

Increased factor market integration (capital and labor) inside the EES area would make it easier to maintain fixed parities, because factor mobility would diminish the need for exchange rate changes in balancing the economy. This argument is based on the theory of optimum currency areas. Harmonization of economic policies, which is likely to materialize

along with the EES process would also contribute positively to maintaining fixed exchange rates in relation to the EMS currencies.

As a counter-argument for the credibility increasing effect of an association it can be argued that the EMS is neither a necessary nor a sufficient condition for credibility. Credibility can be increased with internal measures, too. An independent national central bank, "a conservative central banker" as it is called in the economic literature, can also create the needed credibility. The EMS as a guarantee for medium-term credibility is in fact based on the same idea, the German Bundesbank operating as a conservative banker.

In defending the currency against speculation the efficient international capital market, in turn, is a substitute for EMS intervention funds. The IMF funds can also be used for that purpose. The costs of defending a currency would, however, be the higher the longer the speculation continues. Assuming that speculation would mainly be based on economic fundamentals, these costs could also be seen as a disciplinary element, preventing policy makers from pursuing too expansionary economic policies. The benefits from an association with the EMS, compared to the Nordic currency basket regimes, would thus materialize mainly when foreign exchange speculation is not based on economic fundamentals.

The EMS, as it is today, is not a sufficient condition for credibility, because exchange rate realignments are not excluded. Expectations of exchange rate changes create interest rate differentials inside the ERM, too. High interest rates can prevail for long if necessary exchange rate realignments are delayed. Speculative crises are not excluded inside the EMS either. Some argue that they are even more probable after the liberalization of capital markets (for opposing arguments, see Svensson, 1989).

A widely used argument in favor of a membership in the EMS has been that it reduces the costs of disinflation by increasing the credibility of the economic policy. Recent empirical studies have, however, indicated that the opposite has been true. The disinflation in the EMS has been accompanied by a stronger increase in unemployment, and a stronger decline in growth rates of output than has been the case in the other OECD countries on average. (De Grauwe, 1989; Dornbusch, 1988.) It can still be argued that the EMS might help in maintaining low inflation rates, because it makes it more costly for the authorities to produce surprise inflation.

In the United Kingdom the credibility argument has been criticized on different grounds. According to this view increased credibility due to the fixity of exchange rates, as long as inflation rates differ, is a negative phenomenon, because in this situation freely mobile capital tends to equalize nominal, especially short-term, interest rates. This would worsen imbalances of the economy, rather than correcting them. (See for example Walters, 1986, 126–127.)

The above-mentioned view is related to another argument presented against the EMS, namely that it reduces economic policy autonomy of participating countries. First, the more fixed the exchange rate is the

smaller is the efficiency of the domestic monetary policy in conditions with high capital mobility. Some economists argue that liberalization of financial markets should lead to more flexibility of exchange rates, both because of stabilization policy reasons and for defending foreign exchange reserves against speculative attacks. Increased flexibility of the exchange rate might reduce the need for changes in interest rates, which have more economic side effects.

Another line of reasoning is based on the view that exchange rate changes should not be excluded as a means of correcting external imbalances, even if "a stable currency policy" were followed as a rule. Increasing fixity of the EMS exchange rates could lead to severely deteriorating competitiveness with welfare losses. This would be the case if an association with the EMS did not have a sufficiently positive impact on the behavior of economic agents and on economic structures. Nominal wages and prices could still be too rigid. Finland, Sweden and Norway have traditionally been inflation prone countries, and if this does not change drastically, the costs of a fixed exchange rate might prove to be substantial.

This scepticism can be motivated by the so-called insider-outsider hypothesis, according to which labor unions put their main emphasis on the "core employees", who are not likely to get unemployed first. Em-

Table I:16. Official currency baskets of Finland, Norway and Sweden and the ECU basket, % shares[1].

	Finland	Norway	Sweden	ECU
USA	8.1	11.0	22.8	–
Japan	6.1	6.0	3.3	–
Switzerland	2.5	1.2	2.1	–
Finland	–	3.0	6.5	–
Norway	4.3		9.0	–
Sweden	19.1	15.0	–	–
Austria	1.6	1.5	1.3	–
Canada	–	3.6	1.1	–
Great-Britain	13.4	14.7	22.8	13.0
The Netherlands	4.8	4.6	4.6	9.4
Belgium	3.1	2.4	3.7	7.6
Italy	4.9	3.3	3.6	10.15
France	6.5	9.2	5.2	19.0
West-Germany	19.3	17.7	16.0	30.1
Denmark	4.5	6.8	7.8	2.45
Spain	1.8		1.3	5.3
Portugal	–	–	–	0.8
Luxembourg	–	–	–	0.3
Ireland	–	–	–	1.1
Greece	–	–	–	0.8

[1]) The Finnish basket 07.09.1989; the Norwegian basket since 12.08.1985; the Swedish basket 01.04.1988; and the ECU basket since 21.09.1989.

ployment could thus have a rather low weight in the objective function of the labor unions. Commitment to an irreversibly fixed exchange rate in the form of a "hard" EMS would also save the employees of the closed sectors from real wage reductions in the form of devaluations. The pressure on wage demands would thus be felt more in the open sector of the economy. This phenomenon might have negative impacts on relative wages reducing the attractiveness of the open sector.

Another motivation for parity changes as a tool in economic policy is based on a shock approach. Different countries face different kinds of shocks (external and internal); they also react differently to the same shocks, because of different structures and because of differences in the

Table I:17. Weights of exchange rate indices for Finland corresponding to different targets, % shares.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
USA	8.1	−2.4	11.7	8.0	27.9	28.0	–
Japan	6.1	−4.3	−0.8	9.4	15.9	2.2	–
Switzerland	2.5	8.7	−1.3	2.6	1.4	2.6	–
Norway	4.3	17.4	8.8	3.2	3.6	3.0	–
Sweden	19.1	69.5	31.6	18.2	9.7	16.2	–
Austria	1.6	–	–	–	1.9	–	–
Canada	–	–	–	–	4.9	–	–
Great-Britain	13.4	−2.7	23.1	12.7	3.2	11.4	13.0
The Netherlands	4.8	35.4	1.1	4.0	1.6	3.5	9.4
Belgium	3.1	–	−1.7	2.8	2.0	1.6	7.6
Italy	4.9	−9.9	2.6	6.6	5.2	2.0	10.15
France	6.5	−2.4	4.5	5.1	7.2	4.5	19.0
West Germany	19.3	−9.2	14.1	22.8	14.0	22.4	30.1
Denmark	4.5	–	6.3	4.6	1.5	2.7	2.45
Spain	1.8	–	–	–	–	–	5.3
Portugal	–	–	–	–	–	–	0.8
Luxembourg	–	–	–	–	–	–	0.3
Ireland	–	–	–	–	–	–	1.1
Greece	–	–	–	–	–	–	0.8
Total	100.0	–	100.0	100.0	100.0	100.0	100.0

(1) Foreign trade shares (official basket), 07.09.1989. Source: Bank of Finland Monthly Bulletin.
(2) Weights minimizing the variance of foreign reserves. Source: Lehmussaari (1987). (The estimation period is 1979–1983. Because of roundings the weights do not sum up to 100 %.)
(3) Weights minimizing the variance of production. Source: Pikkarainen (1986).
(4) Weights minimizing the variance of domestic prices. Source: see above.
(5) MERM weights. Source: IMF.
(6) Payments currency weights, 01.01.1987. Source: Board of Customs and Bank of Finland.
(7) ECU weights, 21.09.1989. Source: The EC Commission.

behavior of economic agents. Shocks can be long-lasting or even permanent. Exchange rate changes could be an optimal policy, especially if internal adjustments were not big enough, due to rigidities, or if they were too costly. Increasing factor mobility inside the EES area might also be too limited to correct imbalances, especially in the case of labor.

The last critical argument for an association with the EMS to be presented here is based on the literature concerning the optimal currency basket composition. In that literature optimal currency baskets are derived according to some economic objectives. These objectives can be minimization of changes in competitiveness, production, prices, current account, foreign reserves, etc. The official currency baskets of Finland, Norway and Sweden put the major emphasis on the minimization of changes in competitiveness. The ECU basket of the EMS in turn is a generic basket, the same for all participating countries.

If the ECU basket differed substantially from the various optimal baskets, a substitution of national baskets for the ECU basket would include a cost for the economies. When comparing the Nordic baskets to the ECU basket it is rather obvious that adopting the ECU basket would entail a cost at least when measured with the competitiveness criterion, which is the idea behind the official baskets (see Tables I:16 and I:17). The most obvious difference between the baskets is a high weight for the dollar in the Nordic baskets and no weight at all in the ECU basket. How big that cost would be and to what extent it would be compensated by the benefits of an association with the EMS is an open question.

3.7. Fiscal harmonization

Introduction

The drive towards an integration of the European economies implies a drive towards free movements of goods and services as well as free movements of factors of production inside the European Community.

An important part of the abolition of barriers to trade in goods and services is the removal of border formalities. In order for border formalities to be removed, indirect taxation of goods and services needs to be reconsidered. Traditionally the system of indirect taxation requires border controls. Indirect taxation in the EC countries is based on the so-called destination principle, i.e. taxes are collected in the country of consumption. The present destination-based indirect tax system relies on border controls to make sure that taxes are levied on all imports and that exports leave the country free of tax. If border controls are to be abolished in order to establish an Inner Market, new ways of administering indirect tax collection will have to be found. This might necessitate a harmonization of the system of indirect taxation inside the EC. The EC Commission has also stated that it does not consider harmonization of indirect taxes as a goal in itself, but only as a means to reduce or abolish border formalities in the trade of goods and services.

Regarding the harmonization of other parts of the tax system, the EC Commission does not seem to be in as much of a hurry as with the in-

direct tax system. This might seem somewhat surprising since differential taxation of e.g. highly mobile financial capital is fairly likely to have allocative effects, especially since international capital movements have become less regulated lately (Table I:18). Thus the EC Commission's proposal in 1975 to introduce an imputation system as a common means for dividend taxation in the EC countries has as of yet not been implemented. The recent proposal for a new system of taxing interest income at the source has failed to produce results as well.

The effects of the failure to harmonize the system for direct taxation are not easy to assess. A highly diversified system of direct taxation could, however, have serious effects on the allocation of resources inside the EC.

Table I:18. The Degree of Mobility of Factors of Production.

Mobile	Financial capital Physical capital (direct investment) Labor
Immobile	Real estate (land)

Table I:19. Total tax revenue as a percentage of gross domestic product (GDP) at market prices in some OECD-countries in 1987.

Sweden	56.7	
Denmark	52.0	
Norway	48.3	
Netherlands	48.0	
Belgium	46.1	
France	44.8	
Luxembourg	43.8	
Germany	37.6	
United Kingdom	37.5	
Italy	36.2	
Finland	35.9	(41.1)*
Switzerland	32.0	
Unweighted averages:		
OECD total	38.8	
OECD Europe	40.4	
EC	40.6	

*) Including compulsory retirement insurance and some other compulsory employers' contributions to social security, which are not usually defined as taxes.
Source: OECD Revenue Statistics.

In what follows we will discuss three topics related to the fiscal harmonization issue. First, we describe the tax structure in the Nordic countries as compared to that of the EC. Second, we briefly describe the proposals of the EC Commission concerning harmonization of indirect taxation. Some aspects of the harmonization of direct taxation are discussed as well. Third, we compare the structure of income taxation in the Nordic countries. In this last part no detailed comparison to the EC countries is made.

The tax structure in the Nordic countries

The tax structure of the Nordic countries differs quite considerably between countries. First, one can say that all of the four Nordic countries are high tax countries. This, at least, is true for Sweden, Denmark and Norway, but applies to Finland as well especially if one considers compulsory retirement insurance premiums paid by Finnish employers to private insurance companies as taxes (Table I:19).

In comparing the tax structure of the Nordic countries, it is interesting to note that Norway has a structure quite similar to that of the EC when again Finland, Sweden and Denmark differ in this respect (Table I:20).

Table I:20. Tax revenue of main headings as percentage of total taxation in 1987.

	Denmark	Finland	Norway	Sweden	EC
Income & profits	56.5	49.5	33.1	41.3	32.9
Social security	3.7	9.0	23.6	24.2	29.2
Payroll	0.7	. .	. .	4.5	0.5
Property	5.1	3.2	2.5	5.7	4.5
Goods & services	33.9	38.2	40.1	24.1	32.5
Other	0.2	0.2	0.7	0.2	0.4

Source: OECD Revenue Statistics.

Table I:21. Individual income taxes and employee's contributions to social security, % of all taxes (1987).

	Denmark	Finland	Norway	Sweden	EC
Personal income tax	49.2	45.6*	26.4	37.2	26.3
Employee's contributions	1.9	–	6.5	–	10.1

*) For Finland, the OECD for some reason defines employee's contributions to health insurance and to the public retirement pension system as income taxes.
Source: OECD Revenue Statistics.

As can be seen from Table I:20 especially Denmark and Finland are relying heavily on income and profits taxation. A special feature for Norway and Finland is the relatively important role of indirect taxation, i.e. taxes on goods and services.

The fact that Norway has chosen to put a fairly low direct tax burden on individuals is clearly illustrated in Table I:21, where personal income taxes and social security contributions paid by the employees are given as percentage of total taxes.

Fiscal harmonization in the EC

The EC Commission has, for some time, tried to persuade its member countries to harmonize their tax systems. This has been done especially in the area of indirect taxation although the Commission has been active in other areas as well. The Commission has e.g. tried to get all of the member countries to accept an imputation system as a means for relieving the double taxation of dividends.

Table I:22. VAT rates (%) in the EC and Nordic countries as of January 1, 1989.

	Reduced rate	Standard rate	Higher rate	Weighted average
Belgium	1,6,17	19	25,23	14,8 (85)
Denmark	–	22	–	22,0 (89)
France	5.5	18.6	28	16.0 (86)
Greece	6	18	36	n.a.
Ireland	0,2,4,10	25	–	14.9 (86)
Italy	2,9	18	38	12.6 (85)
Luxembourg	3,6	12	–	9,3 (85)
Netherlands	6	18.5	–	15.0 (85)
Portugal	8	16	30	n.a.
Spain	6	12	33	10.2 (86)
United Kingdom	0	15	–	9.9 (86)
West Germany		14	–	12.5 (86)
Commissions proposal	4–9	14–20	–	
Finland*	–	20,5 (17)		
Norway	–	20	–	
Sweden*	–	23,5 (19)		

*) For Finland the tax rate was increased from 16,5 to 17 from January 1, 1990. The VAT rates of Finland and Sweden are tax inclusive (in parenthesis). If the tax inclusive rate is t_2, the tax exclusive rate (t_1) is given by $t_1 = t_2/(1-t_2)$.

Source: Ökonomiministeriet et alia: "Redogörelse vedr. dansk afgiftspolitik og det Inre Marked", 1989, p. 29.

Indirect taxation

The drive towards a harmonization of indirect taxation – and towards the abolition of fiscal frontiers especially in the field of trade – was started by the Commission's 6th directive (17.5.1977) concerning the value added tax (VAT) of the member countries. Today a VAT is used in all of the member countries, the rates of which are given in Table I:22.

In 1987 the Commission accepted a recommendation (proposal in the table) of harmonizing tax rates of the VAT as well. According to this recommendation, which is part of a drive towards abolition of border controls, it was suggested that VAT would not be lifted from exports inside the common market but that the principle that consumption in each member country should be taxed in that country would be accomplished through a clearing house system. Through the clearing house system, taxes would be allocated to the country of consumption.

The proposals made by the Commission in 1987 was criticized by some of the member countries, however. Especially those countries with high VAT rates were unsatisfied with the proposal. A modified plan was presented in the fall of 1989. The main points of this plan may be summarized as follows:

1. Instead of a band for the standard VAT rate, there will be a minimum standard rate, probably at a level of 15 percent.
2. Some countries are allowed to continue zero-rating of a limited group of necessities (mainly food).
3. The proposed clearing house system will be replaced by a clearing system based on foreign trade statistics.

This proposal, if it is realized, implies a fairly far-reaching harmonization and, most importantly, a possibility to abolish border controls in the trade of goods and services.

The excise tax systems of the EC member countries are more divergent than the VAT systems (Table I:23).

In this area the Commission also made a proposal for harmonization in 1987 (rates prop. in the table). Also this proposal was modified in 1989, however. The Commission stated that, provided member countries maintain their commitment to the abolition of fiscal frontiers, the proposal from 1987 would be regarded as a long-time objective. In the meantime the Commission will propose minimum tax rates for alcohol and tobacco and a rate band for mineral oil.

Direct taxation

In the area of direct taxation the EC Commission has not as of yet been very successful in its drive towards harmonization. The 1975 proposal to harmonize dividend taxation in the form of an imputation system has not been carried through (Table I:24).

Table I:23. Excise tax rates on some products in the EC as of April 1, 1987.

	Pure alcohol ECU per hl	Wine ECU per hl	Beer ECU per hl	Cigarettes* ECU per 1000 cig.	ad valo-rem, %	Petrol ECU per 1000 l
B	1 252	33	10	2.5	66.4	261
DK	2 499	157	56	77.5	39.3	473
D	1 174	20	7	27.3	43.8	256
GR	48	0	10	0.6	60.4	349
E	309	0	3	0.7	51.9	254
F	1 149	3	3	1.3	71.1	369
IRL	2 722	279	82	48.9	33.6	362
I	230	0	17	1.8	68.6	557
L	842	13	5	1.7	63.6	209
NL	1 298	33	20	26.0	35.7	340
P	248	0	9	2.2	64.8	352
UK	2 483	154	49	42.8	34.0	271
Rates prop.	1 271	17	17	19.5	52–54	340

*) The tax on cigarettes includes both an excise duty (here given for 1000 cigarettes) and an ad valorem duty. Cigarettes are also included in the VAT base.
Source: European Economy, No. 35, March 1988.

In the recent debate it seems as if the EC Commission has been more interested in harmonizing indirect than direct taxation. One of the reasons might of course be that the Commission believes that direct taxation will be harmonized anyhow, i.e. without central co-ordination. This might also well be true, especially in the field of capital income taxation and the taxation of other highly mobile factors of production. The reasoning, then, is that governments will be faced with tax competition. Firms, investors and even workers might start "voting with their feet" and move to areas (countries) with low tax rates. In order to counter this development, governments are forced to choose tax rates at the same level as those used in other, competing countries. The competition of tax systems might then, via a process of iterative adjustments, bring about a required harmonization.

In this context it is interesting to speculate through what phases an iterative adjustment might go. There are those who see a scenario with e.g. capital income taxes approaching zero before governments are forced to abandon the tax competition strategy and start harmonization by negotiation.

Income taxation in the Nordic countries

Already above it was stated that the European integration process is likely to force governments to harmonize income taxation systems as

Table I:24. Corporate tax rates and methods of double taxation relief in the EC around 1989.

	Corporate tax rate, %[1])	Relationship to personal income tax[2])	Dividend credit extended to foreign portfolio investors
Belgium	43	Classical	–
Denmark	50	Partial imputation	No
France	39/42[a]	Partial imputation	Yes
Greece	40/0	Dividend deduction	–
Ireland	10/43[b]	Partial imputation	No
Italy	46	Full imputation	No
Luxembourg	41	Classical	–
Netherlands	40/35[c]	Classical	–
Portugal	39	Classical	–
Spain	35	Classical	–
United Kingdom	25/35[d]	Partial imputation	Yes
West Germ.(1990)	58/47[a]	Full imputation	No

[1]) Where substantial local corporate taxes are levied, these are included in the tax rates reported.
[2]) "Partial (full) imputation" means that shareholders are given partial (full) credit for the corporate tax on distributed profits.
[a]) Rate for retained profits/rate for distributed profits.
[b]) Rate for manufacturing companies/standard rate.
[c]) Degressive rate schedule.
[d]) Progressive rate schedule.
Source: P.B. Sorensen: Tax harmonization in the European Community: problems and prospects. October 1989.

well as indirect taxation. This is likely to apply especially to capital income taxation in a world of integrated capital markets. From this point of view it might be of interest to study the similarities and the differences of the income tax systems of the Nordic countries. In order to do this, we constructed a "typical household", the special features of which is that it has some capital income as well as ordinary wage income. We then computed the tax liability of this household in each Nordic country.[1]) The results of the calculations are given in tables I:25–27.

The definition of a typical household[2]) is exactly the same in all countries. Its characteristics are the following. The typical household is a married couple. The spouse is not working. The family consists of two children, one and five years of age, respectively.

[1]) The details of the calculations are reported in M. Ingberg: "Direct taxation of a 'typical household' in the Nordic countries in 1989: Technical notes", PTT Working Papers 1/1990.
[2]) It should be noted that the choice of the characteristics of the household is fairly arbitrary and might be somewhat unrealistic in some cases.

Table I:25. Direct taxation of a "typical household" in the Nordic countries in 1989, FIM.

	Denmark	Finland	Norway	Sweden
Total income received	200,000	200,000	200,000	200,000
Employers' contribution	685	34,655[a]	25,050	58,454
Gross income	200,685	234,655	225,050	258,454
Income tax, state	31,368	25,588	4,046	31,387
Income tax, municipal	37,368	22,849	17,217	37,880
Employee's contribution to social security	344	4,276[b]	11,850	–
Wealth taxes	7,855	–	–	2,333
Personal taxes	77,049	52,713[a]	33,113	71,600
Average tax rate, %[c]	38.5	26.3	16.6	35.8
Employer's contribution to social security	685	34,695	25,050	58,454
All taxes	77,734	87,408	58,163	130,054
Total tax rate, %[d]	38.9	37.2	25.8	50.3
Gross wage	150,685	184,695	175,050	208,454

[a]) For Finland the employers' contributions are higher than the ones reported e.g. in OECD-studies. Compulsory payments to private pension funds are namely defined as taxes.
[b]) In the OECD classification the employee contributions to social security for some reason are defined as income taxes.
[c]) Personal taxes/total income received, %.
[d]) All taxes/gross income, %.

The family owns its own house, the market value of which is one million FIM. The mortgage on the house is 50 percent of its value and the interest rate on the loan is 10 percent p.a. The family has no other debt. It holds bank deposits of 100,000 FIM yielding 10 percent interest p.a. The family owns shares in a listed corporation at the market value of 200,000 FIM. The shares yield a dividend of 5 percent of market value.

The income of the family is thus

	FIM
Wage	150,000
Interest on deposits	10,000
Dividends	10,000
Imputed income from housing*	30,000
Total	200,000

*) The imputed income from housing is calculated (for all countries) as 3 % of the market value of the house.

In Table I:25 the average tax rates of the typical household are compared. As can be seen, the income tax treatment of a "typical household" in the Nordic countries differ quite considerably.

From the discussion of the tax structure it was clear that Norway taxes income directly quite lightly while especially Sweden (and Denmark) tax income heavily.

Table I:26. Marginal tax rates of a typical household in the Nordic countries in 1989.

	Denmark	Finland	Norway	Sweden
Wage income, "net"[a]	68.8	53.2	62.0	75.0
Wage income, "gross"[a]	68.8	62.0	67.4	82.0
Interest income	68.8	53.2	45.6	75.0
Dividend income	(68.8)	53.2	24.6	75.0
Marginal benefit from interest deduction on				
mortgage	57.7	0	45.6	50.0
other loan	57.7	0	45.6	75.0

[a]) The marginal tax rate on wage income (net) is calculated exclusive of employer's contributions to social security while the marginal tax rate on wage income (gross) includes employer's contributions. Let w be the wage paid. Then the net wage (a) is

(i) $a = (1-t)w$; t = marginal income tax rate

The gross wage (b) is given by

(ii) $b = (1+T)w$; T = (marginal) employer's contribution

Then

(iii) $a = (1-t)/(1+T)\ b = (1-m)b$

According to our definition, then, t is the marginal tax rate on wage income (net) and m is the marginal tax rate on wage income (gross).

An important feature of Table I:25 is that all countries except Denmark collect considerable funds through the employer's contributions to social security. This, of course, means that the wage cost of the typical household to the employer is not comparable between countries (see the last row in Table I:25). One might therefore argue that the cross country comparison made in this example, which assumes that the wage received by the employee is the same in each country, is misleading. The high social security taxes in Finland, Norway and Sweden can namely be assumed to have reduced the wage levels in these countries as compared e.g. to Denmark.

The marginal tax rates of the typical household (at different margins) are reported in Table I:26.

From the table it is clear that the Finnish typical household faces the lowest marginal tax rate on labor even if Norway has the lowest average tax rate. The Swedish household faces the highest marginal rates followed by the Danish household.

Cross-country comparisons of marginal tax rates are much harder to make with respect to capital income.

First, this is due to the fact that all countries have developed some types of incentives for savings, the features of which are hard to take into account in typical household calculations. Thus part of the interest income of the households in Finland is tax exempt (tax-free deposits, government bonds). In Sweden savings at certain accounts in the central bank are tax exempt. Norway allows deductions for "new" savings, introducing elements of expenditure taxation into its income tax system.

Second, comparisons are hard to make due to different approaches taken regarding the integration of corporate and personal capital income taxation. In our example this is important in the case of dividends. In Denmark an imputation system is used. In the rest of the countries a dividend deduction system is used.[1])

There are some general conclusions to be drawn from table I:26, however. It seems that Norway in general treats capital income more favorably than the other Nordic countries. This, of course, is due to the fact that capital income is not included in the gross income tax base and that dividends are not included in the tax base of the municipal net income tax. On the other hand the Norwegian tax system discourages borrowing more than that of Sweden and Denmark. Finland seems to be the most restrictive country in this respect, however.[2])

In order to grasp the importance of the analysis of the marginal tax rates we calculated the increase in the gross wage (total wage cost of the

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[1]) It might be worthwhile to point out that Finland has introduced an imputation system with full imputation starting from January 1, 1990. Sweden, again, seems to be moving towards a pure classical system i.e. no relief for double taxation of dividend.

[2]) It should be pointed out, however, that the relative restrictiveness of the Finnish system is due to the fact that Finland has chosen to restrict the deductibility of interest expenses with a ceiling of 25,000 FIM (10,000 FIM for other loans than mortgage). Under the ceiling 90 % of the interest expenses exceeding 2000 FIM are deductible.

Table I:27. Percentage increase in the gross wage required to induce an increase of one percentage in the net wage of a typical household in the Nordic countries in 1989.

	%
Denmark	3.2
Finland	2.6
Norway	3.1
Sweden	5.6

employer) required to produce an increase of one percent in the net wage of the employee (of the typical household). As can be seen in table I:27, Sweden is at the top of the list (a required gross wage increase of 5.6 percent), while Finland is at the bottom.

Concluding remarks

In this section we have tried to give some remarks about the drive towards fiscal harmonization in Europe and the possible consequences of this harmonization for the Nordic countries.

First, we noted that the harmonization of the indirect taxation is closely related to the planned abolition of border controls in Europe. In this sense one might argue that the need for harmonization between the Nordic countries and the EC is related to how far the Nordic economies are allowed to be integrated with the European market in general.

Second, we noted that the harmonization of direct taxes and especially of capital income taxes is likely to happen more in the form of tax competition than through negotiation. This, of course, is an important observation and has to be taken into account in the planning of tax reforms to come. As a matter of fact the reform of the income tax system in Sweden, which starts already in 1990, is obviously a first step on the road to a more competitive tax system in the Nordic countries.

3.8. Summary and Conclusions: Markets Force Institutional Change

The post World War Two period has shown a relatively steady trend towards internationalization and liberalization of national economies. The liberalization was initiated in the field of international trade in the form of GATT agreements and regional economic organizations like the EC and EFTA. Also capital has become more and more mobile. In conjunction with international specialization this process has led to an increasing number of multinational firms.

Liberalization gained fresh momentum in the early 1980s, starting mainly from Britain and the US. Liberalization was at first introduced in the domestic economies. It has perhaps been most pronounced in the financial sector. Domestic credit markets as well as foreign capital flows have been gradually liberalized. In addition to liberalization, also deregulation, privatization and tax reforms have been used as measures in increasing economic efficiency.

On the international scene the aims of liberalization were reinforced in the recent GATT negotiation round, the so-called Uruguay round. In these negotiations, the emphasis was also put on agricultural products, services and on capital flows, in addition to the trade of industrial goods. Also, the OECD and the IMF have been working for the liberalization of international economic relations.

Growing economic ties have increased dependency between countries. Decreasing regulation and increasing role of market forces have also led to diminishing autonomy of national economic policies.

This general trend towards liberalization and internationalization is the main reason for the new European integration effort, the 1992 plan. Another important reason for it is the poor economic record of the EC countries during the late 1970s and during the 1980s, often called "eurosclerosis". In addition to a defensive motivation, the strengthening of the European integration is also an active effort in utilizing European resources more effectively. The new EC integration effort has also political motivations. The goal of a European Political Community has gained new impetus.

The 1992 project is managed by strengthening European institutions and by common regulations. To some extent this is necessary to avoid distortions. If the project is implemented too bureaucratically and centrally, new European institutions might lead to inefficiences and to a lack of flexibility. To avoid this, integration should be based on economic arguments and mainly determined by market forces.

Another concern in the integration process are possible protectionist measures against third countries, i.e. creation of a so-called "Fortress Europe". If this materializes, the result will be a welfare loss for the participating economies and for the whole world economy (see Eliasson-Lundberg, 1989). Neglecting Eastern Europe in the integration process would not be wise either. A wide participation of East European countries in the international division of labor is beneficial for Eastern and Western Europe alike, and it will strengthen market economy elements in Eastern Europe.

In addition to participating in the European integration in one form or another, the Nordic countries have to maintain and capitalize upon their long tradition of intra-Nordic integration and cooperation. Although there is a split between the two trade blocs, EFTA and the EC, the Nordic countries have close economic, political, social and cultural ties and similarities. These are based on close geographic location, common history and partly on similar languages. In the economic field the most important manifestations of the intra-Nordic integration are the extensive intra-Nordic trade, the common labor market, direct investment in other

Nordic countries, and a know-how and technology diffusion based on the above-mentioned channels.

As small open economies the Nordic countries have to continually adjust to changes in their external economic environment. They are not, however, totally without the means to influence it. They also have the intra-Nordic cooperation as an instrument. The main trends in the external economic environment of the Nordic countries in the 1990s are: the general worldwide internationalization and liberalization process, West-European integration and obviously drastic changes in the economic structures of the Eastern European countries.

The internationalization, liberalization and harmonization process realized in the form of the European economic integration leads to important welfare gains. The main mechanisms are: better use of comparative advantages and scale economies, more competition and the so-called dynamic effects resulting mainly from increasing innovativeness.

Even if it is difficult to describe and forecast the economic and social structures of the Nordic countries in the 1990s, it is clear that they will be different from the existing ones. Some trends of development can be indicated here.

One of the most important impacts of the 1992 process on the Nordic economies is increasing competition. This will create pressure on profit margins of firms. Some branches of industry will decline and perhaps even disappear. Firms in industries where the Nordic countries enjoy comparative advantages will grow domestically as well as abroad. Increasing specialization will increase the share of exports relative to GDP.

The social structures of the Nordic countries will become more similar to those of Continental Europe. This is partly because of the harmonization procedures of the 1992 process and partly because of competition between countries. The tax structure is one of the most obvious areas of change. The main direction of the changes is lower marginal and average tax rates. At the moment gross tax rates in Denmark, Norway and Sweden are clearly higher and in Finland somewhat higher than the EC and OECD averages.

In addition to an analysis of the differences between the existing situation and the future, obviously better, situation, we also have to reason about how and at which costs the Nordic economies will adjust to the more integrated Europe. The most acute question concerns the form of integration. There are four main options for the non-EC Nordic countries Finland, Norway and Sweden: an EES (European Economic Space) solution negotiated between the EC and EFTA; bilateral agreements between various Nordic countries and the EC, some kind of a common Nordic agreement with the EC, and membership in the EC.

The EES solution is at the time of writing, in December, 1989, on the agenda in the negotiations between the EC and EFTA. The outcome of this process remains to be seen. What is most important from the Nordic firm's point of view is to know as soon as possible what kind of an environment they will have after the year 1992. If they cannot be sure that

the competitive position of the Nordic countries will be maintained, they will be tempted to invest in the EC countries "just to be on the safe side". Neither from the point of view of the firms nor the economy is such uncertainty a desirable impetus for investment.

Even if the European economies become more integrated and firms become more international, it is not irrelevant for national economies where firms and labor locate. Nation states as economic and political units are not likely to disappear in the foreseeable future. The internationalization and liberalization processes, however, change the way the nation states operate. They will, more than before, have to compete against each other for firms and labor.

European integration increases the need for a favorable business climate in the Nordic countries. This means that the costs of firms will converge towards the average level of competitor countries. It also means liberalization and deregulation at the same pace as in the EC countries. The coming changes in the production structure are not possible without large investments in research and development. Concerning basic investments, the public sector still has an important role to play.

Especially for firms using high-skilled labor intensively, availability of good employees is an important factor behind the location decision. Firms will also compete for qualified labor internationally, because employees are better able to move from country to country. Net wages of skilled labor will matter more than before. This obviously means that the Nordic countries have to decrease their high marginal and average tax rates. There is a strong market pressure against the egalitarian wage structures of the Nordic countries, too. More emphasis must be put on life-time rather than annual incomes.

Pressures to decrease the high tax rates, together with the need to move more resources to the open sector, require slow growth of the public sector. Some services that are now produced by the state or the municipalities, will obviously be shifted to the private sector. The productivity of the public sector also has to be increased.

In spite of the European integration, the intra-Nordic integration and cooperation is still useful. The Nordic countries are in many respects more similar to each other than to the main EC countries. These similarities make economic cooperation easier. In addition to similarities the Nordic countries also have enough differences to make cooperation and specialization useful.

The Nordic countries are natural markets for each other, as well as targets for direct investment. In these respects, more can still be done. Specialization in producing components for metal and engineering industries can be utilized more than before and joint Nordic companies can be built up. In addition to exploiting comparative advantages, these forms of cooperation also make the Nordic companies stronger in relation to the continental firms.

One possible field of cooperation is the financial markets. For example, we might see more joint ventures between the Nordic financial institutions. This is one form of generating greater scales of economy, and it

would make the Nordic institutions more competitive in domestic and foreign markets. Another possible form of cooperation is that between the stock exchanges, by forming a more integrated common Nordic equity market (see section 3.5.).

The Nordic countries, although similar in many respects, have differences in their institutions, economic structures and thus in the way they are adjusting to the European integration. Denmark, as a member of the EC, is directly participating in the EC integration process, whereas in Finland, Norway and Sweden the form of participation depends on the negotiations with the EC. It is not, however, clear that the adjustment will be easier for Denmark than for the other Nordic countries. In the case of tax structure, for example, Norway is more similar to the EC average than Denmark, which has more resemblance to Finland and Sweden in this respect. The pressure to adjust to the EC practice is, obviously, greater on Denmark than on the other Nordic countries.

European integration means more foreign competition in the Nordic markets and thus more import pressure. At the same time it means that firms have to shift resources to export production and to increase their competitiveness in that area. In the near future the Nordic macroeconomic policies will mainly concentrate upon cooling their domestic demand. While important at an initial phase, this policy cannot, however, be the only instrument to be relied on. The Nordic countries also have to put more emphasis on increasing the size and performance of their export sectors. This is the only way of achieving permanent welfare gains from the European integration process.

Appendix 1: Direct Investment

Direct Danish investment abroad, net, millions of DKK.

	Fin	Nor	Swe	Nordic	EC	Total
1980	10	30	−57	−17	541	1 023
1981	5	50	58	113	558	1 137
1982	17	46	49	112	124	597
1983	13	17	−443	−413	290	934
1984	−180	70	220	110	765	2 465
1985	63	−46	185	202	1 367	2 699
1986	124	304	238	666	2 125	5 224
1987	−145	164	294	313	2 407	4 227
1988	126	340	−3	463	2 949	5 005

Direct foreign investment in Denmark, net, millions of DKK, Sweden includes SAS.

	Fin	Nor	Swe	Nordic	EC	Total
1980	4	33	334	371	358	787
1981	14	63	103	180	720	825
1982	18	89	77	184	455	1 213
1983	107	82	368	557	0	937
1984	51	1	312	364	−297	111
1985	29	25	993	1 047	−77	1 315
1986	76	1 398	1 243	2 717	11	1 305
1987	487	190	1 917	2 594	−614	602
1988	263	136	1 481	1 880	642	3 391

Direct Finnish investment abroad, net, millions of FIM.

	Den	Nor	Swe	Nordic	EC	Total
1980	6	10	64	80	148	487
1981	16	79	68	163	256	612
1982	26	32	228	286	430	1 125
1983	67	26	106	199	598	1 451
1984	46	29	802	877	654	2 479
1985	76	104	191	371	817	2 076
1986	90	129	1 590	1 809	1 325	3 641
1987	639	123	448	1 210	2 063	3 738
1988	436	199	2 100	2 735	3 417	7 845

Direct foreign investment in Finland, net, millions of FIM.

	Den	Nor	Swe	Nordic	EC	Total
1980	−3	1	50	48	22	104
1981	6	3	7	16	49	75
1982	1	3	92	96	−195	−67
1983	1	5	89	95	−63	88
1984	3	5	140	148	21	324
1985	21	5	222	248	153	388
1986	19	13	1 434	1 466	99	1 627
1987	28	−106	293	215	140	426
1988	57	22	417	496	345	835

Direct Norwegian investment abroad, net, millions of NOK.

	Den	Fin	Swe	Nordic	EC	Total
1980						
1981						
1982					1 002	1 713
1983	123.7	6.2	145.4	275.3	1 212.3	2 607.4
1984	629.7	7.2	179.1	816	2 212.2	4 889.9
1985	83.3	66.8	2 499	2 649.1	1 832.8	9 096.9
1986	1 248	24	1 362	2 634	4 140	11 872
1987	332	17	227	576	3 887	6 310
1988	268	203	−239	232	963	2 763

Direct foreign investment in Norway, net, millions of NOK.

	Den	Fin	Swe	Nordic	EC	Total
1980						
1981						
1982						
1983	11.6	−196.4	−66.3	−251.1	31.2	2 108.5
1984	51.2	46.1	375.2	472.5	−1 671.2	−1 610.4
1985	27.7	−1 433.9	1 951.8	545.6	2 501.8	−470
1986	71	54	1 084	1 209	2 935	7 554
1987	137	85	2 063	2 285	1 484	1 230
1988	273	242	1 306	1 821	1 893	2 724

Direct Swedish investment abroad, net, millions of SEK.

	Den	Fin	Nor	Nordic	EC	Total
1980	..	..	..	..	..	..
1981	160	85	182	427	..	4 360
1982	276	62	324	662	..	6 104
1983	137	156	893	1 186	..	8 108
1984	436	208	758	1 402	..	8 684
1985	246	675	160	1 081	3 275	10 969
1986	834	1 639	1 326	3 799	6 393	21 820
1987	2 148	847	2 569	5 564	10 412	20 103
1988	2 087	−835	502	1 754	22 548	32 467

Direct foreign investment in Sweden, net, millions of SEK.

	Den	Fin	Nor	Nordic	EC	Total
1980	..	..	..	..	..	..
1981	48	96	103	247	..	937
1982	51	235	181	351	..	1 157
1983	−310	89	56	−275	..	526
1984	56	1 004	449	967	..	1 328
1985	62	296	2 878	2 435	1 152	2 377
1986	74	1 670	1 763	3 147	1 109	5 887
1987	−275	778	341	119	369	2 148
1988	63	2 803	323	1 114	1 109	5 427

Appendix 2:

Controls on Capital Movements in the Nordic Countries

DENMARK

Direct Investment:

- Inward: Largely liberalized before joining EC in 1973. Formal permission of Ministry of Industry required for large investments; the threshold for permission was raised to DKR 10 million in 1985.

- Outward: Largely liberalized before joining EC in 1973. Formal permission of Ministry of Industry required for large investments; the threshold for was permission raised to DKR 10 million in 1985. Investment by financial institutions still tightly controlled for financial institutions.

Portfolio Investment:

Equities

- Inward: Largely deregulated upon Denmark's entry into the EC in 1973, when non-residents were allowed to buy listed shares. Further deregulated in 1983 when purchases of non-listed shares permitted.

- Outward: Since January 1984, Danish residents have been allowed to buy shares listed on foreign exchanges. Since June 1985 Danish residents have, upon application to the Danmarks Nationalbank, been able to buy non-listed shares and invest in foreign unit trusts.

Bonds

- Inward: Largely liberalized starting in 1971. Temporary ban on purchases of government bonds from 1979–1983.

- Outward: Starting in 1978 Danish residents have been allowed to buy bonds listed on foreign exchanges issued by international organizations of which Denmark is a member. Since May 1983, allowed to buy foreign exchange-listed bonds with original maturity greater than two years. Since January 1984 allowed to buy Danish bonds denominated in a foreign currency.

FINLAND

Direct Investment:

- Inward: Restrictions were largely removed in September 1989 in conjunction with the relaxation of foreign exchange regulations. Direct investment is still subject to control in certain sectors, e.g. in real estate and natural resource-based industries such as forestry, mining.

- Outward: Basically unrestricted, except for private individuals, which requires the Bank of Finland's authorization. The regulations regarding direct investment by non-financial companies were removed in August 1988, and those for financial and insurance companies were lifted in June 1989. Direct investment in countries with which Finland has a clearing account agreement, e.g. the Soviet Union, still requires a permit.

Portfolio Investment:

Equities

- Inward: Foreigners are allowed to own up 20 percent of the equity capital of a Finnish company in the form of special non-restricted shares if a provision is so made in the articles of association. Both foreigners and Finns can own these non-restricted shares. The law was amended in 1987 so that it is possible to raise this limit up to a maximum of 40 percent in individual cases upon the consent of Ministry of Trade and Industry.

- Outward: Finnish residents were allowed to purchase securities quoted on foreign exchanges in January 1986. The upper limit on investments was raised from FIM 10,000 to FIM 50,000 in June 1987, and to FIM 300,000 in August 1988. Almost all regulations on outward portfolio investment by non-financial institutions were lifted in September 1989. The restrictions temporarily remain in force for private individuals, but will be removed by June 1990 at the latest.

Bonds

- Inward: Non-residents were allowed in February 1990 to buy markka-denominated bonds abroad and launch markka-denominated bonds in Finland. Foreigners had previously not been permitted to trade in markka denominated bonds since June 1985.

- Outward: See description for equities above.

NORWAY

Direct Investment:

- Inward: There are restrictions on certain types of direct investment, for example, purchasing and leasing of real estate, investment in air transport, and setting up of securities houses, insurance companies, and banking subsidiaries.

- Outward: Direct foreign investment is subject to formal authorization but is seldom, if ever, refused.

Portfolio Investment:

Equities

- Inward: Non-residents are free to purchase shares in Norwegian companies, within certain limitations. Foreigners are subject to maximum ownership limits of 15 % for banks, 25 % for insurance companies, and 40% for shipping companies.

- Outward: Restrictions on purchases of foreign shares were relaxed in June 1984. Norwegians may buy shares listed on foreign exchanges via a broker, but purchases of non-listed shares require a permit.

Bonds

- Inward: Non-residents were allowed to buy krone denominated bonds listed on the stock exchange again starting May 1989. In November, 1989 foreigners were allowed to issue krone bonds. The bond market had been closed to foreigners since 1984.

- Outward: Restrictions on purchases of foreign bonds were relaxed in January 1985. Residents can buy foreign bonds worth up to NOK 1 million and companies up to NOK 5 million with the permission of the Bank of Norway.

SWEDEN

Direct Investment:

- Inward: Investment in certain areas, such as real estate, transport, and communication is controlled, but in other areas only formal permission is required.

- Outward: There are basically no restrictions applying to direct foreign investment. Sweden removed the remainder of its foreign exchange restrictions in January 1989.

Portfolio Investment:

Equities

- Inward: In general, up to 40 percent of a company's equity capital and 20 percent of the voting rights can be owned by foreigners in the form of non-restricted shares. Both foreigners and Swedes can own these non-restricted shares. There are, however, some exceptions: some companies have higher proportions of non-restricted shares, while others have no non-restricted shares, e.g. banks. In January 1989, foreigners were allowed to buy non-listed shares; previously they had been free to buy only listed shares on the stock exchange.

- Outward: Swedes were allowed to buy unrestricted amounts of foreign shares in January, 1989. Shares have to be deposited with an authorized resident bank or stock broker.

Bonds

- Inward: In July 1989, non-residents were allowed to buy Swedish krona-denominated bonds. Previous restrictions dated from 1939.

- Outward: In July 1989, Swedes were allowed to buy foreign bonds in conjunction with the removal of foreign exchange restrictions.

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CHAPTER II

International outlook

Contents Page

1. Introduction

The economic growth after the first oil crisis in 1973 has been much slower than in the 1950s and 1960s. The rapid growth following the Second World War reflected the rebuilding of the devastated infrastructures and the liberalization of world trade. Furthermore, the integration that took place especially in Europe facilitated trade and economic development. The average economic growth was swift, but cyclical.

The 1970s were marked by sharp rises in the prices of raw materials in both nominal and real terms. The second oil crisis set off a recession in the early 1980s that was the worst since the 1930s. Economic policy was tight and real interest rates climbed. The developing countries had become heavily indebted already before the recession. The recession in the industrialized countries weakened the export possibilities of the developing countries and the high level of interest rates combined to increase the burden of servicing their debt, thereby triggering their present debt problems. The total debt of the 15 worst indebted nations accounted for about three times their export income in 1988.

The present growth that has continued unabated since 1982 is extraordinary in many respects. The total output of the OECD countries has now increased for seven straight years, which is the longest post-war stretch of growth. The OECD countries have been able to sustain an average growth rate of 3.5 percent a year during this time. Consumer prices have simultaneously risen 4.1 percent and the volume of world trade has increased by 5.7 percent. Concurrent with the depreciation of the dollar, the United States has since 1985 recaptured a considerable share of the world export market that it had lost when the dollar was overvalued. At the same time the so-called newly industrialized countries have increased their market shares at the expense of the industrialized countries.

Despite the sustained growth, inflation has remained rather low up until the end of 1988. During previous expansionary periods growth has generally been held in check with a contractionary monetary policy aimed at slowing the pace of consumer price increases. This time around monetary policy has been tightened starting in summer 1988 in order to control inflation.

Nominal and real interest rates have risen substantially. In June 1989 the Federal Reserve in the US began to ease the monetary policy in order to prevent a recession. After the decline in stock market prices in October 1989 the central banks generally eased monetary policy in order to prevent a crash.

2. Basic Assumptions

2.1. Exchange Rates

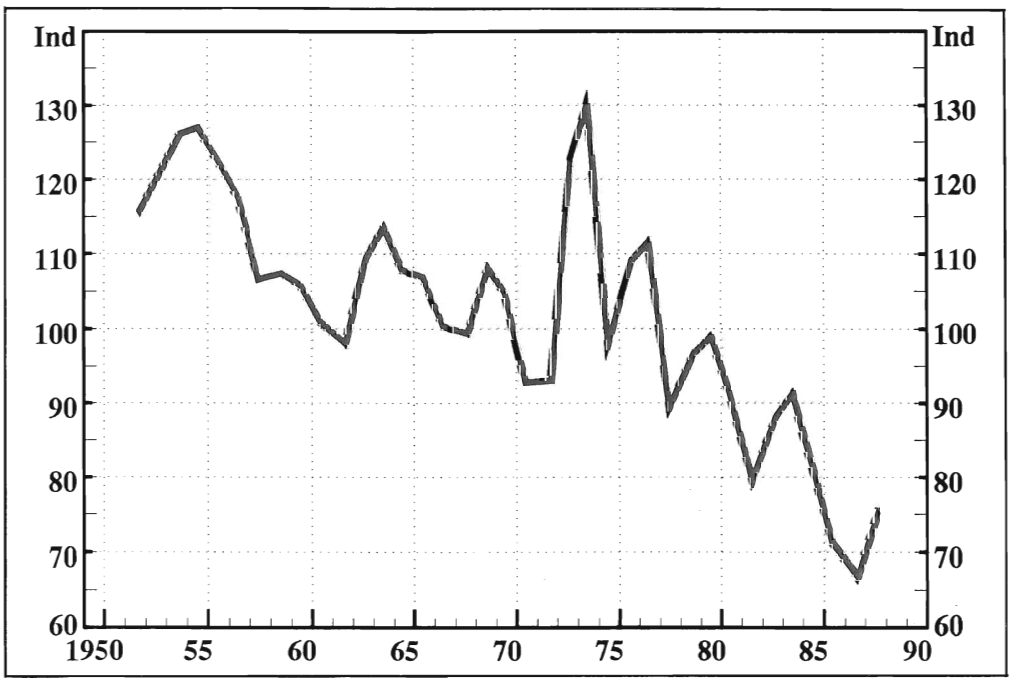
A common practice in forecasting is to set exchange rates at the current level, in this case those prevailing in autumn 1989. Historically this might not seem to be the best possible assumption because the US dollar has fluctuated very much and to some extent systematically. Nevertheless several studies have shown that setting the exchange rates at their most recent levels yields the best estimates.

This method gains credence in this case as it now seems to be commonly agreed among the larger industrialized countries that exchange rates should be kept relatively stable. Already at the so-called Louvre meeting in February of 1987 seven of the major industrialized countries made an agreement that called for cooperation in the stabilization of exchange rates. The same aim has been reaffirmed also at subsequent summit meetings although the stabilization has not been fully successful.

2.2 Commodity Prices

During 1982–1988 commodity price trends have had a dampening effect upon inflation. Real non-energy commodity prices initially rose

Figure II:1. Real price of non-energy commodities (1975 = 100).



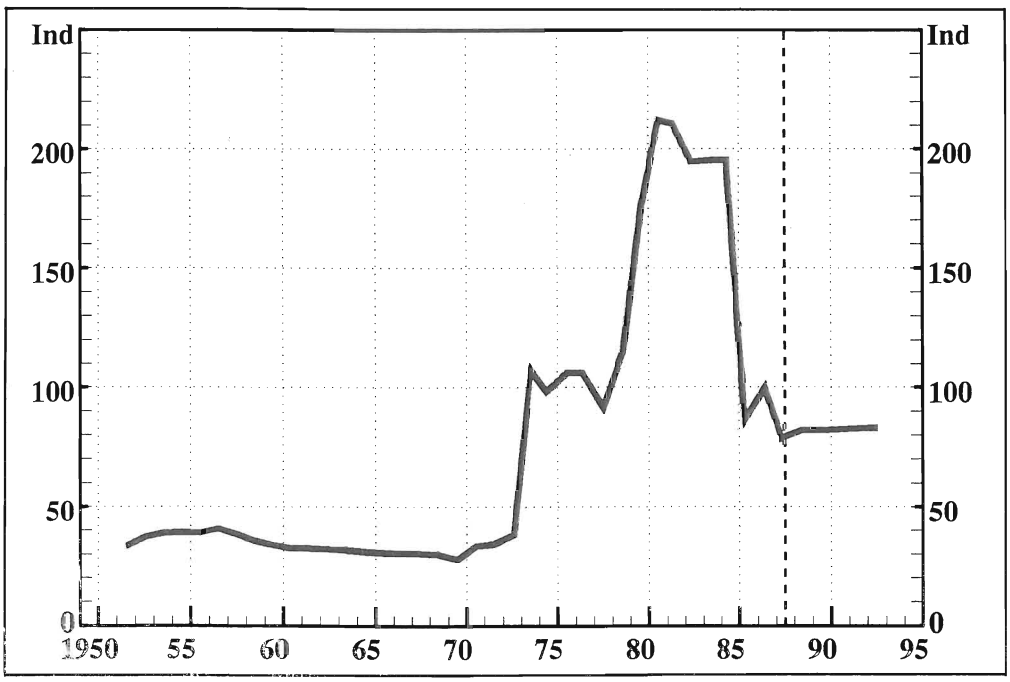
substantially, but after 1984 they fell to their lowest levels since the Second World War. In 1988 nominal prices finally rose over 20 percent.

The dramatic drop in the price of crude oil beginning at the end of 1985 significantly eased inflationary pressures and helped to sustain the current economic expansion.

The output policy of the OPEC countries after the first oil crisis has played a pivotal role in determining the price of crude oil. In the short run the demand for oil changes rather slowly, so that a cutback in supply could cause prices to rise. The nominal price of oil was twelve times higher in 1982 than prior to the first oil crisis. In the long run, however, demand has reacted to the sharp rise in prices. Energy conservation and development of alternative sources of energy have dampened the growth in the demand for oil. At the same time the non-OPEC oil producers have raised their market shares as OPEC has striven to keep prices high by cutting back on production.

Saudi Arabia was the prime regulator of the output of OPEC until the winter of 1985, when it substantially increased its output to protect its market share. This led to a collapse in the price of oil. Prices fell below USD 10 a barrel at one point in 1986. OPEC was able to pull its ranks together again in 1987 so that prices rose, but at the same time the political situation in the Middle East came to a head and the output of the industrialized countries increased relatively quickly. The higher prices led OPEC countries to exceed their production quotas so that in 1988

Figure II:2. Real price of crude oil (1975 = 100).



prices dropped due to the increased supply, falling as low as USD 11–12 a barrel. This again prompted OPEC countries to agree upon new quotas and, somewhat surprisingly, the agreement held initially. Furthermore, as several non-OPEC oil producers agreed to take measures to support prices and due to some serious oil spills, the price of crude oil rose in the beginning of 1989 to over USD 20 a barrel at its highest. Again OPEC-countries began to exceed the quotas. The price did not, however, decrease substantially, because the demand for oil increased more than expected during 1989. In autumn the price began to increase even though OPEC produced around two million barrels above their quota of 20.5 million barrels per day set in the beginning of October 1989.

The nominal price of crude oil during 1989–93 is anticipated to rise very modestly. The average price of crude oil (Brent blend) in 1989 was around USD 18 and it will be almost the same in 1990. After this oil prices will remain unchanged in real terms, which means a 3.5 percent rise in nominal prices. The moderate price estimates are due to the market situation. Crude oil reserves are rather high and the OPEC countries are under increasing pressure to step up their production. In the long run the vast oil reserves will encourage the OPEC producers to follow a modest pricing policy.

3. Economic Policy

The current economic boom has not been without its problems, even though inflation stayed low until last year. The problematic trade and current account imbalances between the leading economies of the United States, Japan and West Germany did, however, decrease in 1988. This soon led to swift growth of domestic demand in Japan and West Germany as well as in the United States. This trend is not expected to continue quite as favorably in the future, but the Japanese current account surplus is nevertheless expected to decline.

The fiscal policy in many countries during the past few years has been quite tight. The primary aim has been to curb the growth of the public sector and borrowing. Last year, however, the fiscal policy in Japan and West Germany was eased. In the United States the cutting of the federal government deficit has long been proclaimed as a primary economic policy goal. The latest version of the so-called Gramm-Rudman-Hollings act calls for a balanced budget by 1993. OECD projects that the official deficit target for the fiscal year 1989 of USD 136 billion will be exceeded by USD 16 billion. The projections made in the budgetary proposal regarding, for example, the economic growth and interest rates seem rather optimistic so that staying within the budgetary limits will be difficult also in the fiscal years 1990–93.

The October 1987 stock market crash did not lead to a slowdown in growth; on the contrary, the industrial countries experienced their fastest growth since 1984. This was sparked by the state of the economy at the end of 1987 being better than had been expected and by the easing of

monetary policy. The vigorous growth of 1988, however, led to a tightening of monetary policy in many countries. The rise in interest rates was induced by fears of higher inflation or currency depreciation.

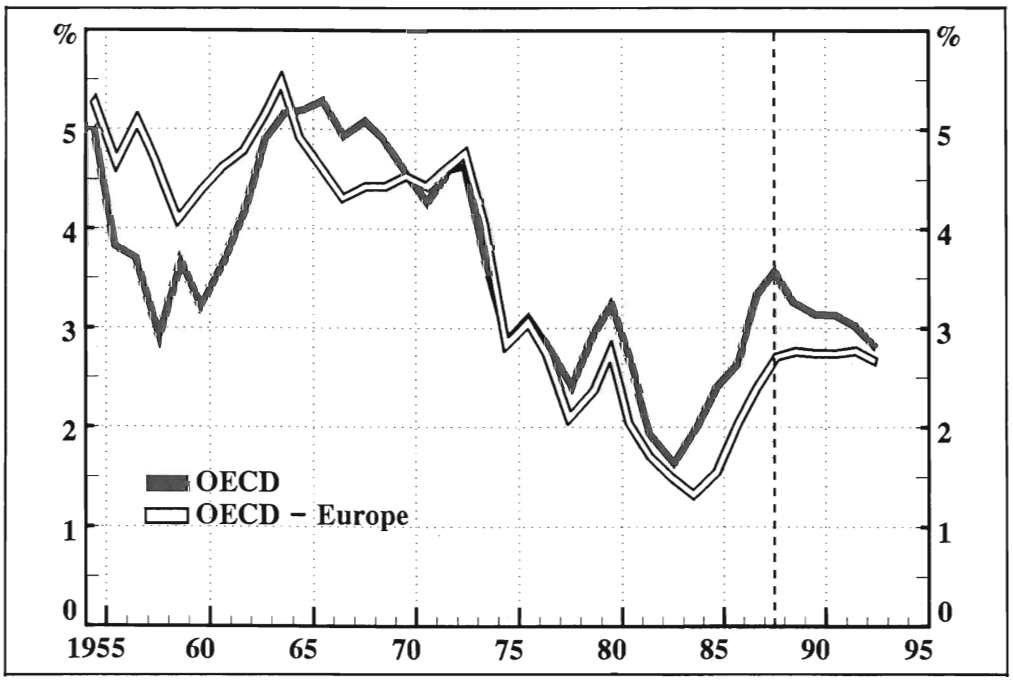
During the summer 1989 the US changed its policy by easing the monetary policy shifting the emphasis of the policy to prevent a possible recession. A soft landing scenario seems probable even though the stock market declined in October 1989. The decline was not justified by economic reasons. Prices recovered afterwards, as central banks in most countries eased the monetary policy temporarily. This may make it more difficult to control inflation.

In the forecast period of 1989–93 nominal interest rates are anticipated to be held fairly high at first in order to curb inflation. When inflation is brought under control, for instance, due to slower economic growth, interest rates will gradually decline. Real rates of interest are nevertheless expected to stay rather high.

4. Output and Employment

In the forecast it is assumed that the risks facing the economic development of the industrialized countries can be held in check. Thus a decline in total output is not expected in the immediate future. Total output

Figure II:3. Average annual rates of GDP growth in the OECD-area for moving five-year periods.



is anticipated to grow by 3 percent on average in the OECD countries during 1989–93. The economic growth will not, however, be entirely uniform, with 1990–91 seeing the slowest growth. Thereafter output is expected to pick up steam again as inflation is brought under control during the slowdown in growth.

A tight fiscal policy forced by the lid on deficit spending is expected to slow down the economic growth in the US. Furthermore, monetary policy will remain tight in order to combat inflation. The total output in Japan will continue to increase swiftly, accelerating domestic demand. The integration process in the European Community has already started to have an effect and has raised expectations about the future. This has led to investment becoming a main factor behind the growth. The possibilities for sustained economic growth will thus be improved through this stimulus even if the positive effects stemming from the integration happen to fall short of expectations.

Unemployment will continue to be a difficult problem in the EC countries in spite of the integration process. The unemployment rate is anticipated to remain over 10 percent during 1989–93. Unemployment in the US is not expected to increase substantially regardless of the tighter fiscal policy. The Japanese unemployment rate is estimated to stay under 3 percent.

The growth of the total world economy is expected to be slower due to the debt problem of the developing countries, among other things. The volume of exports of the developing countries even fell after the second oil crisis until 1982, and their exports have never quite recovered after this. Their imports have also increased much faster than exports, exacerbating the debt problem. The developing countries known as newly industrialized countries, on the other hand, have experienced rapid growth with the expansion of their exports.

Weak growth has lead to radical changes in the Comecon countries (Council for Mutual Economic Assistance). The growth potential in many Comecon countries has been limited by their high Western debt. Borrowing by the Soviet Union has not been a problem. Economic inefficiencies have led to considerably slower growth than planned. This has led to considerable changes inside Comecon countries as well in the organization itself. The general direction of change is towards being more market-oriented and related liberalization of political life. The situation is difficult. Economies are facing stagnation and short-term outlook is poor in spite of changes. Wide conflicts between various nationalities in many countries make the development even more difficult. In the longer term the developments offer great economic opportunities for the neighboring countries.

The countries are in a great need of economic assistance from western countries. Some steps are already being taken. Also special organizations, e.g. a special bank, are being set up to help with the financing of economic reforms.

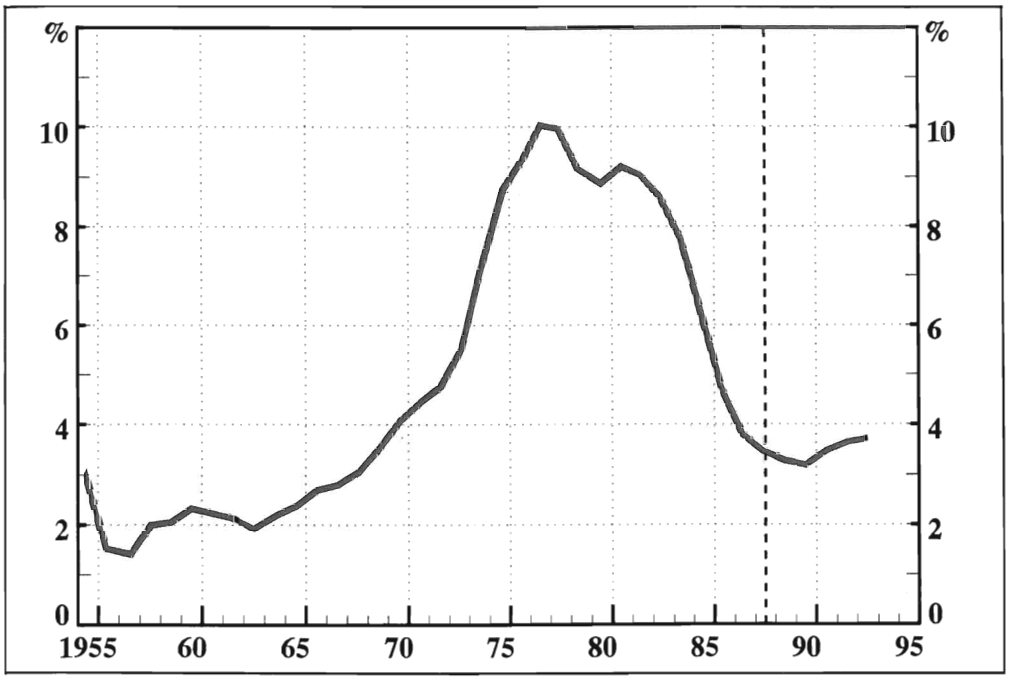
In the Soviet Union the problems are currently being addressed with the ambitious reform program known as perestroika. Economic activity is shifting from strict centralized control towards making use of more

market-oriented forces. Firms and cooperatives are being given more decision-making power with respect to output and marketing. Foreign trade is being freed up considerably as, for example, cooperatives are able to export their products directly to Western countries. The shift of the economic system towards being more market-oriented will require a lot of adjustment and learning of new business practices. The process will be difficult and it is not likely to lead to any substantial acceleration of economic growth during the first few years. The potential for growth in the longer run is good, however, if perestroika's economic guidelines can be followed.

5. Inflation

The acceleration of inflation poses a prime threat to the economic growth of the industrialized countries. Despite the tightening of monetary policy, inflation has still picked up speed in many countries in the beginning of 1989. Inflation in Great Britain already approached 8 percent, even though monetary policy there has been tightened the most. Inflation seems to have stabilized although the price of crude oil has risen considerably.

Figure II:4. Average annual rates of change in consumer prices of industrial countries for moving five-year periods.



A significant rise in interest rates might lead to a greater than expected slowdown in growth during the next few years. Inflation has indeed become a more serious threat to the continuance of the economic growth.

The rate of increase in consumer prices is anticipated to average about 4.5 percent during 1989–93. Commodity prices are expected to rise more slowly, due among other things to the slowdown in economic growth.

6. World Trade and International Financial Markets

The volume of world trade will grow on average by about 5 percent a year during 1989–93. World trade prices in dollars will rise at a somewhat slower rate than consumer prices, at about 3.5 percent a year.

The process of integrating the EC countries to create a combined internal market has progressed relatively smoothly so far. There are still substantial differences of opinion between the countries concerning how deep and in what form the actual integration will take place. In any case the process has already raised expectations about the development of the economic region. Other countries and groups of countries, such as EFTA, are already negotiating with the EC about their own trade status, attempting to preserve their competitiveness within this vast market.

A trade agreement between the United States and Canada went into effect at the beginning of 1989, which lowers the trade barriers between the two countries considerably. The formation of internal markets and free trade areas is beneficial from a world trade point of view if they do not lead to isolationist trade measures.

The new trade act in the United States that went into effect already in 1988 increases the threat of protectionism. The president is empowered to impose unilateral sanctions if other countries are considered to have unfair export barriers against American products. The potential for unilateral action is alarming in that they may lead the other side to retaliate. The actions could then snowball, leading to increased calls for protectionism. Multilateral negotiations, such as the GATT rounds, are the most productive from a world trade point of view.

One of the most important recent developments in the international financial markets is the freeing of restrictions on financial services in association with the EC integration. In June 1988 a directive was approved according to which capital mobility and financial services would be liberalized before 1.7.1990. This will affect not only the internal market, but will affect countries outside the EC as well. The relations with countries outside the EC will nonetheless be governed by the principle of reciprocity.

The position of the European Monetary System has strengthened on international currency markets. The Spanish and the Portuguese curren-

Table II:1. Assumptions of international economic environment.

	1960–73	1974–85	1982–88*	1988–93
GDP volume in OECD countries	5.0	2.5	3.4	3
Volume of world trade	9.1	4.1	5.7	5.5
Unit value of world trade (in USD)	3.7	5.2	1.3	3.5
Real price of crude oil	0.8	14.3	−15.9	2
Inflation (consumer prices) in OECD countries	3.9	10.4	4.1	4.5
Non-energy raw material prices (HWWA-index)	5.5	2.2	4.2	3
Real interest rates[1])				
– USA	1.9	1.8	6.5	5.5
– Germany	3.8	3.4	5	4

[1]) Yield on long term government bonds deflated by consumer prices. Average rates for the respective periods.

cies were included in the ECU basket in September 1989. Also the Spanish peseta was included into the exchange rate of the European Monetary System. Of the EC currencies, only the British pound, the Greek drachma and the Portuguese escudo still do not belong to the exchange rate mechanism. The latest realignment happened in January 1990, when Italian lira was devalued 3.7 % against the central rate. The previous realignment happened three years ago.

The EC countries decided to tighten their coordination last summer despite opposition from the United Kingdom. The Delors' report outlined the formation of a European monetary union. The ultimate aim is to create a joint currency and develop binding guidelines for fiscal and macroeconomic policies.

CHAPTER III

Denmark: Regaining Momentum in the 1990s

Contents Page

1. Introduction

The first section of this chapter deals with the Danish economy during the last 10 years. This is concluded by an analysis of the present situation – status and expected policy changes.

In the next section, we present a forecast for the period 1989–1993, based on the general scenario for the international economic climate (chapter II).

Finally, selected important structural trends are analyzed. Subjects covered in the third and final section include:

* Basic economic structure
* Energy policy
* Infrastructure developments
* The tax system and European economic integration

These four themes are major subjects in the present political debate, and are expected to remain in the forefront of policymaking. It may seem surprising that there is no special emphasis on the 'EC single market' debate, but this perspective is largely covered in the section on the tax system.

2. Danish Economy in the 1980s

The development of Danish economy in the 1980s can be divided into three phases.

The first phase is the period after the oil price surge of 1979–1980. The second phase started in 1982, when a cyclical change in the Danish economy coincided with the accession of a new, liberal government. This phase was heavily influenced by a strong growth of private consumption and growing problems with the balance of payments, which necessitated contractive economic policies. The third phase started in early 1987, as very contractionary economic policies brought the Danish economy to a halt.

The economy, however, regained momentum in 1989. All in all, the development of Danish economy has been counter-cyclical as compared to international developments since 1982.

2.1. Phase I: 1979–1982

In this period the economy of Denmark – like everywhere else – was dominated by reactions to the heavy oil price increases. Among the consequences was a strong growth of inflation, which reached a level of 12 percent in 1979–1980.

It can be argued that the reasons for the upswing of inflation in Denmark are structural, as they were to a large extent due to organization and structure of the labor market.

An inflationary wage-price-spiral was established, spawning higher inflation in Denmark than in her most important trading partners. This necessitated a continuing depreciation of the Danish Krone (DEK) compared to the trading partners as well as several actual devaluations.

This, in turn, encouraged further inflation and forced interest rates upwards. In connection with the high inflation levels of 1980 there were interest rates on the order of more than 20 percent on long-term mortgage bonds, i.e. loans with good collateral.

An important point in this context is the tradition of using fixed interest-loans for long-term finance, in particular as far as housing is concerned. (This point will be elaborated upon in the section on taxation policies.)

At the same time these policies could not inhibit the high expenditures on energy imports and the stagnation of export markets from causing large deficits on the balance of payments.

With a concurrent decline of domestic demand – and, in particular, a slackening of demand for domestically produced goods due to the unfavorable trends in the competitiveness – the result was a stagnation of economic activity from 1980 to 1982. Unemployment grew from 160,000 in 1979 to 280,000 in 1982, while GDP declined slightly in 1980 as well as 1981.

The economic policies of the liberal/social democratic coalition government as well as of the succeeding social democratic government were to an increasing degree dominated by attempts to restrain inflation and curb the strongly growing deficit of the public sector, which was caused by falling tax revenues as well as growing transfer payments.

In this period there were several attempts at job-creation projects, but in an international comparison Danish economic policies were fundamentally liberal: There was very little in the way of support schemes for industry, and attempts at regulation were focused on the labor market.

The major labor market instrument wielded in this period was incomes policy: There were several cases of 'wage freezes', and the methods for wage indexation were changed as early as December 1979 when energy prices were taken out of the 'basket' of goods used for indexation; wage indexation was suspended at a later date and has since been abolished altogether.

Wage developments continued to impair economic recovery, and when the labor market agreements of 1981 concluded with wage increases on the order of 8 percent in both 1982 and 1983 there was clearly a need for further economic policy measures in 1982.

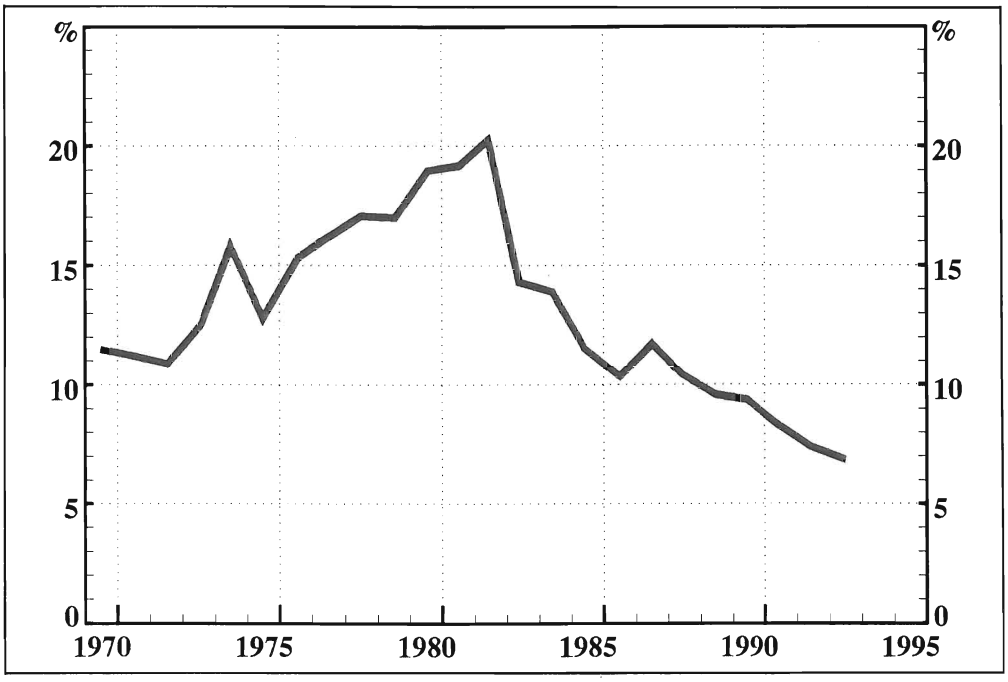
2.2. Phase II: 1982–1986

In September 1982 the social democratic minority government stepped back and was replaced by a four-party liberal coalition government. The coalition government had the good fortune of stepping into power at a time when the current depreciation of the krone had improved Danish competitiveness somewhat. At the same time the international economy was picking up steam.

The new government introduced an economic policy program with the following main points:

* Stronger incomes policies (i.e., lower wage growth)
* The government guaranteed that the exchange rates were fixed permanently; the Danish Krone (DEK) would be devalued no more in relation to the EMS currencies
* Public finances were to show a surplus

Figure III:1. Long-term Interest Rates, 1970–1993, percent p.a. (nominal)



Source: Danmarks Statistik (Central Statistical Office of Denmark) / ADAM data bank (December 1989-version) and own estimates

A very important point is that the government created an optimistic atmosphere – a belief that the development of Danish economy henceforth would be on a new and better track.

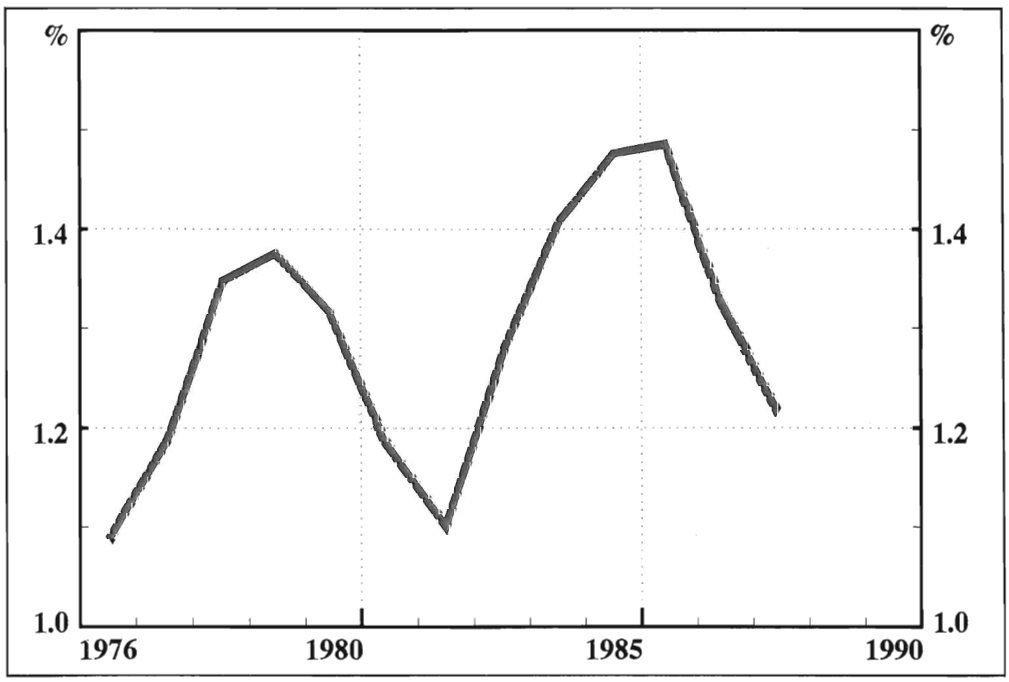
The announcement of the policy of fixed exchange rates led to a sharp decline in interest rates, in real as well as in nominal terms. The mortgage rate on housing loans fell from about 21 percent in 1982 to an average of 14 percent in 1987, while the rate of increase in consumer prices fell from 10 percent to 7 percent (viz. figure III:1).

The consequence was a strong growth in activity, inter alia caused by the positive expectations. At the same time the international expansion and the improved price competitiveness caused a strong growth in exports.

1983 saw the first surplus on the balance of trade in goods and services since 1945, and the various indicators of economic development were positive. This development was reinforced by the very impressive decline in nominal interest rates mentioned above even though real interest rates did not decline.

An important element in the economic policies was thence successful; the lowered interest rates, as well as the higher economic activity in general, could be expected to bring up investment activity.

Figure III:2. Private Nonfinancial Sectors' Net Assets as a Percentage of GDP 1976–1988.



Source: Ministry of Economic Affairs

Another consequence of the declining rate of interest, however, was increased private consumption. Borrowing for consumption increased, probably partly due to the more optimistic atmosphere created by the government.

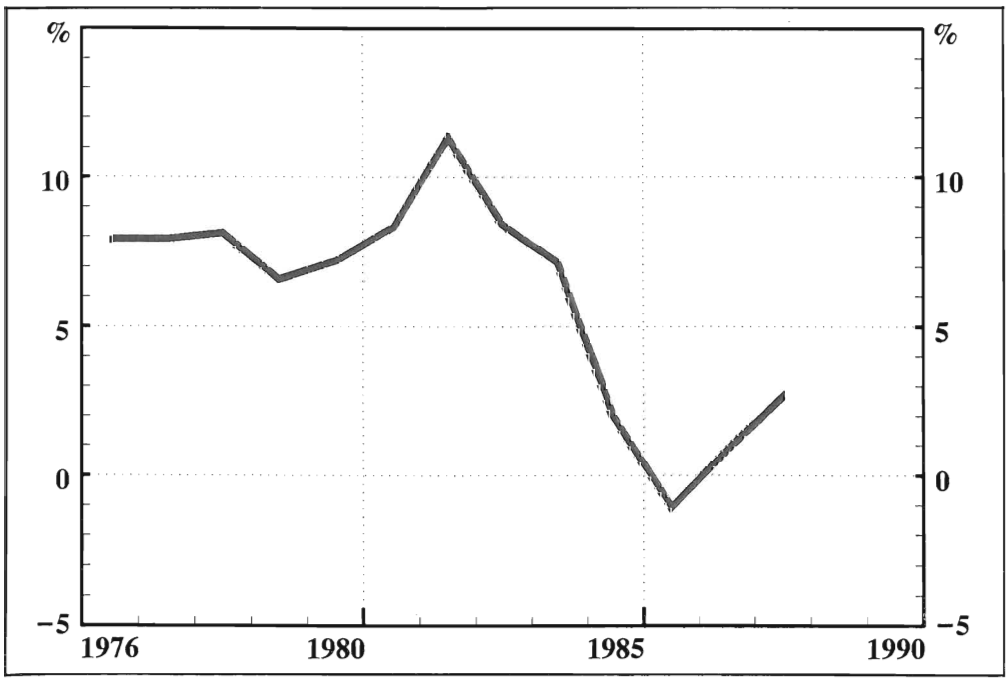
At the same time the falling interest rate generated very considerable capital gains for people holding fixed-interest assets as well as for the financial sector, viz. figure III:2. These capital gains had the negative corollary, though, of declining private savings, viz. figure III:3.

A major part of these gains were illusory, as they represented similar losses of debtors in (other parts of) the private sector or the public sector. These losses, however, were less visible: The debtor had to pay no more than agreed upon, but the lower inflation rates in fact increased the burden of future interest payments. Nevertheless, the capital gains were translated into growing private consumption.

1984, then, saw a strong growth of imports for private consumption as well as for investment. The buoyant domestic demand caused investors to focus on production for the home market.

Inflation fell considerably during the period, but in spite of this, wages and prices grew much faster in Denmark than in other EMS countries. The policy of fixed exchange rates thence caused a continual revaluation of the krone (in real terms), and international competitiveness was consequently inhibited.

Figure III:3. Household Sector's Savings Ratio 1976–1988.



Source: Ministry of Economic Affairs

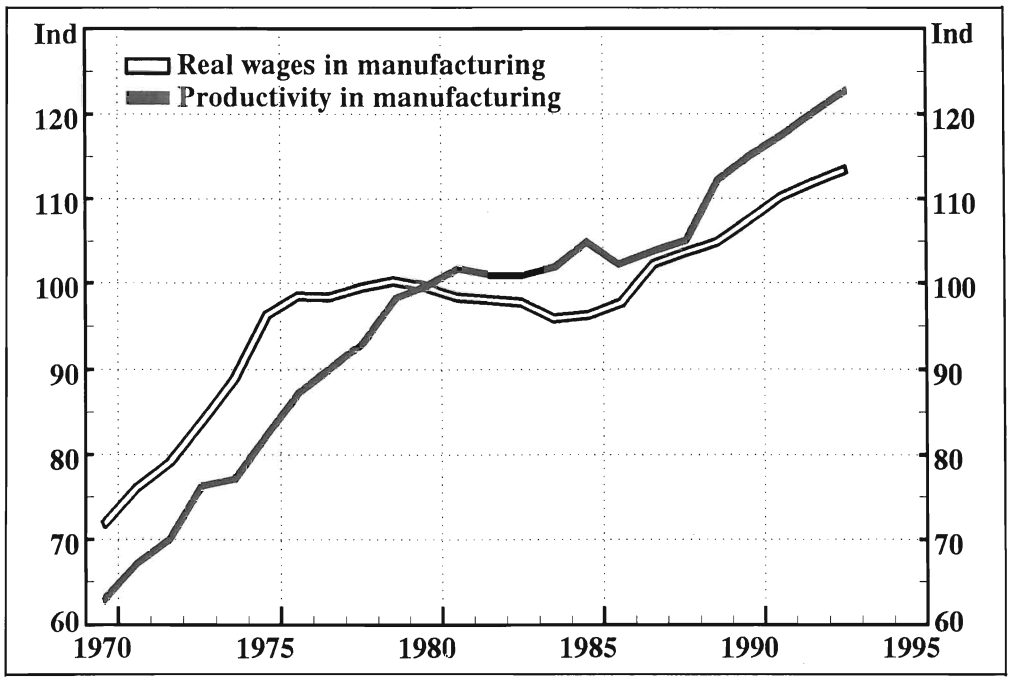
The combination of high domestic demand, low competitiveness and the debt service payments of the accumulated foreign debt caused a strongly declining foreign balance: In 1983, the deficit on the current account was DEK 13 billion growing to 18 billion in 1984, 29 billion in 1985 and 36 billion in 1986. The latter figure can be compared with a total export of about DEK 214 billion in 1986.

The high level of activity in the Danish economy caused employment to grow strongly, and unemployment fell from 280,000 in 1984 to 220,000 in 1986, although the labor force grew from 2.72 million to 2.82 million.

A very noteworthy trend was the growth of employment in manufacturing. From 1982 to 1986 employment in this sector grew by 15 percent, from 470,000 to 541,000. This marked a reversal of the long-term trend for manufacturing, which has experienced declining employment since the middle 1960s.

It should be taken into account, however, that a large part of the growth took place within firms which were to a high degree oriented towards the (artificially) booming home market. At the same time there was extraordinarily low growth in labor productivity. Labor productivity in manufacturing grew by an average of less than 0.8 percent a year from 1981 to 1985 and actually declined by 2.5 percent in 1986 (on an hourly basis), viz. figure III:4.

Figure III:4. Industrial Wage Rates and Productivity 1970–1993.



Source: Official statistics / ADAM data bank, and own estimates

While it was clear that general economic trends – and in particular the balance of payments developments – were unsustainable, there were no major changes of economic policies before spring 1986. (Some restriction was introduced in December 1985, but with a limited aim: Curbs on public construction were to alleviate the 'bottleneck' problems in the construction sector).

The first major restrictive policy measure with the aim of restraining private consumption, then, came in spring 1986 (the so-called 'Easter package') – when the balance of payments figures for 1985 became known. The main measure was to absorb the gains in purchasing power which would have been the result of the downturn in energy prices in early 1986. A variable energy levy was introduced, making consumer energy prices fairly independent of the spot market fluctuations.

A few months later a tax reform was passed by parliament; the main element was a restriction of the possibilities for tax deductions insofar as private (i.e. non-business) debt is concerned. The reform was to be implemented in 1987.

In autumn 1986 – that is, long before the effects of the tax reform were to be felt – a further restrictive measure was introduced. The measure was a special levy – a surtax – connected to private (net) interest payments relating to consumer loans. Loans for housing were in principle not to be affected by the surtax. (And, in fact, the surtax has since been repealed, so that it only applied to 1987).

The consequences of the tax reform are described in more detail in the section on structural changes, later in this chapter. The effects of these various restrictive measures were not to be felt until 1987.

2.3. Phase III: 1987–1989

1987 marked the start of an era with renewed growth for the European economy; it marked a turning point for the Danish economy as well, but the change was to a period of weaker rather than stronger growth: The various measures introduced in 1986 had a strong impact on domestic demand. At the same time the growth of export markets caused only limited growth in Danish exports due to the continual decline of Danish competitiveness, caused inter alia by the strict adherence to the policy of fixed exchange rates vis-à-vis the EMS countries.

It is estimated that the policy of fixed exchanged rates with its implicit (real) revaluation of the Danish krone caused a decline of international competitiveness in the order of 13 percent from 1982 to 1987.

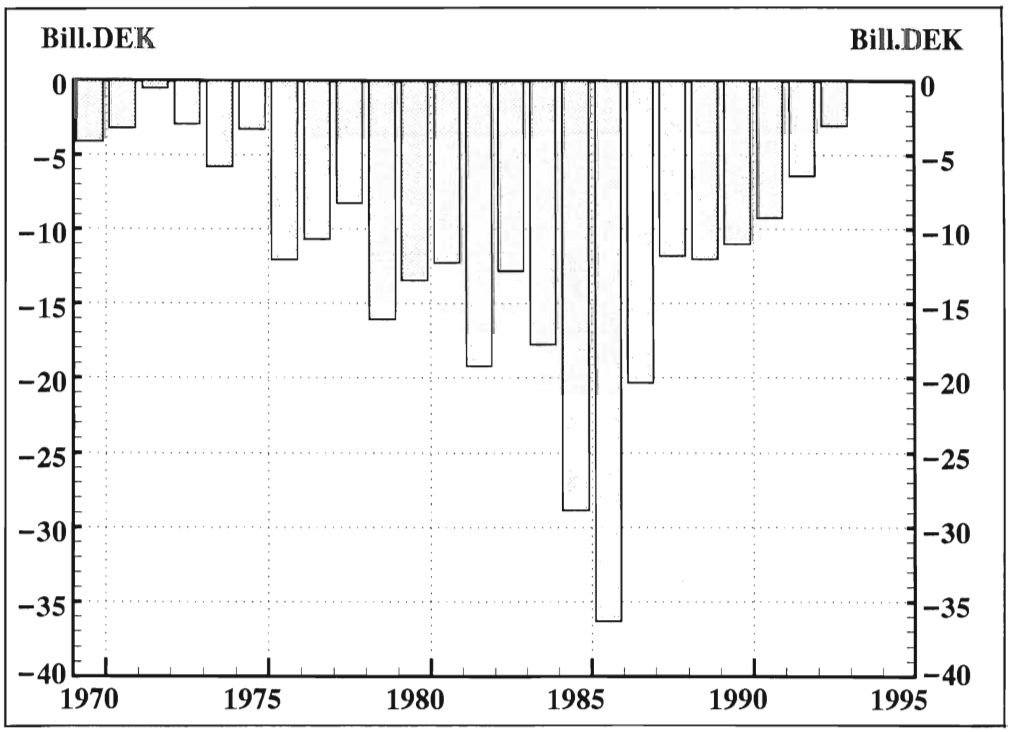
March 1987 saw a new round of labor market negotiations, resulting in an agreement within the private sector upon a gradual shortening of weekly working hours, from 40 hours to 37. At the same time wages were to rise somewhat. It is estimated that total hourly labor costs of industry would grow by 6.5 percent in 1987 and 5 percent in 1988 due to this agreement. This agreement, then, made the competitiveness issue all the more topical.

The immediate consequences of the rigorous measures of 1986 were a decline in GDP in the order of 1 percent in 1987 and a turnaround of the hitherto positive trends with regard to unemployment. At the same time the balance of payments, as well as the trade balance, improved considerably. The deficit on the current account declined from DEK 35 billion in 1986 to DEK 19 billion in 1987, and the trade balance of 1987 showed a surplus of DEK 6 billion (on an 'fob' basis).

The total improvement on the trade balance was about DEK 14 billion; of these, 11 billion were accounted for by smaller imports and only 3 billion by growth in exports, which grew by only 3 percent, significantly below the growth in Denmark's main export markets, indicating a continued decline in international competitiveness. (The above figures refer to the trade in goods only; the balance of trade in goods and services improved about DEK 16 billion.)

Late 1987 saw the introduction of a measure to increase competitiveness; the contributions of employers to various labor market measures were to be calculated on the basis of the VAT base, rather than from the actual number of employees in the business. It is estimated that this measure improved competitiveness on the order of 4 percent.

Figure III:5. Development of the Current Account of the Balance of Payments 1970–1993. Billions of DEK.



Source: Official statistics / ADAM data bank, and own estimates

In 1988, the various measures implemented during 1987–1988 began to show results. While competitiveness was still being hurt by excessive salary growth, the positive domestic measures in combination with the positive trends of world economy made Danish exports grow by 6.7 percent in real terms; imports were nearly unchanged, with a growth of 1.2 percent, as domestic demand was weak.

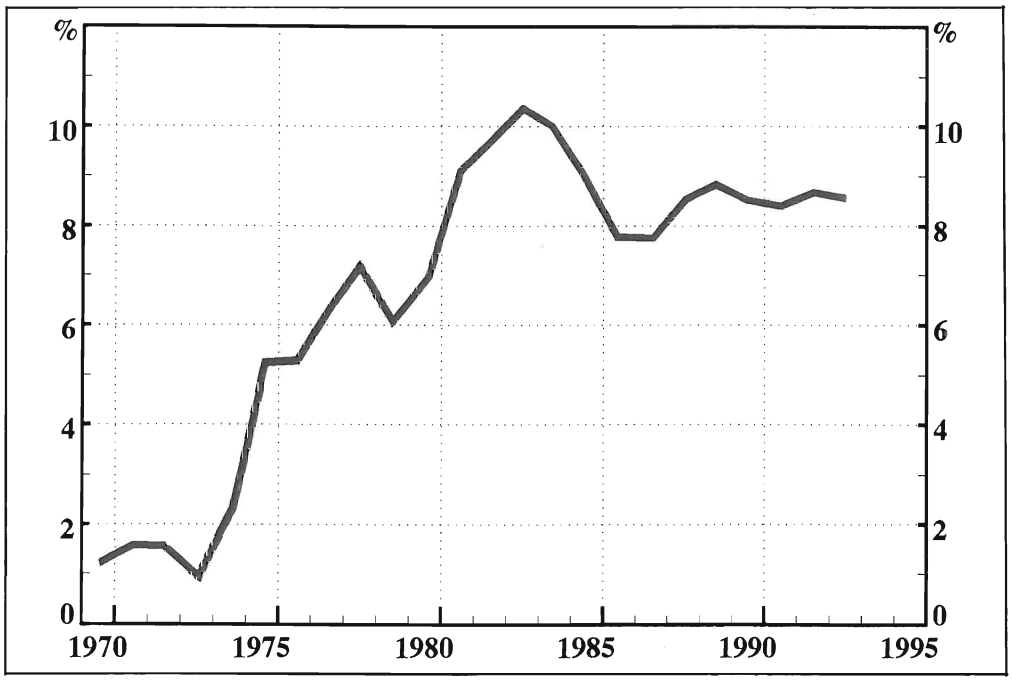
2.4. The Present Situation

To sum up, the present state of the Danish economy is characterized by:

* High deficit on the current account of the balance of payments (viz. figure III:5), with
* low growth (compared to Western Europe in general), and hence
* high unemployment (compared to the other Nordic countries, but in line with the situation in the rest of the EC) (viz. figure III:6), and
* low growth of labor productivity (viz. figure III:4), which has resulted in declining international competitiveness (viz. figure III:7) until 1989.

While these trends can be seen as (partially) cyclical, a deeper-rooted problem is the rather high concentration of fairly low-tech industries in Denmark, particularly within food processing.

Figure III:6. Unemployment 1970–1993. Percentage of the Labor Force.



Source: Official statistics / ADAM data bank, and own estimates

On the other hand, the typical sunset industries are few, and the major part of chemical and metal industries are technically advanced – as required by the rather high labor costs of Denmark.

While wage increases before 1989 were far too high, they are now much smaller, which – coupled with previous measures to decrease the cost of labor from the employers point of view – has led to a more favorable development in the international competitiveness. We expect wage increases to remain sufficiently low for a further improvement of the competitiveness in the period under consideration.

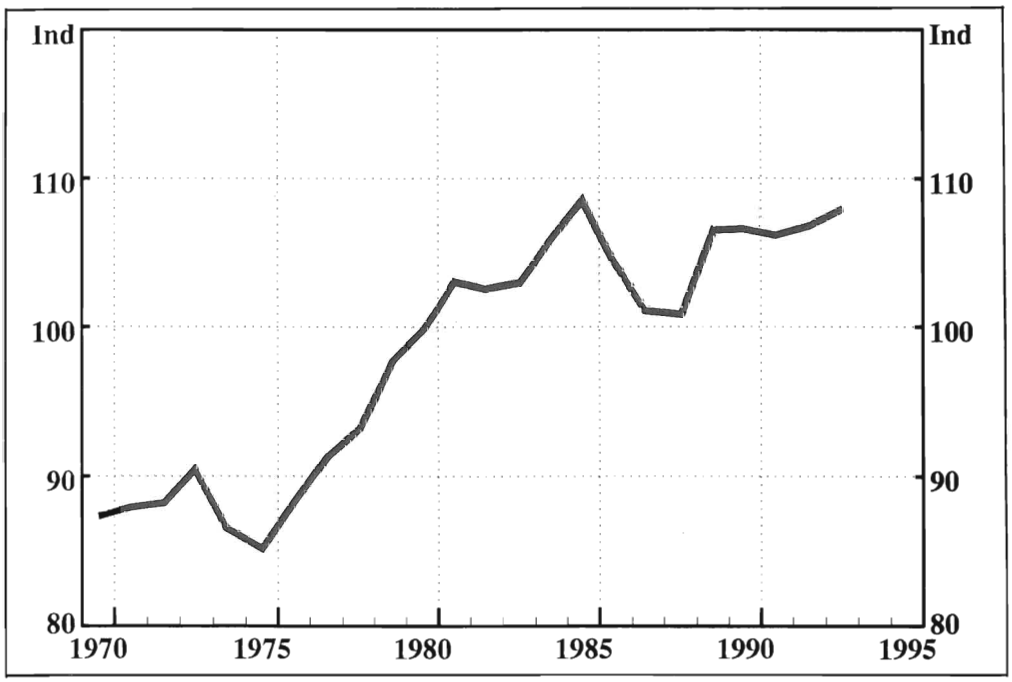
In general, the economic prospects of Denmark have improved within the last couple of years:

* International competitiveness has gained greatly from changes in labor market contributions and reduced wage increases; in effect, the relative price of exports have been made more favorable compared to sales on the domestic market.

* Exports are now growing at the same pace or faster than the relevant import markets, indicating a turnaround of the previously unfavorable trend in market shares.

* Inflation has slowed to a fairly comfortable rate, and is expected to remain fairly low; while the main motor of inflation in many years has

Figure III:7. Productivity in Manufacturing Divided by Real Wages 1970–1993. Index 1980 = 100.



Source: Official statistics / ADAM data bank, and own estimates

been the domestic wage/price- spiral, the role is now reversed. Imports account for a major part of the inflationary pressures; higher than expected raw materials prices have kept general inflation higher than expected in 1989, but the underlying, domestic trends seem to indicate lower inflation in the years to come.

* Interest rates have eased; as the policy of exchange rate stability has gained credibility the premium over and above DEM-interest rates has declined greatly. The lower premium helps real investors, of course; an added benefit is that it helps reduce the deficit on the balance of payments, as quite a considerable part of the current account deficit is in fact financed by sales of Danish bonds on international markets.

* Important changes in the taxation system have helped boost the household savings ratio, viz. figure III:3. Since 1970, the post-tax real rate of interest was negative for many investors during long periods; this was certainly not conducive to savings, and a major part of household savings were in the form of real estate investments, financed mainly by fixed-rate loans. In the last couple of years, the differential between nominal interest rates and the rate of increase in consumer prices has narrowed; even more significantly, major changes in the tax system have made borrowing much less favorable, and it is now possible to gain a positive interest, after tax, on savings. (These matters are discussed in more detail in the section on structural changes later in this chapter).

  However, it should be kept in mind that the savings ratio was at an all-time high in 1982. It fell steeply from 1982 to 1986, and the measures have only managed to increase private savings to one third of the 1982 level.

* The growth of the public sector has been checked; public consumption as well as public investment are now expected to remain stable in the medium term. A reduction of the public sector has been a policy aim for the last few years; in actual fact, only a slowdown, not a decline, of public expenditure has been achieved. (Public consumption declined 1–1.2 percent from 1987 to 1989 (est.) in real terms, but other expenditures have grown somewhat, giving a very slight overall growth in public expenditures). According to the plans of the present minority government, there will be reductions in the coming years, but – as before – political compromise makes it seem unlikely that the size of the public sector will in fact be reduced more than marginally.

* The current account of the balance of payments has improved considerably. The basic trend is even better than revealed from the overall figures, as changes in the registration rules for ships has caused imports to swell during 1989; in spite of this, the overall trade balance improved very considerably.

3. Expected Policy Changes within the Coming Years

* Marginal tax rates will be lowered, for individuals as well as for firms
* Owner-occupied housing will consequently be hit by the reduced value of tax deductions for interest rates
* Other forms of housing will be subsidized less
* Investment behavior of firms, in light of reduced tax rates and reduced tax deductions, remains uncertain
* The labor market and social policies will probably tend to make it an even less comfortable position to be unemployed than it is at present, improving wage flexibility in the process. At the same time vocational training for unemployed labor, reducing the risk of bottleneck problems during expansions, will probably be improved.

It seems likely that we will have another tax reform within the coming years. At present, both the minority government and the largest opposition party have launched plans for a major tax reform. Though the plans differ greatly in many respects, reduced marginal tax rates are a common denominator. This will be at least partly financed by broadening the tax base, possibly by some (small) reductions in the level of public services, and by an increasing reliance on payments by the end users of public services.

At the same time it is expected that the plans will be partly self-financing; the consequent increases in the level of economic activity will both increase tax payments and greatly reduce the present very high costs of unemployment benefits. It should be noted that the "structural" surplus of the public sector in Denmark is very high; in spite of the current high unemployment, the public finances are close to equilibrium.

3.1. A Scenario for the Danish Economy 1989–1993

Our projections for this period are presented in Tables III:1–III:4. The projections represent a moderately optimistic scenario, with a positive trend in international competitiveness as a main presumption. In general, this conjecture is based on a trend towards lower pay increases and decreased public sector resource utilization (public consumption + transfer payments).

The trend toward lower wage growth will be reinforced by the deceleration of Danish inflation – measured in terms of consumer prices – which is an inevitable consequence of the single market of 1993. At present, excise duties are very much above the EC average, and even though a complete harmonization is no longer in the cards it will be politically as well as economically impossible not to reduce the level of excise duties.

Consumer prices and industrial wages are expected to rise at approximately identical rates through the period, about 2–3 percent p.a., with only slight growth in real wages. There will remain considerable

Table III:1. Balance of Resources and Expenditure 1970–1993.

	1988	Average annual change in volume, percent				
	Bill. DEK	1971–75	1976–80	1981–85	1986–88	1989–93
GDP (at market prices)	724.0	2.0	2.5	2.6	0.9	2.0
Imports	215.3	0.8	2.5	3.4	1.8	3.3
– goods	176.0	0.2	2.1	3.6	0.4	3.4
– services	39.3	6.3	5.7	2.4	10.6	2.9
Total resources	939.3	1.7	2.5	2.8	1.2	2.4
Exports	237.1	4.1	4.6	4.8	3.8	5.5
– goods	186.3	4.6	5.4	5.5	2.8	5.1
– services	50.8	2.4	1.8	1.9	8.1	7.3
Consumption	572.1	2.1	2.4	1.8	0.7	0.6
– private	386.2	1.3	1.4	2.0	0.7	1.1
– public	187.0	4.1	4.6	1.5	0.7	−0.4
Fixed investment	133.1	−1.6	0.1	2.3	1.1	1.6
– private (including residential)	114.8	−1.2	0.5	3.8	0.4	2.0
– public	18.4	−3.5	−1.4	−6.1	5.6	−1.0
Inventory[1])	−4.0[2])	−0.2	0.0	0.2	−0.3	0.2
Total demand	939.3	1.7	2.5	2.8	1.2	2.4

[1]) Contribution to GDP growth
[2]) Actual value of inventory-building in 1988
Source: Official statistics / ADAM data bank, and own estimates

Table III:2. Other Key Variables in the Forecasts.

	1985	1986	1987	1988	1993
	percent				
Unemployment	9.0	7.8	7.8	8.6	8.6
	percent p.a.				
Interest rate (long)	11.55	10.55	11.91	10.55	5.8
Salary rise for average industrial worker	4.8	4.9	9.2	6.4	2.7
Productivity in manufacturing (hourly)	2.9	−1.8	1.3	3.4	2.2

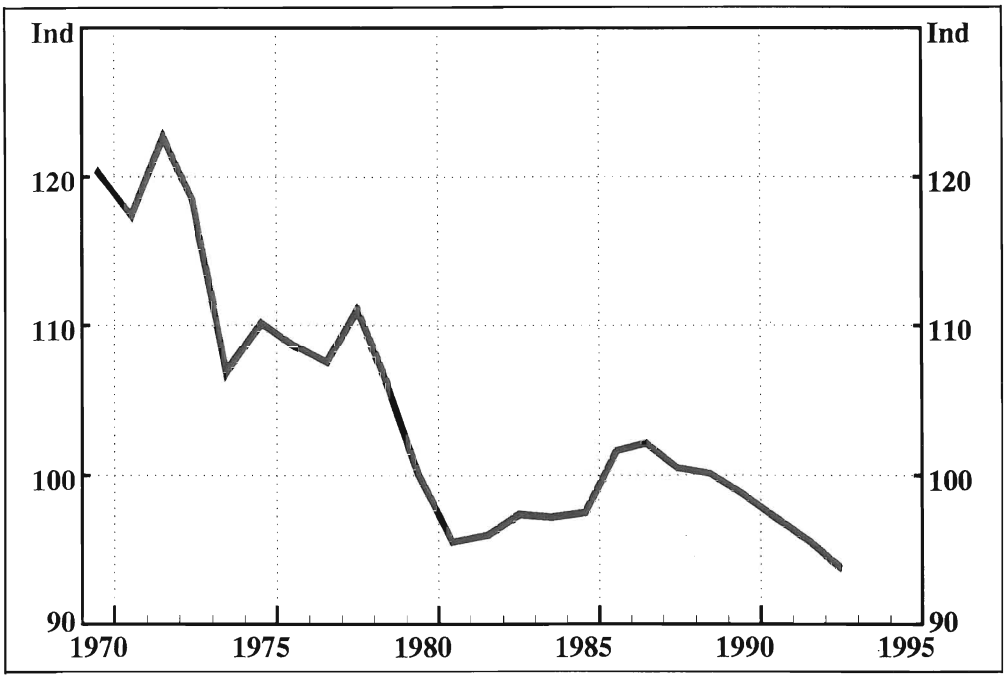
Source: Official statistics / ADAM data bank, and own estimates

slack in the labor market, as unemployment remains on the level of 8–9 percent of the labor force.

At the same time, the lowered excise duties will have decisive consequences for public finances, which will reinforce the trend towards reforming public services, with improved resource allocation as a likely result (at least in the medium term, when structural adjustments in the sector are enforced – or are accepted – by politicians). There remains a risk, however, that it may result in declining service levels, but not in improved resource utilization. The politics of governing a public sector, which directly employs a large part of the electorate – and on which other parts of the electorate are crucially dependent – are quite intricate.

While decreased wage growth will help international competitiveness and hence improve export performance, overall economic growth rates will not be very high in the period. Due to the precarious state of the current account, **consumption** will have to be restricted one way or another. The projected slight gains in real wages and in employment will give a certain rise in disposable income, but the situation overall will not give much impetus to private consumption. The savings ratio is expected to grow in light of the considerable capital losses which will likely accrue to homeowners during the period (discussed in the section on changes in taxation system). **Public consumption** will decline slightly.

Figure III:8. Development of Terms of Trade 1970–1993.
Index 1980 = 100



Source: Official statistics / ADAM data bank, and own estimates

Investment will be somewhat more vigorous than private consumption – with stronger growth in machinery investment than in building and construction – but the only truly expansionary factor will be **exports**; strong growth is projected in real terms, favorably influenced by the projected decline of the Danish terms of trade (i.e. growing competitiveness), viz. figure III:8.

A high growth of exports is not sufficient to offset the very low growth of domestic demand in total, and the growth rates of industry will not be spectacular.

The above implies, inter alia, that the present plans for reductions in tax rates will not be fully implemented – or that their implementation will be carried out in a way which does not reduce the overall level of taxation + other forms of payments from the private to the public sector significantly.

This does not preclude, of course, that incentives to individuals and to firms will be changed in a way which is conducive to growth. In fact, a certain improvement of the incentive structure is assumed in the projections.

Table III:3. Foreign Balance, Balance of the Public Sector etc.

	1985	1986	1987	1988	1993
	billion DEK				
Current account of the balance of payments	−28.8	−36.3	−20.3	−11.8	−3.0
Public sector surplus	−12.4	22.7	17.2	1.8	25.8
	percent of GDP				
Current account of the balance of payments	− 4.7	− 5.4	− 2.9	− 1.6	−0.35
Public sector surplus	− 2.0	3.4	2.5	0.2	3.0
	percent of GDP				
Tax share	49.1	50.9	51.9	52.2	52.3
Import share	26.7	24.5	23.0	22.9	25.6
	1980 = 100				
Terms of trade	97.6	101.8	102.4	100.7	93.9

Source: Official statistics / ADAM data bank, and own estimates

A basic tenet of the forecast is the assumption that **financial policies** will be kept tight in spite of a very considerable improvement in the current account throughout the period. The deficit is projected to be on the order of 1/3 percent of the GDP in 1993, and will continue to improve, i.e. a surplus is to be expected in 1994 or 1995 (assuming policies remain committed to this goal). At the same time, the public finances will show a healthy surplus – on the order of 3 percent of GDP – in 1993.

It is quite possible that the high unemployment and considerable surplus with respect to the public finances will make it politically infeasible to keep financial policies quite as determined. On the other hand, the risk of a snowballing foreign debt, if confidence in financial markets is undermined, may keep policies determined. It would of course have devastating consequences for the Danish economy if refinancing the foreign debt became much more expensive.

A certain slight relaxation of policies will probably not be seen as irresponsible. In that case, real growth will be a little higher; a slightly higher rate of interest will not be sufficient to offset the gains from a more relaxed financial policy.

4. Economic Structure

This section includes discussions of

* Basic economic structure, including
  - the structure of the labor force and its relation to the size of the public service sector
  - the regional structure of the Danish economy, and
  - the industrial base
* Energy policies and domestic energy production
* New transportational infrastructure projects
* Important changes in the tax system

4.1. Basic Economic Structure of Denmark

The Danish **labor force** numbers about 2.8 million people, which should be viewed in the light of a population of 5.1 million people. This means that the labor force is very large compared to the size of the population (viz. figure III:9).

The female participation ratio in Denmark ranks among the highest in Western Europe, and the growing number of working women during the 1970s was a significant element in the economic development of Denmark; this growth is clearly connected to the growth of public services in the same period (e.g.: kindergarten personnel being working mothers).

In 1987, 67 percent of women in the age group 15–74 were in the labor force; for men the share was 78 per cent. During the last decade the female participation ratio has grown by about 10 percentage points.

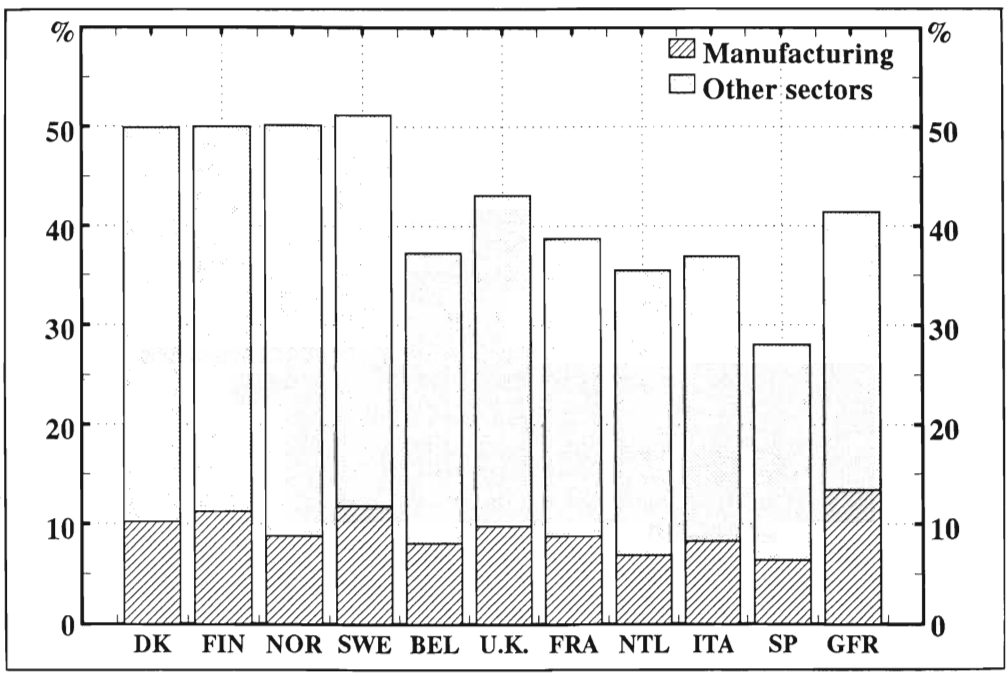
The **regional structure** of Denmark can be described by the fact that the country in effect is composed of two areas separated from each other: A continental West-Denmark and the islands in the East, where the capital, Copenhagen, is situated. Economic development has been rather different in these two areas.

The traditional industries, which typically have been situated in town centers near railways and harbors, tend to lay off people, as some firms close down and others move to open areas. Due to environmental (and transport) considerations, very little new industry is started in urban areas, and at the same time growing productivity tends to decrease the industrial labor force in general.

Most Danish cities are experiencing declining industrial employment. This development is particularly strong in Copenhagen, the former stronghold of Danish industry.

At the same time a strong growth of industrial production is seen in former country areas. Today, the region with the highest share of indus-

Figure III:9. Total Employment and Employment in Manufacturing in Relation to Population Size of Selected Countries. 1986.



Source: Danmarks Statistik: Statistisk tiårsoversigt 1989 (Central Statistical Office of Denmark: Statistical 10-year review 1989)

Table III:4. Balance of Manpower Resources 1975–1993.

Year	1975	1980	1985	1988	1993
	(thousands)				
Labor force	2468	2626	2783	2839	2925
Employment	2338	2442	2532	2595	2672
Unemployed	131	184	252	244	253

Note: The figures refer to average for the year
Source: Official statistics / ADAM data bank, and own estimates

trial employment in total employment was Ringköbing Amt in Western Jutland, a part of the country which has clearly been dominated by agriculture and fisheries up to the last decades.

Correspondingly, Greater Copenhagen has the lowest share of industrial employment in total employment. During the previous 10 years industrial employment in the Greater Copenhagen area declined by 25,000 people, that of 'the islands' (i.e. the central parts of Denmark, the islands excluding the Copenhagen area) was stable, and that of Jutland grew by 54,000 people.

Geographically, there are two main trends. Industrial employment moves from the cities to the countryside, and the expansion of industrial employment takes place in the peninsula of Jutland rather than on the islands.

This is a serious problem for Copenhagen; signs of a dual economy are appearing:

- Part of the population is well educated; it is employed in service trades, high-tech industries and administration. Salaries are high, and the price level is forced upwards.
- Another group is unskilled, or have weak or outmoded skills; they have had difficulties finding employment after the industrial decline. In spite of the higher wages – which were part of the reason for industry leaving the region – the real wages are low for this group, as the price level (in particular as far as housing is concerned) is higher than in the rest of the country.

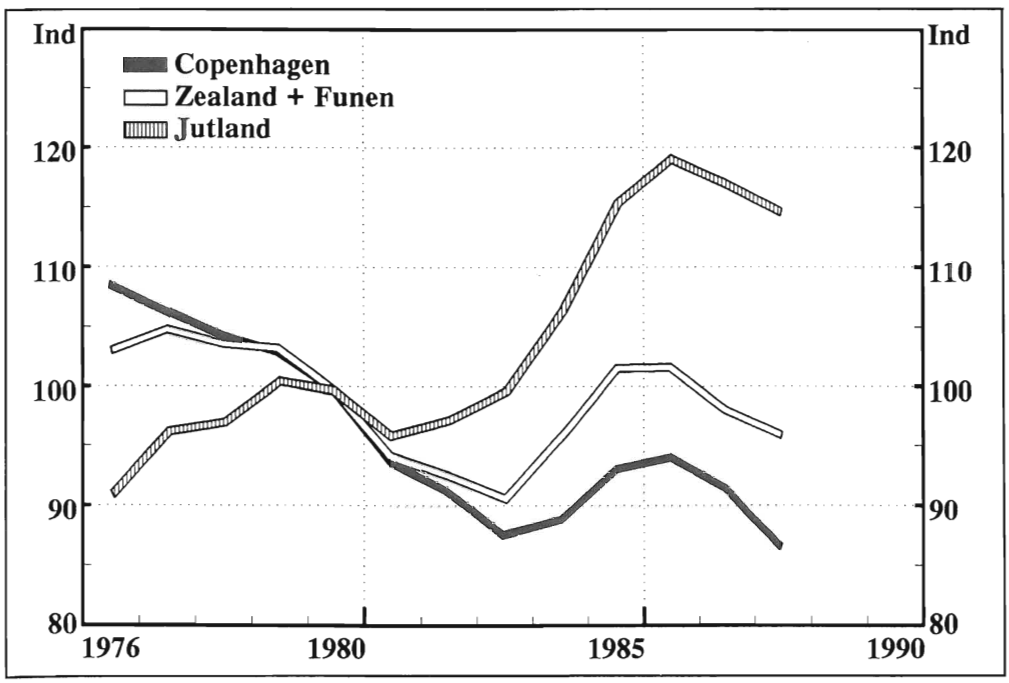
In light of the expected general economic trends in the medium term it seems more likely that the Copenhagen area will tend towards economic stagnation, rather than the depicted dual economy. This is based, inter alia, on the conjecture that public as well as private administration is expected to generate a certain rise in productivity, in no small way due to the belated attainment of the promised gains from information technology. With or without productivity gains, employment in public administration is scheduled to decline on a national level, and the Copenhagen area will possibly furthermore be struck by the transfer of various parts of the central administration to other, purportedly less fortunate regions of the country.

However, political awareness of the specific big-city problems plaguing Copenhagen seems to be growing, and new political trends may favor a new emphasis on growth in Copenhagen, based on rejuvenation of the inner city and in particular the large harbor areas – in a development similar to that seen in eg London (the Docklands area), Baltimore, and other big cities. Furthermore, bridges to Sweden and Germany – which we expect to be built once the internal Danish tunnel-and-bridge connection across the Storebælt is near completion, as discussed in the section on transportational infrastructure projects – will improve the prospects of the Copenhagen area greatly.

The primary sector is characterized by very high productivity as well as continual technological progress. As demonstrated by table III:5, agriculture and fisheries play only a minor role in Danish employment – although the share is slightly higher than in many other high-income industrialized countries.

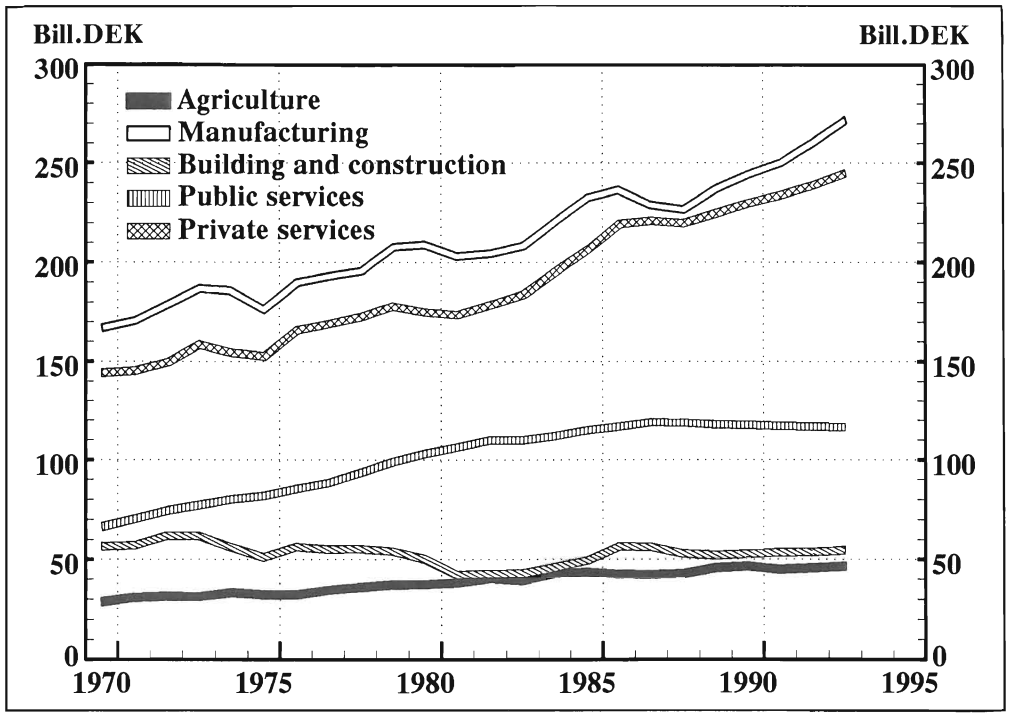
The labor productivity of Danish agriculture has grown by 7 percent p.a. on the average during the last 25 years; at this rate of growth productivity doubles every 10 years.

Figure III:10. Regional Development in Denmark 1976–1988. Industrial Employment in Three Main Regions.
Index 1980 = 100.



Source: Danmarks Statistik: Industristatistik, various years (Central Statistical Office of Denmark: Industrial Statistics)

Figure III:11. GDP by Industries in Denmark 1970–1993.
Fixed prices



Source: Official statistics / ADAM data bank, and own estimates

In those 25 years it has thus been possible to reduce employment greatly while production has increased considerably. Today, there are about 40,000 full-time farms left (i.e., farms employing at least one person – including the owner – on a full-time basis).

The main representative of the **extractive** trades, the off-shore oil industry – is discussed in the section on energy policies below.

Table III:5. Employment in Agriculture, Forestry and Fisheries as a Percentage of the Active Population, 1986.

Denmark	7 percent
Finland	11 percent
Norway	7 percent
Sweden	4 percent

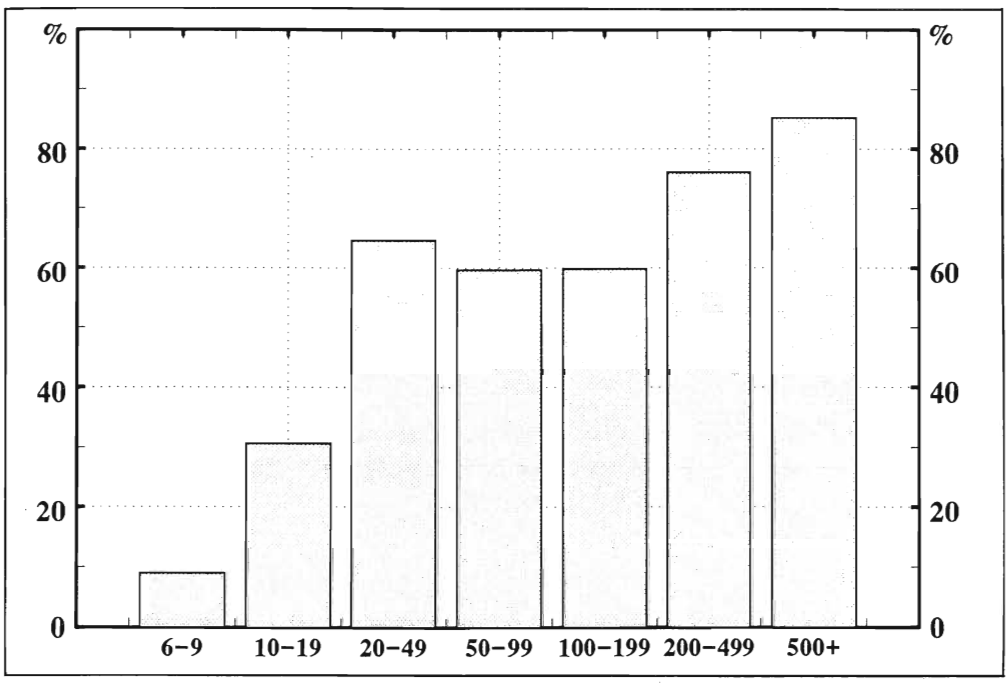
Source: Danmarks Statistik: Statistisk tiårsoversigt 1989 (Central Statistical Office of Denmark: Statistical 10-year Review 1989)

As far as **manufacturing industry** is concerned, an important trait is that there are very few **large** enterprises. This is demonstrated clearly by figure III:12. The ten largest enterprises in Finland, Norway and Sweden play extremely prominent roles in their societies (viz. figure III:13). This is far less true of Denmark, which is dominated by small and medium-sized enterprises.

In spite of the relative scarcity of large industrial enterprises, **the employment in the Danish manufacturing sector is among the largest in Western Europe in relation to the population size**. Among the Nordic countries and the EEC countries, only Finland, Sweden and West Germany have a larger manufacturing sector by this measure. But as Denmark has a considerable share of low tech-industries, it ranks lower if the size of the sector is measured by the value added.

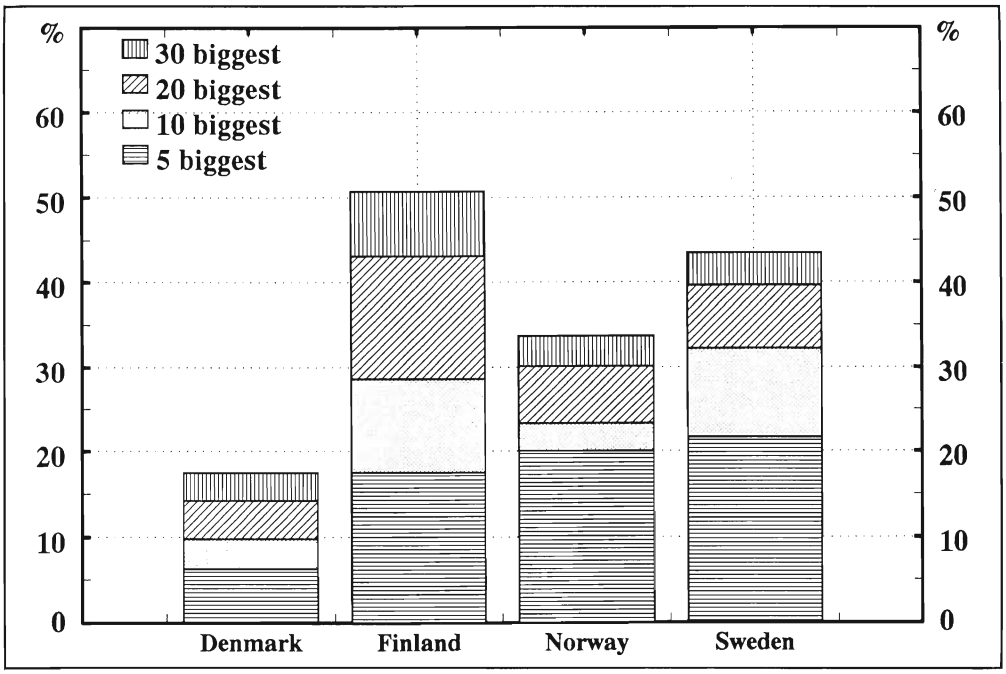
Since the cyclical change of 1987, the **building and construction** sector has suffered a sharp decline, not only because this type of activity is very sensitive to cyclical trends, but also, and more importantly, because the tax reform of 1987 has hit private construction of housing extremely hard. The only positive trend is rather high activity in renovation and modernization, in particular of inner city-housing, and the Store Bælt bridge-and- tunnel project, discussed in a later section.

Figure III:12. Relative Size of Firms in Manufacturing Industry. Employment by Number of Employees in each Establishment. 1987.



Source: Danmarks Statistik: Industristatistik, various years (Central Statistical Office of Denmark: Industrial Statistics)

Figure III:13. The Relative Importance of the Biggest Industrial Companies in the Nordic Countries.



Note: Share of the large companies' domestic employment in total manufacturing employment.
Sources: Denmark: Estimates from Copenhagen School of Business Economics; Finland, Norway, Sweden: Nordic Perspective Group.

4.2. The Service Sector

Like most industrialized countries, Denmark has experienced a relative enlargement of the **service trades** in the postWorld War II-boom. Important structural changes are to be found behind the figures; some sectors have virtually disappeared while others have thrived.

Most remarkable is perhaps that the **private service sector** in total has only grown in line with the general level of economic activity, i.e. its share of GDP has remained the same. The growth of the Danish service sector, then, is due solely to the high growth of the public sector during this period.

The public sector in Denmark is very large in an international comparison. It is primarily active in three areas: social services (notably services for children and elderly), health services and education. Besides this, there are extensive public insurance and pension schemes. The public sector is not very involved in industrial policies, however. The concentration in these three areas is remarkable even in a Nordic context.

Table III:6. GDP at Factor Cost by Sectors 1970–1993.

	1988	Average annual change in volume, percent				
	Bill. DEK	1971–75	1976–80	1981–85	1986–88	1989–93
Agriculture etc.	25.5	4.5	1.8	5.6	−2.2	1.6
Industry	176.8	0.9	2.3	2.4	1.9	3.5
Oil and gas extraction	3.6	−11.1	..	171.4	28.1	6.1
Construction	41.0	− 3.4	0.0	−2.5	4.9	0.4
Manufacturing	123.9	2.9	3.0	2.5	−1.0	4.3
Food, drink & tobacco	27.2	3.1	4.6	3.1	−0.9	1.2
Metal industry	43.2	4.0	2.5	3.1	−3.1	5.3
Chemical & pharmaceutical	16.9	6.6	4.5	3.4	5.4	5.6
Other manufacturing	36.6	0.7	2.0	1.1	−1.0	4.7
Other industry	8.4	5.4	6.6	6.6	−0.3	1.0
Private services	232.0	1.2	2.3	2.6	2.2	2.1
Ownership of dwellings	52.8	6.4	2.4	0.9	−0.3	1.7
Public services	142.1	4.9	5.2	2.4	0.9	−0.2
Imputed bank service charges	−20.8	5.4	−0.8	2.8	2.1	3.6
GDP at factor cost	608.4	2.3	3.0	2.5	1.4	1.9

Source: Official statistics / ADAM data bank, and own estimates

The principle underlying public services has traditionally been that all citizens have a right to such services irrespective of income. As a consequence of this principle most public services are free. This includes e.g. medical services, assistance in homes for the elderly, and university tuition.

The public sector employs about 800,000 people; discounting the share of part-time employment there are the equivalent of about 660,000 full-time employees. The labor force of Denmark numbers about 2.8 million people. A large number of the public employees are women, employed in areas which are the traditional domains of housewives, maidservants etc., and to some extent it can be argued that the large size of the public sector in Denmark only represents a shift of these activities from the informal economy to the formal sector.

Another important point is the decentralized organization of the public sector. Nearly all current services are operated by the municipal sector (i.e., local government) and are financed by this sector, at the municipal or regional level. Left in the hands of the central government are railways, postal services and a few other parts of communication and transportation infrastructure (but only a minor part of the road network), universities, the judicial system, police and military forces, and central administration.

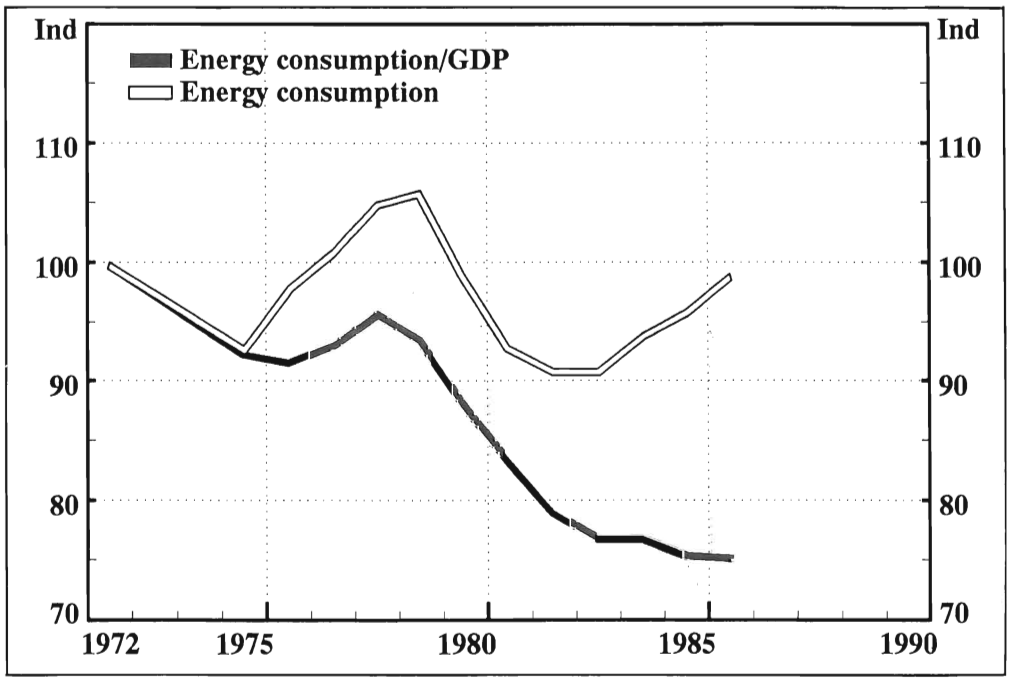
It is evident that there was very rapid growth in public expenditure until 1982; the increase was caused both by growing public consumption and by rising transfers.

Both trends can be ascribed to rising needs in connection with the growth of unemployment. As far as transfers are concerned, a main cause of the rise is the introduction of an early retirement scheme, introduced in 1979 with the aim of reducing (or hiding) unemployment. As far as social services are concerned, the trend towards growing expenditures can be partly ascribed to rising needs and partly to higher service levels.

During the 1970s, the public sector accumulated a considerable debt, at the municipal as well as at the national level, to the extent that a continuation of the policies became unsustainable: The debt service burden would necessitate a further rise of tax levels.

An important element of the policies of the liberal government since 1982 has been to contain the public debt. Fiscal policy has been tight, and most years since 1982 have shown a surplus on the public finances. In spite of this, the public debt is still of a considerable size, and the net interest payments of the public sector represent around 10 percent of total public expenditure presently. This share will decline in the future, though, as the public finances, after a short lapse into a (very small) deficit are expected to show a fairly large surplus in the coming years.

Figure III:14. Energy Consumption and Energy Efficiency in Denmark. Index 1972 = 100.



Source: Energiplanlægning 1987. Statusnotat, energiministeriet.
(Ministry of Energy: Energy Planning 1987. Status. December 1987)

4.3. Energy Policies and the Domestic Energy Production

Danish energy policy is interesting in an international perspective. The share of various energy sources has changed profoundly during a very short period of time, and the magnitude of energy consumption has declined steeply in relation to the size of GDP.

Energy policies have been guided by the aim of controlling the structure as well as the magnitude of total energy consumption. This has been done partly by excise taxes (levied with different rates on e.g. petrol, heavy oil and electricity), partly by supporting the development of renewable energy sources (e.g. windmills, production of methane by fermentation of farm manure) as well as energy saving measures (e.g. improved insulation of housing), and partly by the physical planning of district heating and electricity supply schemes.

The latter includes planning of small and de-centralized as well as large and centralized electricity and district heating combination plants, on national, regional and local administrative levels, in order to reach the optimal utilization of domestic energy sources such as natural gas (from the North Sea), windmills, and straw-burning plants.

The development of total energy consumption is presented in figure III:14. It is evident that energy consumption fell off in 1973–75 as well as in 1979–81; although energy policy played a role in this, the price increases of 1973 and 1979 are major factors in the development, of course.

Energy consumption is thus virtually the same today as in 1972. This marks a departure from the trends of the preceding decades, which saw exponential increases in the consumption of energy, caused by the generally high economic growth.

The relation between the level of economic activity and the level of energy consumption was broken, too, as evident from figure III:14. This is of course in line with economic theory, which on a general level suggests that rising prices for a commodity should induce substitution away from that commodity.

Table III:7 presents the structure of energy supplies for 1972 and 1986.

Table III:7. Energy Consumption by Sources, 1972 and 1986. Percent of Total Energy Consumption.

	1972	1986
Oil	93	52
Natural gas	–	5
Coal	6	38
Renewable sources	1	4

Source: Ministry of Energy, op.cit.

The most important change is the rising role of coal. The main reason is that coal has been substituted for oil in the production of electricity and district heating, in which oil was the dominating energy source before the oil price hikes of 1973.

Natural gas and renewable energy is planned to play a greater role in the energy supply, and their share has increased considerably since 1972. Natural gas was introduced in 1982 and the gas infrastructure (pipelines, etc.) is now well established. Renewable energy – mainly windmills and straw-burning units – has been encouraged by various support measures.

At the same time domestic oil production has grown rapidly; production has increased tenfold during less than a decade, from 0.5 million tons in 1980 to 5 million tons in 1987. The production of natural gas did not reach a major scale until 1984; in 1987 it had grown to 3 million tons of oil equivalents, however.

This means that 65 percent of Danish consumption of oil and natural gas – corresponding to 40 percent of total energy consumption – is covered by the oil and gas production in the Danish part of the North Sea.

The known reserves of oil are on the order of 165 million tons, and the reserves of natural gas about 158 million tons of oil equivalents. This can be compared to an annual energy consumption on the order of 21 million tons of oil equivalents. In other words, the known reserves cover something like 15 years of energy consumption at the present rate, without taking expected new finds into account; at the present rate of production, the known reserves will last more than twice as long.

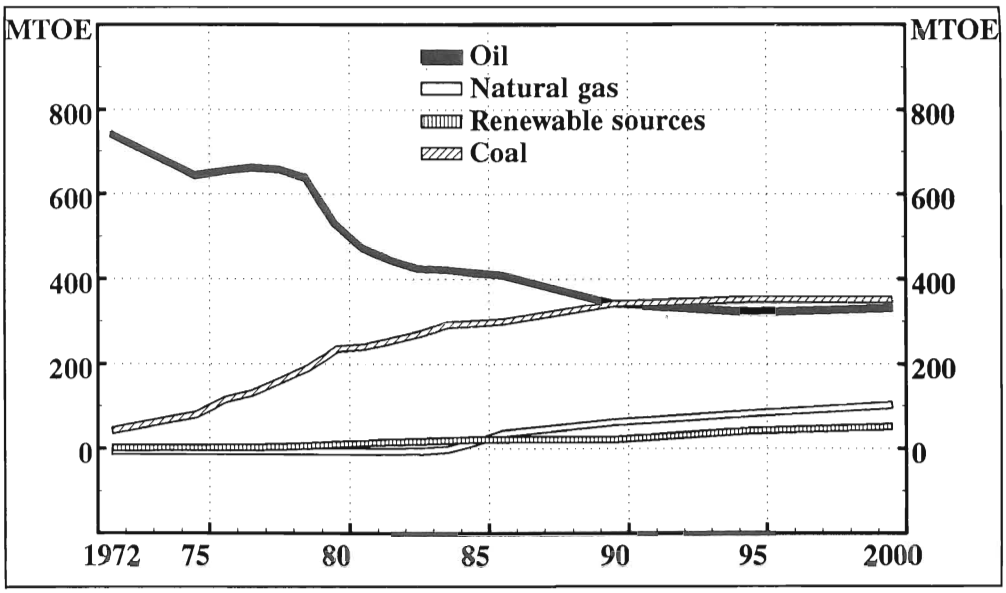
In 1979 it was decided to establish a national network for natural gas. By now, a decade later, the construction of this network is nearly finished.

Present plans, then, indicate a continuation of the trend of decreasing reliance on oil, while other sources of energy gain in significance (viz. figure III:15).

The degree of self sufficiency (share of domestic energy production in total energy consumption) is projected to reach a level of 50 percent in the early 1990s, but will then decline slightly during the decade. Self sufficiency in oil and natural gas is planned to be around 90 percent in the early 1990s.

The success of the Danish energy policy has now been threatened by the EEC policies in relation to the single market. An integral part of the single market is the harmonization of excise taxes; a harmonization of the excise taxes on energy at (or near) the present average level in the community would jeopardize the Danish energy policy. As other countries due to environmental considerations now to an increasing degree are willing to accept restrictions on energy use this is a problem which may never materialize, however; it is quite likely that the common level of the excise tax will be at much higher level than the present average, or that countries will be permitted to have different levels of excise taxes relating to this group of products.

Figure III:15. Danish Energy Consumption 1972–2000 by Primary Energy Source.



Source: Ministry of Energy, op.cit.

4.4. Transportational Infrastructure Projects

The construction of two links (a train tunnel-and-bridge link and a highway bridge) across the Storebælt (Great Belt) was started in 1989. With a budget of about DEK 19 billion, it will constitute an important part of large-scale public investments through the planned construction period, 1989–1996.

Besides its status as a major construction project this project will be of considerable economic importance to Denmark, as it will change the socio-geographic structure of the country by its impact on the transportation infrastructure and, hence, on transport costs, the location of industry and the possibilities for day trips.

The immediate consequence of the project are:

* A drastic reduction in the transportation time between major parts of the country,
* Elimination of the inherent vagaries of ferry services, and
* Elimination of the bottleneck problems associated with the present ferry services.

Transportation time is reduced from the present approximately 60 minutes plus the time spent waiting for ferries, embarking, etc., to the time required for trains or cars to drive 19 kilometers. It has been calculated that this can be seen as the equivalent of a reduction of distances on the order of 150 to 600 kilometers. (A reduction on the order of 150

kilometers is insignificant in the international context: The distance from the Scandinavian Peninsula and Copenhagen via Jutland to Hamburg, for example, becomes no shorter than the present route using the ferry service across the Fehmern Belt. But the higher figure is very significant in the Danish context, with possibly profound effects on the regional development.)

As a consequence, productivity in the transport sector will grow, and transportation costs will decrease. An important question to ask is what types of transport will benefit from this.

The effects can be compared to the effects of the EEC single market. An important physical trade barrier will be removed, although there will still be a "duty" in the form of toll payments. (The price of crossing is planned to be about the same as on today's ferry services; the time savings involved will of course still represent a major benefit.)

Many companies will undoubtedly be able to gain from structural adjustments based on the reduction of transport time. The major benefits will accrue after 1996, when the road link is scheduled to be ready, but the benefits will start accumulating after the opening of the train connection in 1993.

It should be pointed out that this project is of major nationalpsychological significance, on a scale similar to the importance of the channel-tunnel link to Great Britain. While it is hard to estimate the economic consequences of this, it is a significant point that the effect of the Great Belt connection will surpass the purely logistic rewards.

From a Nordic point of view, it may become significant that the establishment of the Great Belt connection will wipe out the political opposition to building a fixed connection across Öresund, the sound connecting Denmark and Southern Sweden. It seems likely that this will be the next connection built, while a bridge or tunnel across the Fehmern Belt may be delayed until the Great Belt connection has yielded a fair return on the investment. On the other hand, the connections across Öresund and the Fehmern Belt may be seen as a 'package', which besides its obvious benefits to Denmark will greatly reduce transport times from the Scandinavian Peninsula to Northern Germany and Central Europe. To fully gain the benefits of the connection across Öresund, there has to be a better connection across the Fehmern Belt as well. And, as these connections will quite likely be financed by private capital, it seems likely that a 'package deal' will be established, linking Southern Sweden and Northern Germany with road and rail links through Denmark some time in the second half of the 1990es.

4.5 The Danish Tax System and European Economic Integration

The structure of the Danish tax system differs from the structures of the systems in all other EC countries.

At the same time, the tax pressure (total taxes relative to GDP) is the second highest in Europe. But if the taxation of public transfers are excluded from the taxes and if the public finance surplus is neutralized, the "expenditure pressure" in Denmark is lower than the pressure in Belgium, Sweden, the Netherlands and Italy.

The Danish system is based on high **direct taxation** (i.e. high income taxes) instead of social/labor market contributions paid by the employers. Therefore Denmark has higher VAT and excise taxes, too.

If the Danish system is compared with the systems of the other Nordic countries there are still differences: Both Norway and Sweden have higher social/labor market contributions. But the VAT and the excise duties are at about the same level in Denmark as in the other Nordic countries.

At the beginning of **1987** an **income tax reform** was introduced in Denmark. Until then personal income was taxed according to a system of progressively rising tax rates. Personal income was computed as the sum of all personal income regardless of source less various types of deductible expenditures.

The Danish income tax system after the 1987 reform is based on a division of the personal income taxation:

* **Personal income** consists of wages and salaries, pensions and surplus from privately owned firms.
* **Capital income** consists of interest, dividends, rental value etc. Interest expenses can only be deducted with respect to capital income. Capital income can be positive or negative.

The sum of capital and personal income after deduction of various general deductible expenditures **('taxable income')** is taxed at a flat rate of approximately 50 percent (it varies a little due to differences in local tax rates). As capital income is directly included in the taxable income even when it is negative, interest expenses give an immediate tax reduction of 50 percent.

The progression in the tax system is ensured by levying an extra 12 percent central government tax on income exceeding DEK 200,000. As mentioned above **'taxable income'** cannot be reduced by deducting interest expenses. Furthermore, an extra 6 percent central government tax is levied on the sum of positive net capital income and personal income if it exceeds a threshold of DEK 130,000.

The highest tax rebate on deductible interest expenses is therefore reduced to around 56 percent and for a big part of taxpayers it means that the marginal tax value has been reduced from the above mentioned 73 percent to around 50 percent. In this case it means that the burden of interest expenses after tax has been doubled. (Only when capital income is positive will the rebate be 56 percent).

Aiming at damping private consumption and thereby attempting to stop the accelerating balance-of-payment troubles a policy package was introduced in October 1986 targeting the credit financed private consumption.

From January 1987 a 20 percent surtax was levied on net interest payments on consumer credits. Dividends, interest income and calculated capital income from privately owned firms are deducted from the interest payments. Net interest expenses are corrected for interest expenses in connection with housing, business and education.

The combined effects of the 1987 tax reform ("tax reform I") and the interest payment tax were a substantial increase in the real after-tax rate of interest. This is illustrated in the following tables.

Table III:8 shows the development in the real after-tax rate of interest for a taxpayer without positive net interest income and with an income in the top income tax bracket. If he took out a loan at a rate of interest equal to the mortgage deed rate of interest in 1986 (11.85 percent), the

Table III:8. Real After-Tax Rate of Interest on Newly Established Private Consumer Loans Including the 20 Percent Surtax (For Person in the Highest Tax Bracket).

tax year	rate of interest	after tax	+ 20 % surtax	nominal expense	infla-tion	real after-tax interest rate with marginal	
						73 %	50 %
	percent						
1979	19.91	5.4	–	5.4	9.6	−3.9	0.0
1980	21.35	5.8	−5.8	12.3	–	5.8	−1.4
1981	21.47	5.8	–	5.8	11.7	−5.3	−0.9
1982	20.89	5.6	–	5.6	10.1	−4.1	0.3
1983	14.14	3.8	–	3.8	6.9	−2.9	1.6
1984	13.99	3.8	–	3.8	6.3	−2.4	0.7
1985	10.93	3.0	–	3.0	4.7	−1.7	0.7
1986	11.85	3.2	–	3.2	3.6	−0.4	2.2
1987	12.66	6.3	2.5	8.8	3.9	4.7[1]	
1988	11.68	5.8	–	5.8	4.6	1.2	

Sources: Danmarks Statistik (Central Statistical Office of Denmark), various publications, and own calculations

Notes:
Excl. transitional arrangements in 1987 and 1988.
The interest rate is the average rate on private housing mortgage deeds that year. The "after-tax" rate is defined as the highest marginal tax rate (i.e. 73 percent before the latest tax reform and 50 percent after the reform). The inflation rate is calculated using the consumer price index.

[1]) Since 1987, the "tax rebate" is independent of the tax bracket with regard to non-capital income. The figures relate to taxpayers with negative capital income. Excluding the 20 percent surtax, which – after various political compromises – will only be applied in the year 1987, the real after-tax rate of interest was 2.3 percent in 1987.

nominal rate of interest after tax would be less than the rate of inflation meaning that the real after-tax rate would be negative.

If the same tax-payer took out a loan on the same conditions in 1987 the share of the interest expenses financed through tax discount would fall from 73 percent to around 50 percent of the nominal costs of the loan because of the tax reform. If the loan was subject to the 20 percent surtax on interest payments – as were all private consumer loans in 1987, except loans for housing or education – the increase in the after-tax interest rate was even higher.

In 1987 interest rates rose to 12.7 percent. With a 50 percent tax discount, the after tax expense was 6.3 percent; if the 20 percent surtax was applicable – i.e. the loan was a private consumer credit – the further 20 percent surtax on the nominal interest payments increased the after-tax price of the loan by about 2.5 percent, i. e. from 6.3 percent to 8.8 percent of the nominal value of the loan.

Older loans were exempted from the 20 percent surtax, but the effect of the tax reform is still very significant, and even more so because of the interplay with the falling rate of inflation.

An example might clarify the point (viz. table III:9): For a loan taken in 1979 with a fixed rate of interest of 19.9 percent, the real after-tax rate of interest for taxpayers within the top income bracket was approximately 1.7 percent in 1986, before the introduction of the tax reform (and this was a historically high real rate of interest compared with the situation in the beginning of the 1980s where the rate of inflation had made the real rate of interest negative). After the tax reform (not taking transitional arrangements into consideration) the real after-tax rate rose to 5.9 percent.

Table III:9. Real After-Tax Rate of Interest on a Loan with a Fixed Rate of Interest Taken in 1979.

year	rate of interest	after tax	infla-tion	real after-tax interest rate
	percent			
1979	19.91	5.4	9.6	−3.9
1980	19.91	5.4	12.3	−6.2
1981	19.91	5.4	11.7	−5.7
1982	19.91	5.4	10.1	−4.3
1983	19.91	5.4	6.9	−1.4
1984	19.91	5.4	6.3	−0.9
1985	19.91	5.4	4.7	0.6
1986	19.91	5.4	3.6	1.7
1987	19.91	10.0	3.9	5.9
1988	19.91	10.0	4.6	5.2

Sources and notes: As for table III:8.

For the private consumer/borrower in the highest marginal tax bracket, the real after-tax rate of interest has increased by approximately 10 percentage points from 1980 until 1987 reflecting interest rate changes, the 1987 tax reform and the introduction of the 20 percent surtax (viz. table III:8).

For low-income groups the picture is rather different; as the marginal tax rates before the reforms were lower, the reduction of the tax rebate to 50 percent made no difference to most low-income taxpayers. Changes in the relative levels of interest rates, inflation, and taxation still imply a considerable growth of real after-tax interest payments for this group, but the increase is smaller than for high-income groups.

The Danish level of **indirect taxation** is the highest in the EEC, but the level is about the same as in the other Nordic countries. Almost all goods and services are taxed by VAT. And they are taxed at the same rate – 22 percent – which is a rather high level by international standards. Denmark has the highest average VAT among the EC member countries.

The relative budgetary importance of VAT and the excise duties is the same in Denmark. There are a lot of different excise duties and the number is very high compared to a Common Market standard. About 20 different goods are taxed.

Differences in the tax levels among EC countries make border controls necessary. Therefore the EEC Commission finds that a **harmonization of the excise duties and value added taxes is required** if the single market is to be realised.

The Commission proposes an introduction of two different VAT levels. One – the general level – in the interval of 14–20 percent and a lower level in the interval of 4–9 percent.

If Denmark follows the proposal a reduction of 2 percent in the general VAT rate has to be introduced and a reduction of 13 percent has to be made for the goods and services taxed by the low rate.

If the proposal on VAT is followed it means that the Danish state may loose an income of DEK 20 billion equal to about 10 percent of present expenditures to state consumption.

At the same time, the Commission is proposing to take away all **excise duties** except on five type of goods, that is energy, tobacco, beer, wine and spirits, and those goods are proposed to be taxed at levels far below the present levels in Denmark. The proposed levels are formed as an average of the present level of taxation in the 12 EC member countries.

The proposals on energy taxes will in the Danish case lead to a changed energy policy and to a loss of DEK 10 billion for the state. In the case of tobacco the price of a pack of 20 cigarettes is expected to fall by DEK 12. The tax on spirits is proposed to be lowered by 40 percent. The tax on ordinary wine is proposed to be set down from DEK 12.60 to DEK 1.35 per liter. And the tax on beer from DEK 4.82 per liter to the same level as on wine, i.e. DEK 1.35 per liter.

The harmonization of the excise duties (including energy taxes) will give the state a loss of DEK 20 billion.

The proposals of the EEC Commission are a proposal. Decisions on **tax policy** have to be made in the Minister Council. That means that each member country in principle has the possibility to veto the proposals.

But by consenting to "**The Single Act**", the member states of the EC are obliged to remove all restrictions for free exchange of products and labor across the borders inside the Common Market. In Denmark a majority of the population supported the Single Act by a referendum in 1987.

In the spring of 1989 several **plans for new tax policies** were proposed. At the end of May 1989 the government presented its comprehensive policy proposal, "The Plan". Before the presentation The Prime Minister labelled The Plan "the most comprehensive policy proposal in the history of Denmark". Shortly before the publication of "The Plan" the Social Democrats – the largest opposition party – presented their tax policy plan.

The tax policy plan of the government aims at redistribution/ expenditure cuts of some DEK 40 billion. A substantial part of the tax reductions are to be financed by expenditure cuts. **Direct taxes** are proposed to be lowered by about DEK 36 billion.

The personal income tax is proposed to be lowered by some DEK 31 billion. Marginal tax rates on personal income will range from 44 percent up to 52 percent, depending on the level of income. Tax rates on capital income are to be cut from the 50 percent to 40 percent. The core of "The Plan" is therefore to lower the tax on income.

Corporate taxation was proposed to be lowered by some DEK 5.5 billion – from the rate of 50 percent (at the time of the plan) to 35 percent. (It has since, as a first step, been lowered to 40 percent).

It is worth noting that regarding the excise duties the proposal is not in line with the proposals of the EC Commission on harmonization of income tax and VAT.

The tax reductions described above are proposed to be financed through a widening of the tax base. In accordance with the international trend this is to be done by reducing tax deductions.

Finally cuts in central government spending of some DEK 7.5 billion is anticipated and so is a reduction of 6 billions on local government spending.

A number of parties in opposition have contributed to the debate with their own plans, the most significant being that of the largest opposition party, the Social Democrats. There are substantial differences between the two plans and as the present coalition government does not have a majority in the Folketing (parliament) widespread negotiations have to be expected.

In the autumn of 1989 there were negotiations between the government and the Social Democrats, but in order to get the budget for 1990 passed, the government made a compromise with the rightwing Progress Party (i.e., the tax refusal party). Negotiations with the Social Democrats on the long-term tax reform were suspended, at least temporarily. It seems very likely that the negotiations will restart in 1990.

The budget for 1990 did make a start on the necessary adjustments in the taxation system, however. The taxation of company profits was reduced from 50 percent to 40 percent, and the 20 percent surtax on interest payments (for persons with negative capital income) was repealed, partly because the administration of it was too costly, partly because it already had achieved its aim: The psychological impact was much larger than the financial, and the message had been understood by the consumers – or so it seems.

The present political situation is quite complicated, and the final results of the negotiations may vary considerably from the plan outlined above. But it seems fairly certain that tax rates will be reduced in a package deal – which includes a widening of the tax base – within a few years, possibly already in 1990.

CHAPTER IV

Finland: Back to Reality – Economic Growth Has to Slow Down

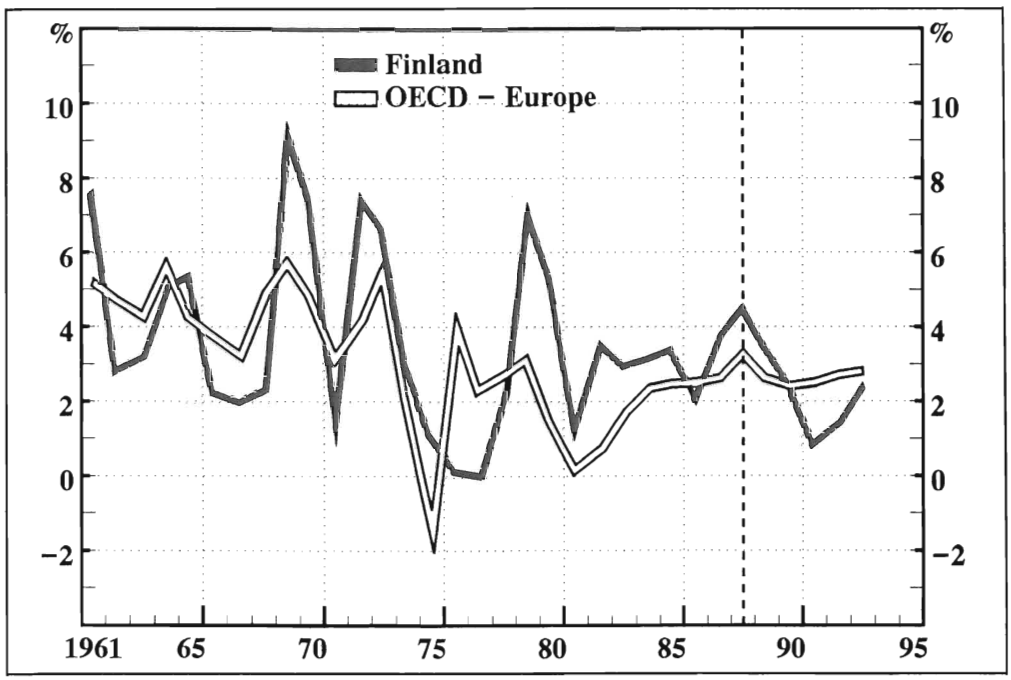
Contents

1. The Recent Performance of the Finnish Economy

The economic growth in Finland has been by any standards very strong in the 1980s, especially in its latter half. The average growth of the European OECD-countries has been exceeded by a large margin. Investment in increasing productive capacity picked up late in the 1970s and investment has been buoyant since that time. During the last few years, however, the majority of the productive investment has been directed towards modernization and rationalization rather than directly towards increasing capacity. Thus, in an economy where price competitiveness has been deteriorating due to ever increasing relative labor costs, the focus has been on improving real competitiveness. This has led to absolute diminishing of the labor force employed in the manufacturing industries while production has switched to more capital intensive forms. The service sector, most notably the public sector, has easily absorbed the idle labor force, so there have been no major problems with increased unemployment. In fact, the situation in the labor market has recently been marked by a shortage of skilled labor. The labor force is no longer increasing at the rates it used to in the early 1980s. Demographic factors like the large age groups born after the Second World War attaining the active labor age and the increased participation of females in the labor force have already left their mark.

In addition to the strong showing of investment, private consumption has picked up vigorously, too. The liberalization of the domestic credit markets has enabled households to finance much of their consumption

Figure IV:1. Gross domestic product in Finland and in European OECD countries, changes in volume.



by increased indebtedness. The households' savings ratio has accordingly taken a nose dive. The wage earnings have also increased favorably, thereby creating favorable expectations about future earnings in addition to increasing the purchasing power of the households. The 1980s has been very much a decade of closing the gap in private consumption between Finland and the other Nordic countries.

The Finnish foreign trade has experienced substantial changes since the early 1980s. When oil prices peaked after the second oil crisis, Finnish foreign trade with the Soviet Union soon amounted to a fourth of the total foreign trade. As oil prices have come down dramatically from those years' levels, Finnish exports to the Soviet Union have done the same. The effects of this trend have hit hardest that part of the Finnish consumer goods industry whose survival, as we now realize, could not have been maintained without the added demand from the Soviet Union. It has been extremely difficult for this industry to direct its production either to the Western export markets or to the domestic markets mainly due to poor price competitiveness. Production has thus been slated to be cut back. On the other hand, industries like the forest, the chemical and large parts of the metal industry have fared well on the Western export markets, where they have been able to benefit from the long uninterrupted economic growth. These industries have also increased their production capacity abroad by making direct investments in the countries where their production is aimed at. Much of this investment activity can be attributed to safeguarding the footage in the unifying European markets, but some of it is also due to high production costs in Finland.

Figure IV:2. Changes in the consumer price index in Finland and in the OECD countries.

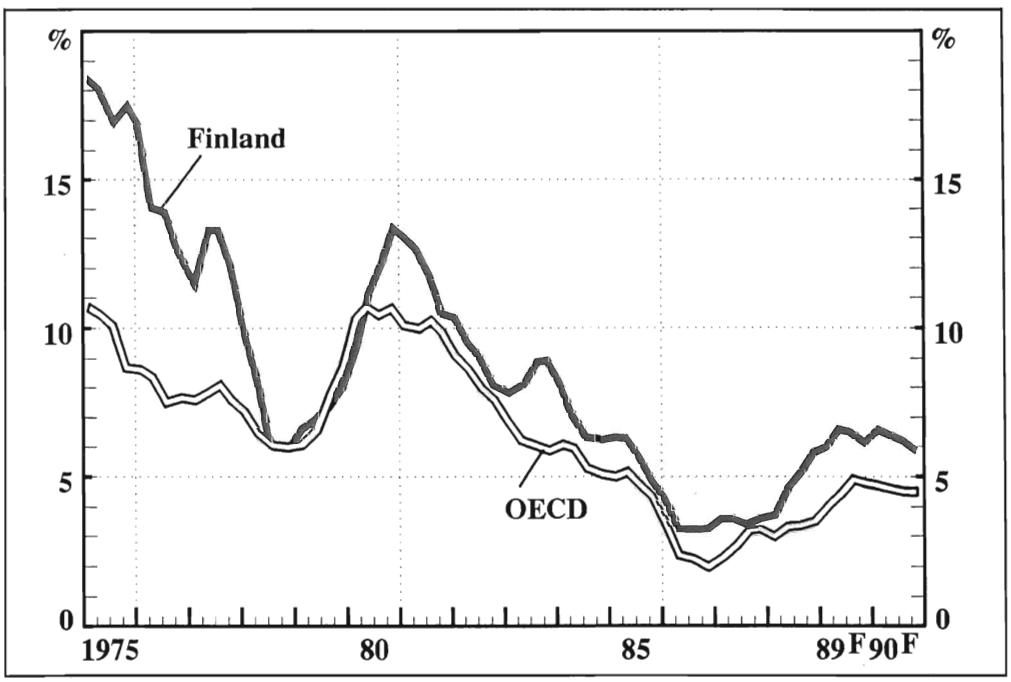
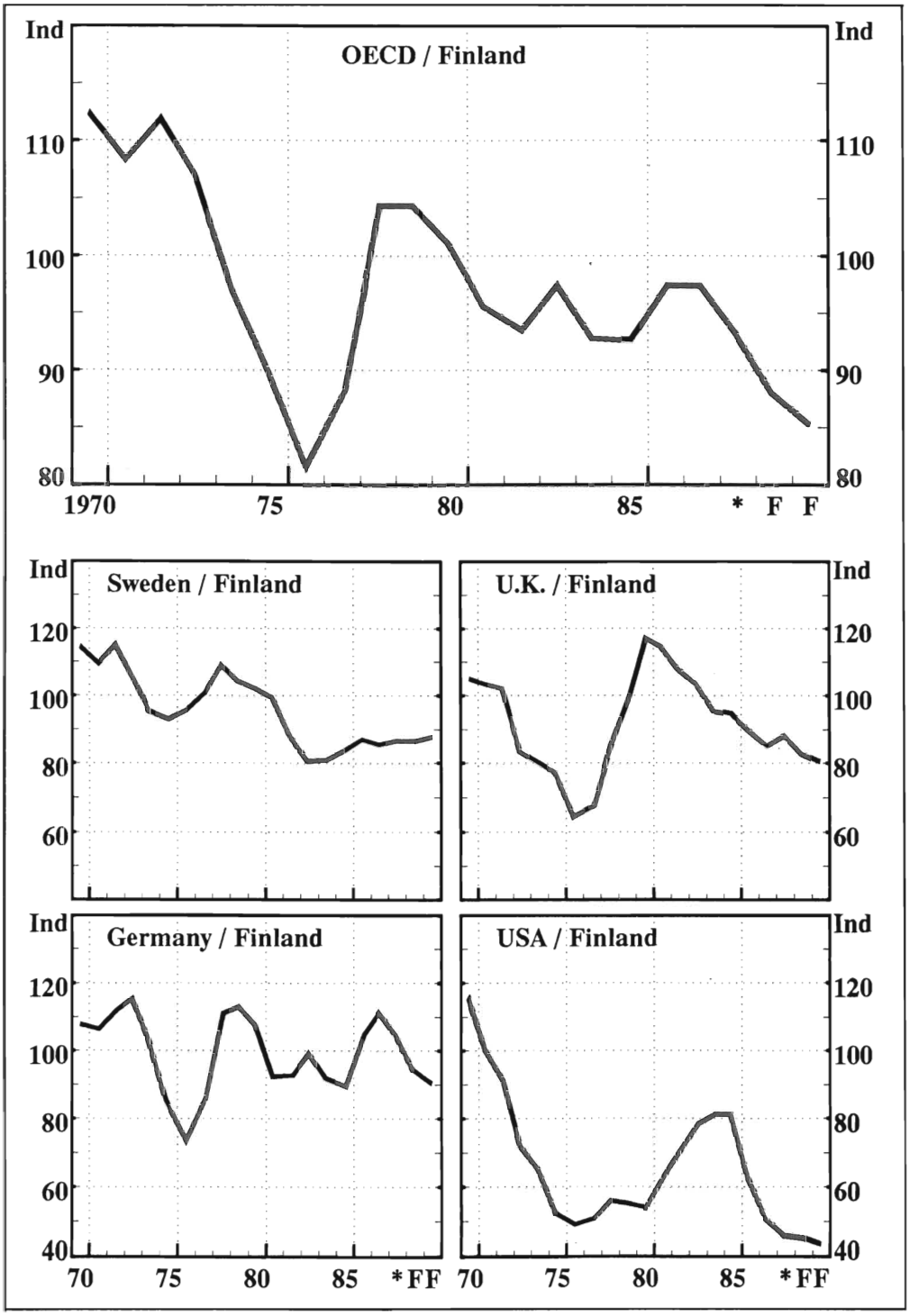


Figure IV:3. Finland's unit labor costs in relation to those in the OECD countries and Sweden, U.K., Germany and USA (average 1968–87 = 100).



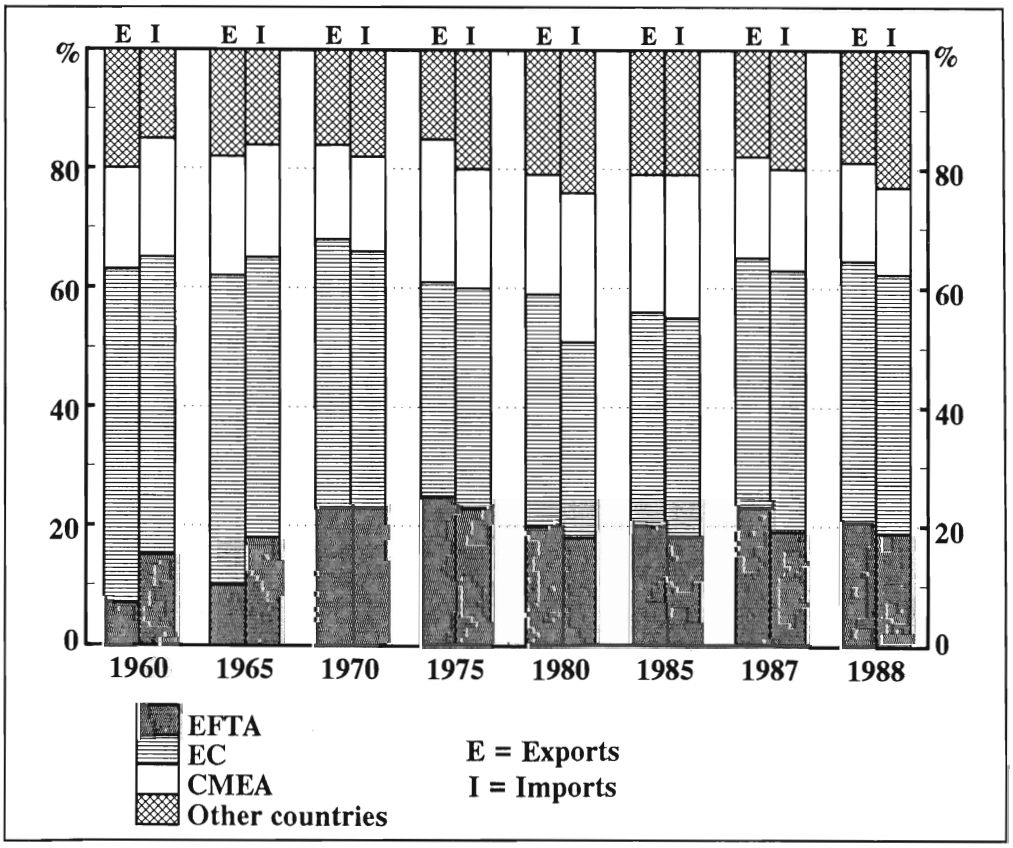
The strong domestic demand has created problems for the external balance. The exports have not been able to keep pace with the rapidly increasing imports. Imports of investment and consumption goods have experienced a rapid rise. The surplus in the trade balance has by now turned into a deficit and the current account is deteriorating alarmingly. There appears to be no other cure to the problem but to somehow slow down the economic activity well below that of the export and competitor countries. Surpluses in the trade balance should be attained soon so that the adjustment process can be started to stop the increase in the net foreign debt.

2. Macroeconomic Outlook to 1993

2.1. Overview: Tightening Economic Policy Needed and Anticipated

The Finnish economy has in many respects become overheated, leading to the acceleration of inflation and deterioration of the current account.

Figure IV:4. Foreign trade by countries.

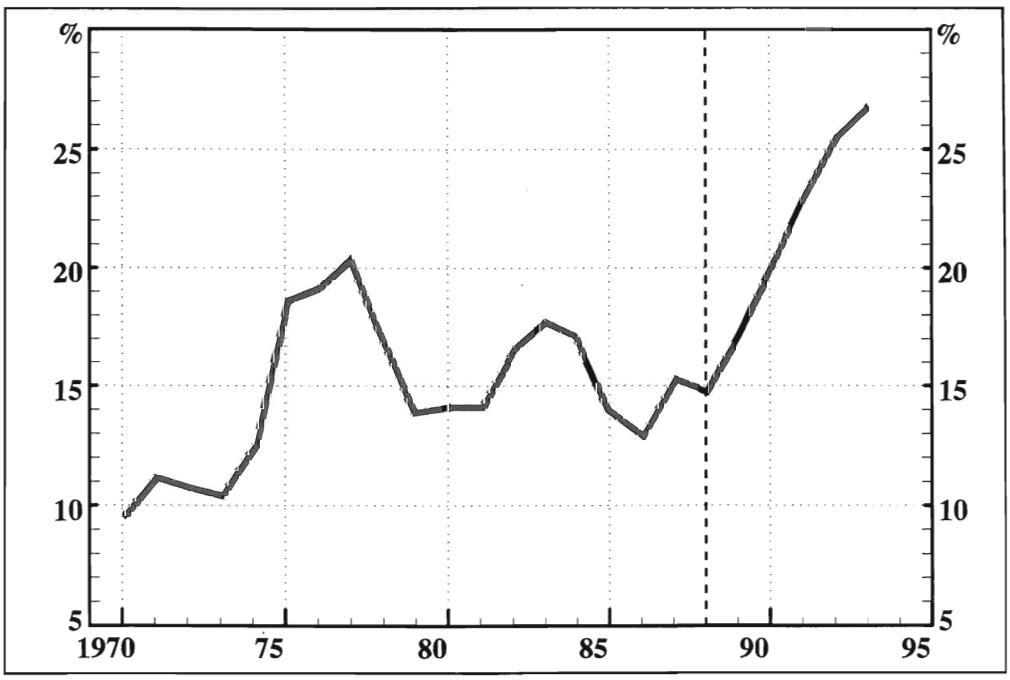


Continued increases in private consumption at a 4–5 percent pace, which is clearly faster than that of output, would generate unbearable pressures for sustaining the favorable growth in the economy.

One of the most striking developments having an impact on the overall Finnish economy during the past few years has been the liberalization of the financial markets. This has occurred at a time when economic growth has already been vigorous. Also the pent-up demand of households for credit has been unleashed upon the housing markets and caused consumer credit to expand at an unforeseen pace. The most serious consequence of this has been the skyrocketing of housing prices during the past couple of years. On the positive side it should be noted that there has been a rapid expansion in housing production, which means that in a few years there will be more dwellings than there would have been without the price rise. On the other hand, it follows that real housing prices will apparently be lower in a few years than they would have been without the increased housing production.

As the growth of private consumption decelerates, this will slow down the growth of the closed sector of the economy, with especially investment by the service sector slackening off. Investment in housing will start to decline already before this. There should be no reason for a slowdown in the open sector if domestic costs are held in check. The level of total investment in 1993 will be the same as in 1988. Machinery and equipment investment will rise modestly, but building investment will decline.

Figure IV:5. Net foreign liabilities in relation to GDP, %.



The slowdown in the growth in the volume of public expenditures should play a crucial role in the tightening of incomes and fiscal policy. The increase in the expenditures of the central government is anticipated to slow down to just under 2 percent from the 2.5 percent growth of the previous five-year period. The expenditures by local government rose by as much as 4.3 percent on average during 1984–1988, but during the beginning of the coming five-year period growth will average 3 percent. Even though this seems to be a sizable drop, the expenditures by the local government sector still constitute the fastest growing component of domestic demand.

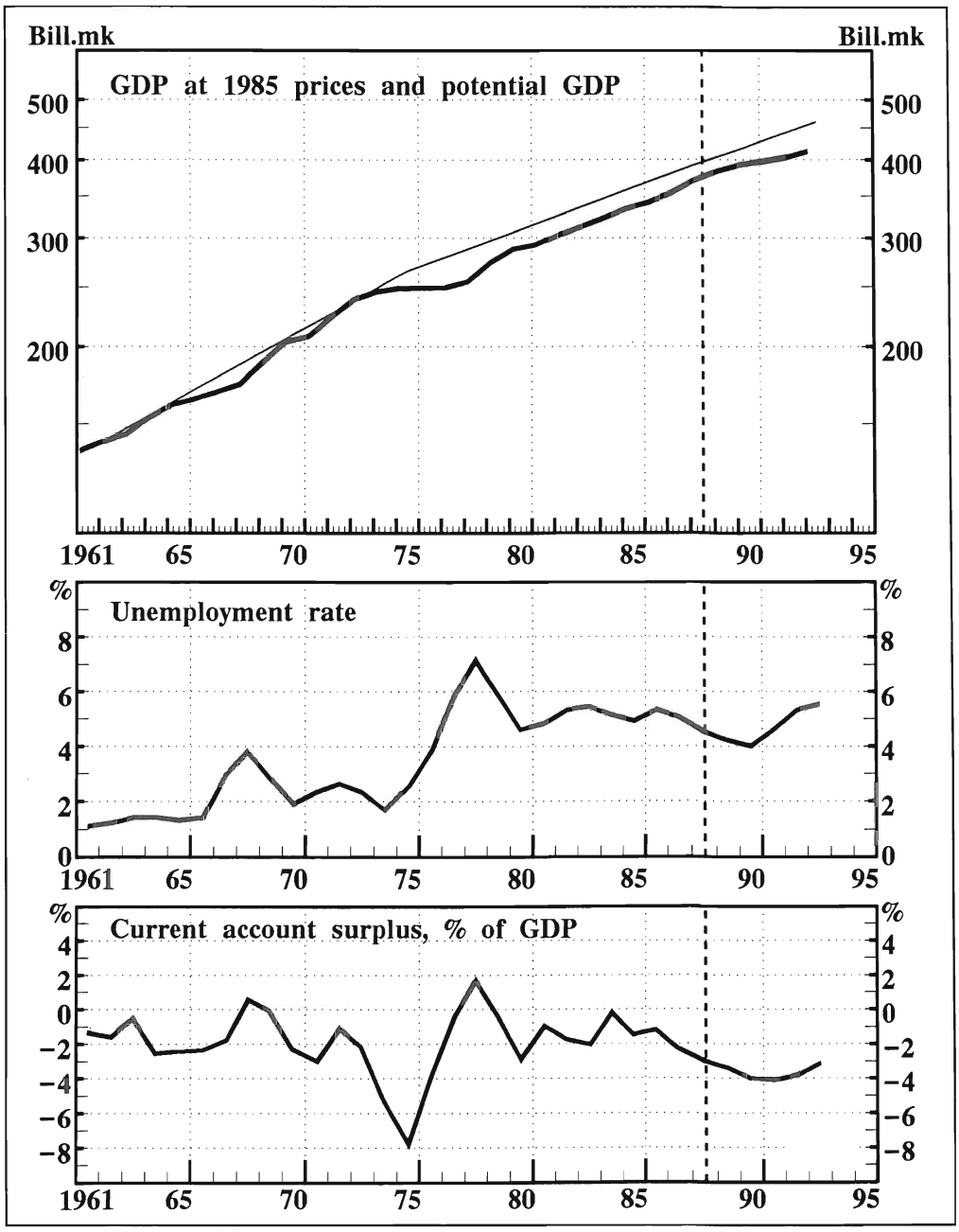
Due to the current account deficit and relatively fast inflation it is not possible to ease the monetary policy in the near future. Whether further tightening will become necessary depends much on domestic inflation developments and shifts in international interest rates. The pressures from abroad seem to be overshadowed by those at home. The differen-

Table IV:1. Balance of resources and expenditure.

Item	1988* Bill. FIM	Average annual change, % 1988→1993			Index in 1993 1988 = 100			1993 Bill. FIM
		Volume	Price	Value	Volume	Price	Value	
Gross domestic product in purchasers' values	437.5	2	4.5	7	113	125	139	608.9
Imports	109.6	2.5	3.5	6	112	118	133	145.5
– goods	91.2	2.5	3.5	6	112	118	131	120.7
– services	18.4	2.5	3.5	6	114	118	135	24.8
Total resources	547.1	2	4.5	6.5	112	124	138	754.4
Exports	108.4	2.5	4	6.5	114	121	138	149.9
– goods	91.4	3	4	6.5	115	121	139	126.6
– services	17.0	2	4.5	6.5	109	125	138	23.4
Investment	107.8	0	5	5	100	127	127	137.0
– private	93.8	–0.5	5	4.5	98	127	125	117.0
– government	14.0	2.5	5	7.5	113	127	143	20.0
Consumption expenditure	323.7	2.5	4.5	7	112	125	140	453.8
– private	234.1	2	4	6.5	111	123	137	320.3
– government	89.5	2.5	5.5	8.5	114	131	149	133.5
Change in stocks[2])	0.5	0.3[1])	. .	. .	. .	. .	. .	13.7
Total demand	547.1	2	4.5	6.5	112	124	138	754.4

[1]) Contribution of changes in stocks to the growth of total demand, percentage points.
[2]) Including statistical discrepancy.

Figure IV:6. Economic developments.



tial between interest rates for the Finnish markka and for foreign currencies abroad necessary to finance the current account deficit must be maintained under the conditions of present exchange rates.

2.2. Foreign Trade: Current Account Deficit is Worrysome

The volume of goods exported during the period of 1989–1993 will rise by about the same amount as during the preceding five-year period. The expansion of exports to Western countries will be relatively swift due to the favorable economic climate prevailing in the OECD countries. The risks associated with the Western export developments are, however, increasing. The volume of exports to Eastern countries will continue to shrink for a few years, but towards the end of the forecast period it will start to rise again along with an equalization of the bilateral payments.

Exports will experience their strongest growth in the paper, engineering and chemical industries. Exports of other industrial branches will continue to experience slower than average growth. Within the industrial branches attention will increasingly be focused upon products with a high degree of technology and knowhow. This is inevitable since Finland is unable to compete in areas that are labor and raw-material intensive due to the high level of costs. The rapid pace of the earlier expansion in Western exports has been due to the swift economic growth in the OECD countries, the gradual build-up of supply pressures resulting from imbalances in the bilateral trade with Eastern countries, and the fact that the export structure and productive capacity of Finland corresponds relatively well to the present import requirements of Western countries.

The forthcoming integration of Western European economic markets will generate additional demand for investment goods, especially in the EC countries. The product structure of the Finnish metal and engineering industry is not necessarily geared up to meet the specific needs of the

Table IV:2. Merchandise exports.

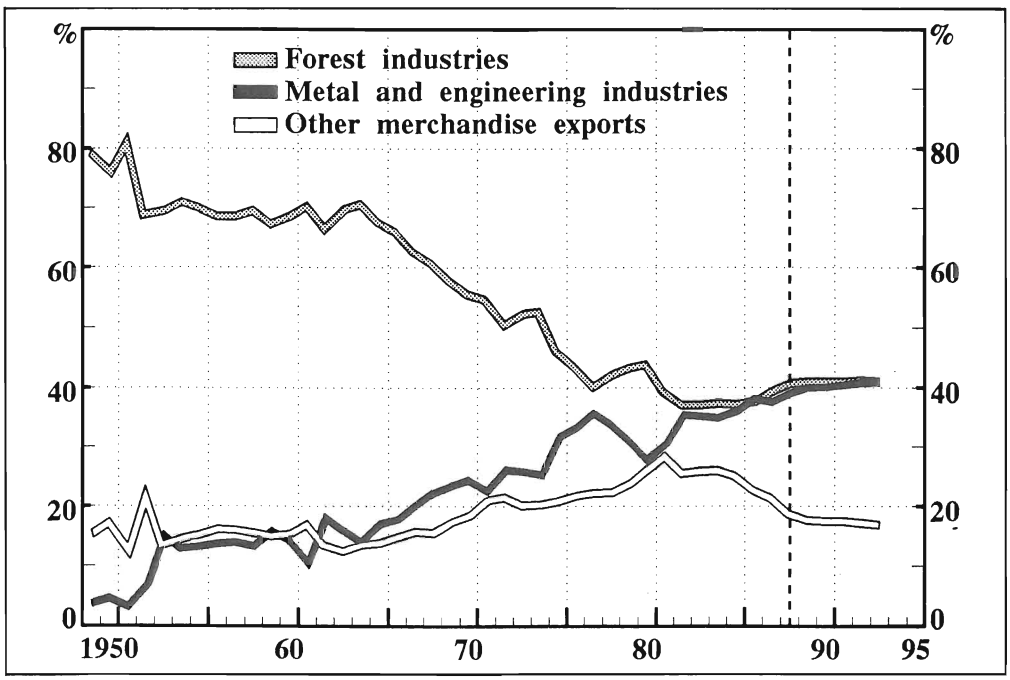
Activity	1988 Bill. FIM	Average annual change in volume, %			
		1973→78	1978→83	1983→88	1988→93
Wood industry	7.6	0.2	−0.5	−0.5	−0.5
Paper industry	30.8	−0.6	3.8	6.3	4
Metal industry	36.8	8.5	5.5	3.9	3.5
Other industry	16.1	4.9	6.2	0.1	1
Total merchandise exports	93.1	3.5	4.4	3.2	3
– to Western countries	77.3	1.9	2.8	5.0	4
– to Eastern countries	15.8	9.3	9.2	−7.5	−3.5

rising demand. Despite the favorable expansion of Western exports, the balance of Finnish exports is still tilted too strongly in favor of commodity groups experiencing slower than average growth.

During the last five-year period, the volume of Finnish exports to Eastern countries shrunk by an average of 7.5 percent a year. The cutbacks occurred for the most part starting in 1986 after the price of oil fell dramatically. Since oil constitutes the bulk of Finnish imports from the Soviet Union, the drop in the price of oil has meant that Finland had to cut back on its exports in order to counterbalance the bilateral trade. During 1989–1993 the volume of exports to the Soviet Union is anticipated to decrease 3.5 percent a year on average, with the greatest decline occurring in the beginning of the period. Exports may swing upwards again toward the end of the period.

There will be some significant changes in the trade arrangements with the Soviet Union during the forecast period. The guidelines regarding the trade taking place in 1991–1995 will be looser than previously. The share of trade transacted in freely convertible currency will also grow, but the clearing system will remain as the basis of the bilateral trade. The independence of purchasing firms in the Soviet Union will grow, which will mean that marketing will become more important. If the perestroika phenomenon occurring in the Soviet Union ever brings about a freely convertible rouble, this will not occur before the latter half of the 1990s.

Figure IV:7. Merchandise exports by kind of economic activity, percentage share of total.



The volume of imports is expected to increase during 1989–1993 at a rate of 2.5 percent on an annual average basis, i.e. half a percentage point faster than domestic demand. The growth of imports will still be rapid in the beginning of the forecast period, but already by 1991 the growth is anticipated to stop. This reflects the slowdown in the growth in private consumption and the weakening of investment.

The current account deficit in relation to GDP will increase until 1991, but after this the sharp decline in domestic demand will reduce the deficit. By 1993 the ratio will fall back down to the same level as in 1988, i.e. 3 percent of GDP.

Figure IV:8. Volume of merchandise exports to Western and Eastern countries (1980 = 100).

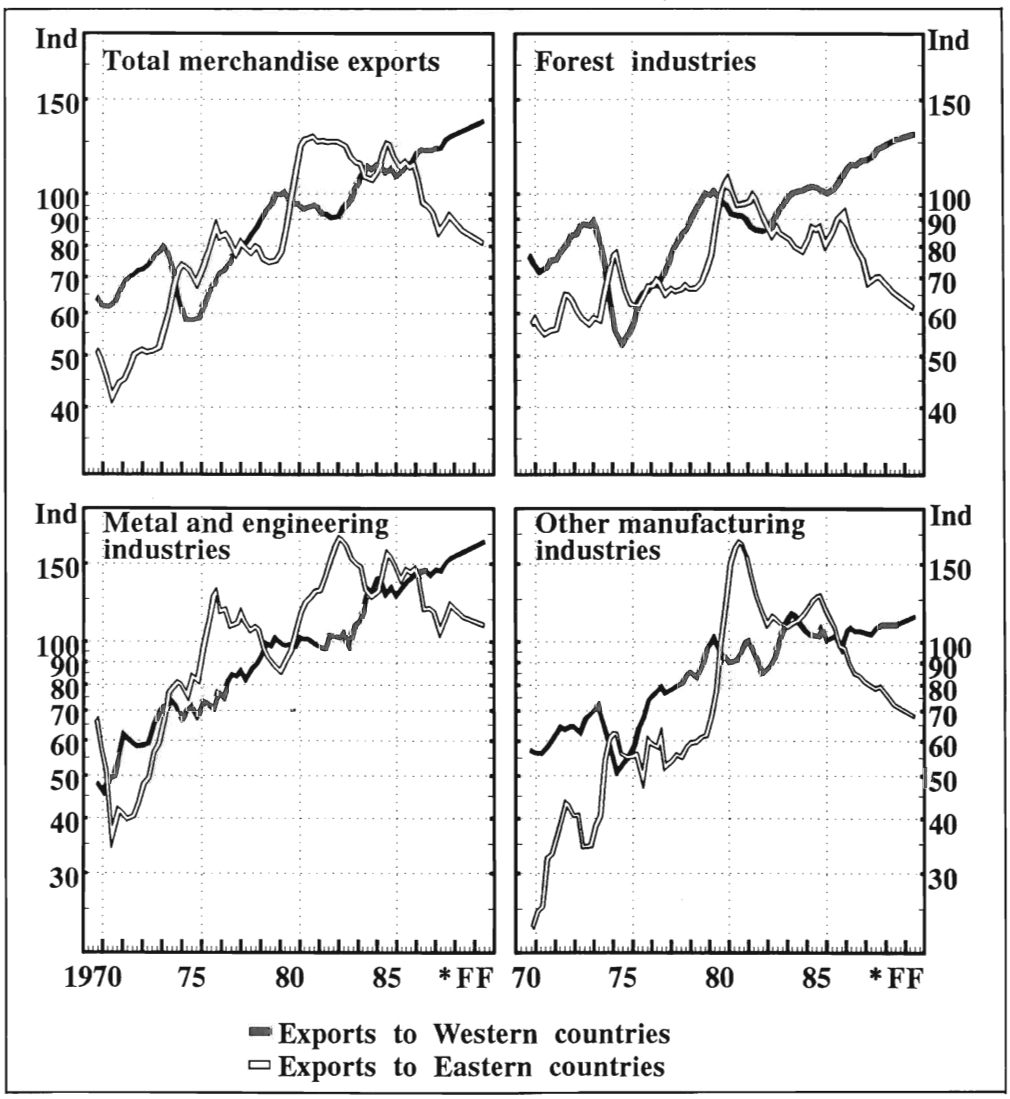
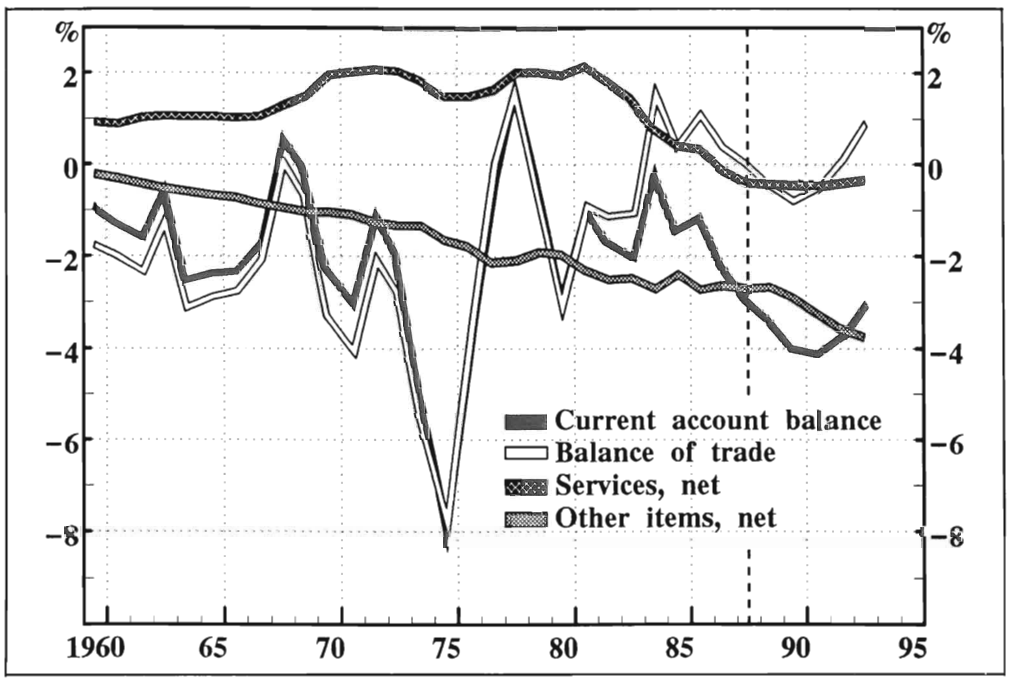


Table IV:3. Merchandise imports.

Commodity group	1988 Bill. FIM	Average annual change in volume, %			
		1973→78	1978→83	1983→88	1988→93
Raw materials, etc.	50.1	−1.5	4.6	3.6	2
Fuels and lubricants	3.1	1.5	−1.8	5.5	5
Investment goods	17.3	−5.0	10.4	6.0	2
Consumer goods	20.9	−1.5	10.0	10.5	4
Total merchandise imports	92.1	−2.1	5.5	5.7	2.5

Figure IV:9. Current account surplus by components in relation to GDP, %.



The current account deficit is so large that the Finnish net foreign debt will swell each year, accounting for 27 percent of GDP by 1993. Halting the growth of the share of net debt relative to GDP would require a shrinkage of the current account deficit down to about 1.5 percent of total output.

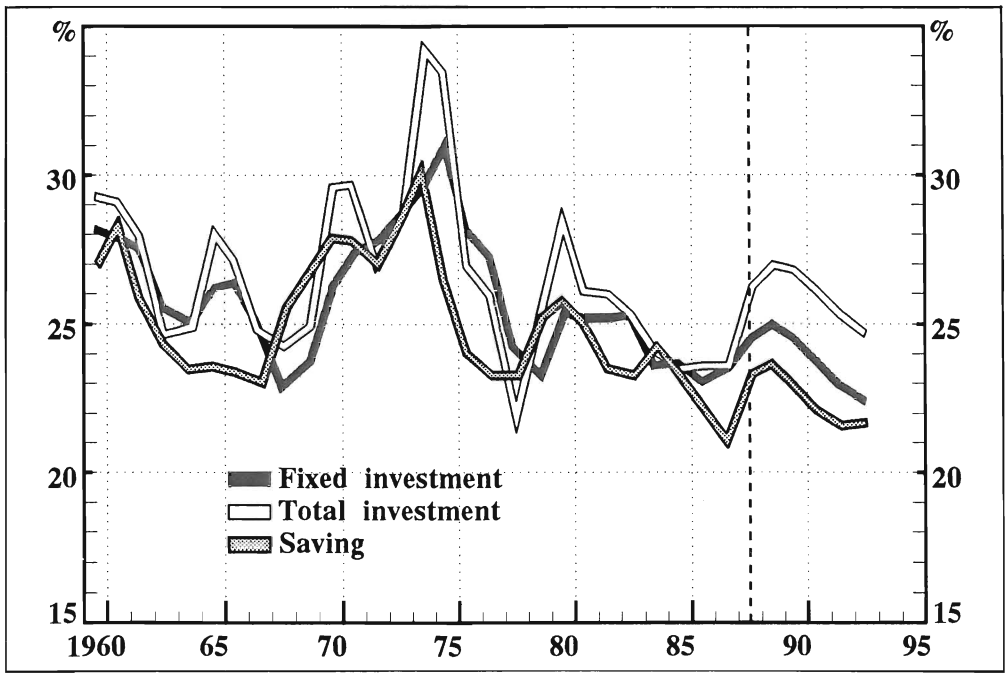
2.3. Investment: The Boom is Soon Over

The average rate of investment growth will slow down considerably during the period of 1989–1993. The slowdown stems in part from the fact that investment is starting out at such a high level, but also problems associated with the external imbalance are weakening the outlook for demand and investment in both the open and closed sectors.

The industrial investment ratio will gradually start to fall. The investment ratio will still remain relatively high, even though the growth of investment over the entire five-year period will be low. The weak industrial investment may turn into a problem. Solving the problem of the current account deficit will eventually require Finland to run a trade surplus since it is more difficult to affect the other components of the current account. If such a trade surplus is to be generated, there has to be sufficient industrial capacity. The trade flows are still nearly in balance but many important branches of the export sector are already running at full capacity. Additional capacity in the forest and metal industries is slated to come on line in the near future, but in the longer run the weak competitive outlook will hamper investment.

The investment ratio in the service sector has long been higher than in the manufacturing industry, and this will continue to be the case in the future as well. Investment has been spurred primarily by strong growth in private consumption. The pace of investment growth in the service sector is due to slow down in the near future. Private consumption will

Figure IV:10. Investment and saving as a percentage of GDP.



have to be cut due to the problems associated with the external imbalance, which will reflect directly upon the demand for household-oriented services.

The growth in building investment has been sparked by liberalization of the credit market that eliminated the regulations which had effectively curbed the demand for housing. The powerful impact that the deregulation of lending had on the housing prices took everyone by surprise. Almost as surprising has been the strong reaction of the housing production to the rise in housing prices: new housing starts have risen by a third. There are, however, clear signs of cooling off in the housing market and investment are forecast to decelerate soon.

2.4. Consumption: A Return to Normality at a New Level of Indebtedness

Private consumption has increased greatly of late, much faster than real disposable income. The volume of growth in consumption during the last five-year period averaged over 4 percent annually.

Table IV:4. Gross fixed capital formation by industries.

Industry	1988* Bill. FIM	1988* % shares in 1985 prices	Annual change in volume, %			
			1973→78	1978→83	1983→88	1988→93
Agriculture and foresty	6.3	7.0	−1.4	4.3	−5.4	−4
Mining and manufacturing	15.4	17.0	−4.4	8.5	6.0	1
Electricity, gas, and water	3.6	3.9	−6.3	2.3	4.4	0
Construction	1.7	1.9	−6.8	13.1	−6.5	0
Ownership of dwellings	29.4	28.8	−0.6	1.4	0.4	−3
Services	38.5	41.4	−5.5	7.0	6.7	2
Private fixed capital formation	94.8	100.0	−3.4	4.8	3.2	−0.5
Government fixed capital formation	14.3		0.6	4.6	2.5	2.5
Gross fixed capital formation	109.2		−2.9	4.8	3.1	0

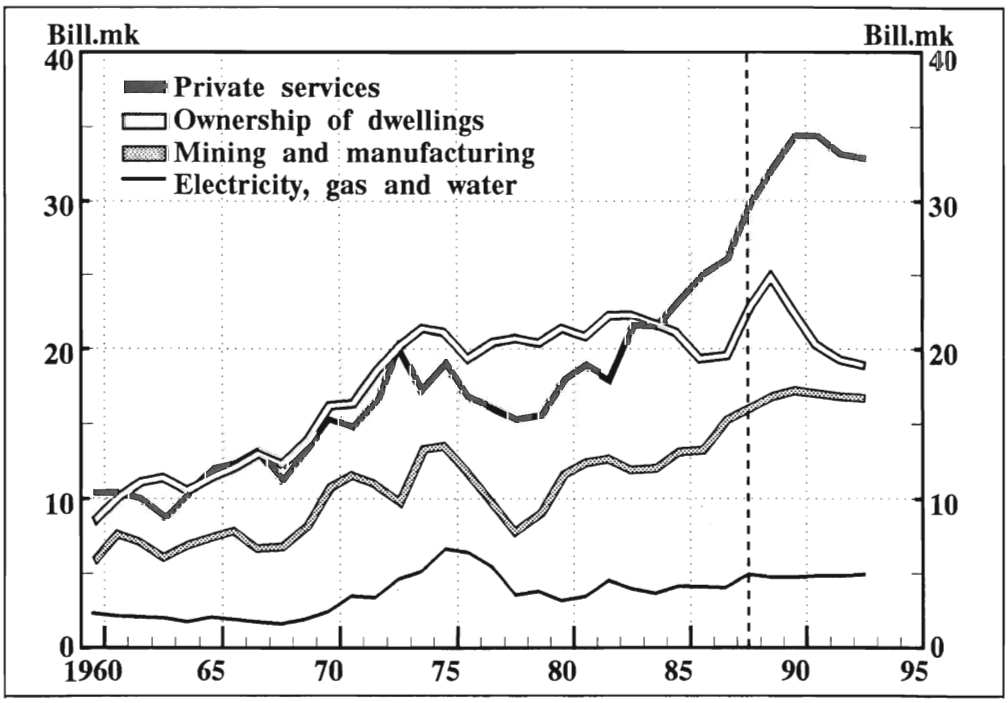
The purchases of durable goods have contributed strongly to the growth in private consumption. The consumption of services has mirrored the trends of total private consumption. Private consumption growth is anticipated to level off during the forecast period along with the flat growth of real purchasing power.

The demand for durable goods during the forecast period will slacken and remain below the pace set by the rise in real purchasing power. As regards semidurables, expenditures on clothing and footwear has increased relatively fast compared with the past few years. The pace of growth for this category is expected to slow down a bit during the period of 1989–1993. The consumption of services will grow faster than other consumption expenditures.

Growth in the service sector will emphasize tourism and health-care expenditures. The relative significance of travel expenditures is still rather low in Finland compared with other Nordic countries. In order for the expenditures on foreign trips to be on the same level as in other Nordic countries, its share would have to be one and a half times higher.

In the latter half of the 1980s there have been changes in the sources of finance for households, namely increases in the shares of consumer credit and income transfers, which have raised the consumption possibilities of households, even though according to the National Accounts

Figure IV:11. Volume of private fixed capital formation by industries in 1985 prices.



the savings ratio has fallen. On the other hand, bank deposits in relation to disposable income have risen somewhat.

The changes in the financial situation of households during the next five years are based on the following assumptions. Attempts will be made to stop the decline in the household savings ratio by institutional and/or fiscal policy means, with curbing the demand for credit by households high on the list of priorities.

When the demand for credit by households slackens, the share of expenditure known as forced savings, i.e. the repayment of loans, will grow in significance.

The housing and consumer credit base has expanded rapidly during the past couple of years. The amortization of housing loans accounts for almost 10 percent of the disposable income at present. Because disposable income is expected to rise during the forecast period at a considerably slower pace than the average in the 1980s, the repayment of housing loans may tend to tighten household finances.

Table IV:5. Private consumption expenditure and real disposable income of households.

Consumption item	1988* Bill. FIM	Average annual change in volume, %		
		1978→83	1983→88	1988→93
Food, beverages and tobacco	54.6	1.6	1.7	1
Clothing and footwear	11.1	1.6	4.0	2
Housing	38.2	3.1	3.7	3
Furniture	17.3	4.0	4.9	2
Medical care	8.9	1.9	3.7	3
Transport and communication	41.4	3.8	5.8	2
Recreation, culture and education	23.0	4.7	3.8	2.5
Other goods and services	28.1	3.4	5.5	2.5
Other consumption[1])	11.6	10.9	8.0	3
Private consumption	234.1	3.2	4.0	2
Real disposable income of households[2])		3.4	2.5	2

[1]) Expenditure of residents abroad (net) and consumption expenditure of private non-profit institutions.
[2]) Households' disposable income deflated by the private consumption price index.

Figure IV:12. Households' savings ratio, %.

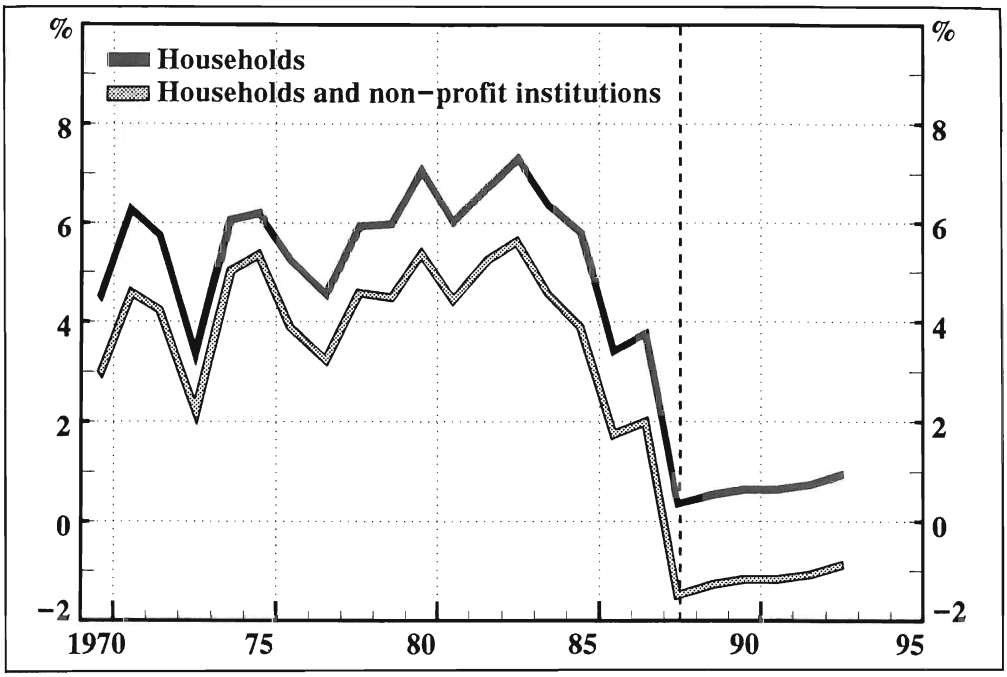


Figure IV:13. Public debt, as a percentage of GDP.

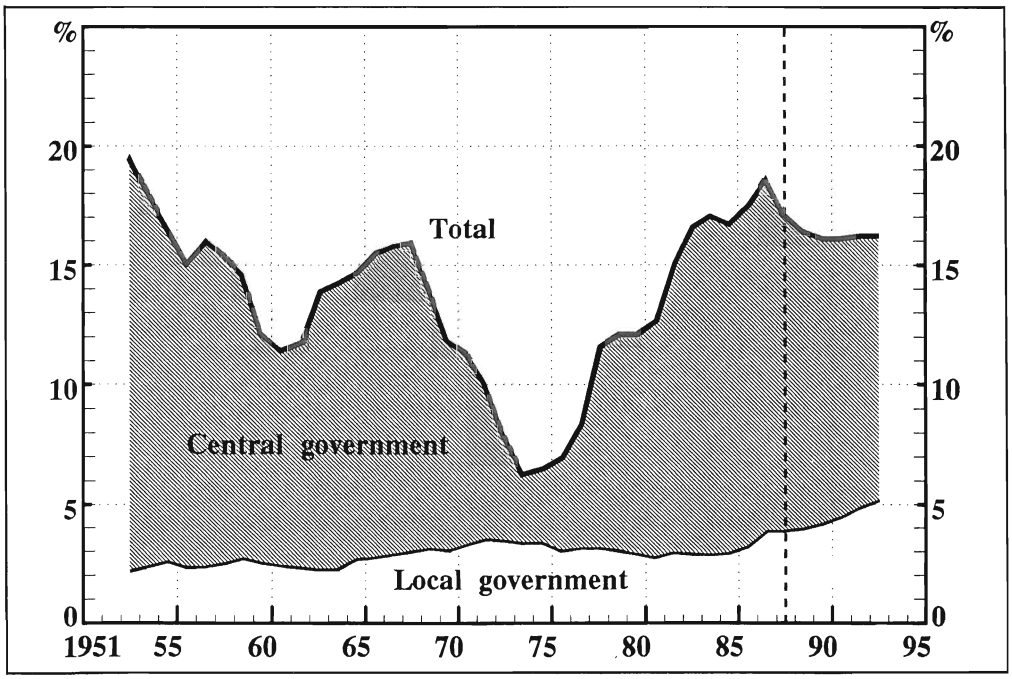


Table IV:6. Taxes and income transfers, % of GDP[1]).

Income transfer item	1960	1970	1980	1988	1993
1. Direct taxes	10.1	13.1	14.5	17.0	17.3
2. Social security contributions[2])	3.6	5.7	6.3	5.4	5.2
3. Indirect taxes	13.2	13.3	14.1	15.4	15.1
4. Other current transfers	0.6	0.5	0.7	1.1	1.2
5. Total current transfers from private sector (1 + 2 + 3 + 4)	27.4	32.6	35.6	38.9	38.8
6. Current transfers to households	6.2	8.3	10.2	10.7	10.4
7. Subsidies	2.8	3.0	3.9	3.2	2.7
8. Current transfers to private sector (6 + 7)	9.0	11.3	14.1	13.9	13.1
9. Net current transfers to public sector (5–8)	18.4	21.3	21.5	24.9	25.7
Taxes per GDP[3])	26.3	31.1	33.7	37.9	37.8

[1]) Caution must be exercised when comparing the figures for the items 2 and 6 with previous years. The municipal pension institutions have been shifted from being a general government item to being insurance institutions in the official statistics.
[2]) Incl. imputed welfare contributions.
[3]) Incl. taxes, compulsory social security contributions to general government and compulsory fees and penalties.

2.5. Public Finance: Surplus State Budgets to be Expected

During the period of 1989–1993, the growth of public expenditures is expected to slow down. Since the tax burden is expected to increase, fiscal policy will become tighter. The central government will run a budgetary surplus throughout the five-year period. The growth of local government will outpace that of the rest of the economy, even though it will be slower than before. If the revenue sharing system between the central and local government is reorganized, new means to curb the expansion of the local government may be found. Local government will still have to increase its borrowing to finance its expenditures. The total public debt in relation to GDP will not rise during the forecast period since the central government's financial situation will improve.

The level of taxes during the 1980s has risen faster than according to the original targets. The tax/GDP ratio was 37.9 percent in 1988, i.e. about 4 percentage points higher than the 1983 level. The tax burden will still increase somewhat in the forecast period. The gradual advancement of the tax reform will shift the tax burden more on consumption than on income.

Transfers to households increased very rapidly during the first half of the 1980s owing to, for instance, the renewal of the pension system and increased health insurance benefits. The growth rate of transfers is anticipated to decline during the forecast period because there are no major programs slated to be revamped. The basis determining the level of social security payments will undergo no appreciable change during the forecast period. Permanent changes in the basis for employers' social security contributions may, however, become necessary.

Figure IV:14. Revenue and expenditure of general government, % of GDP.

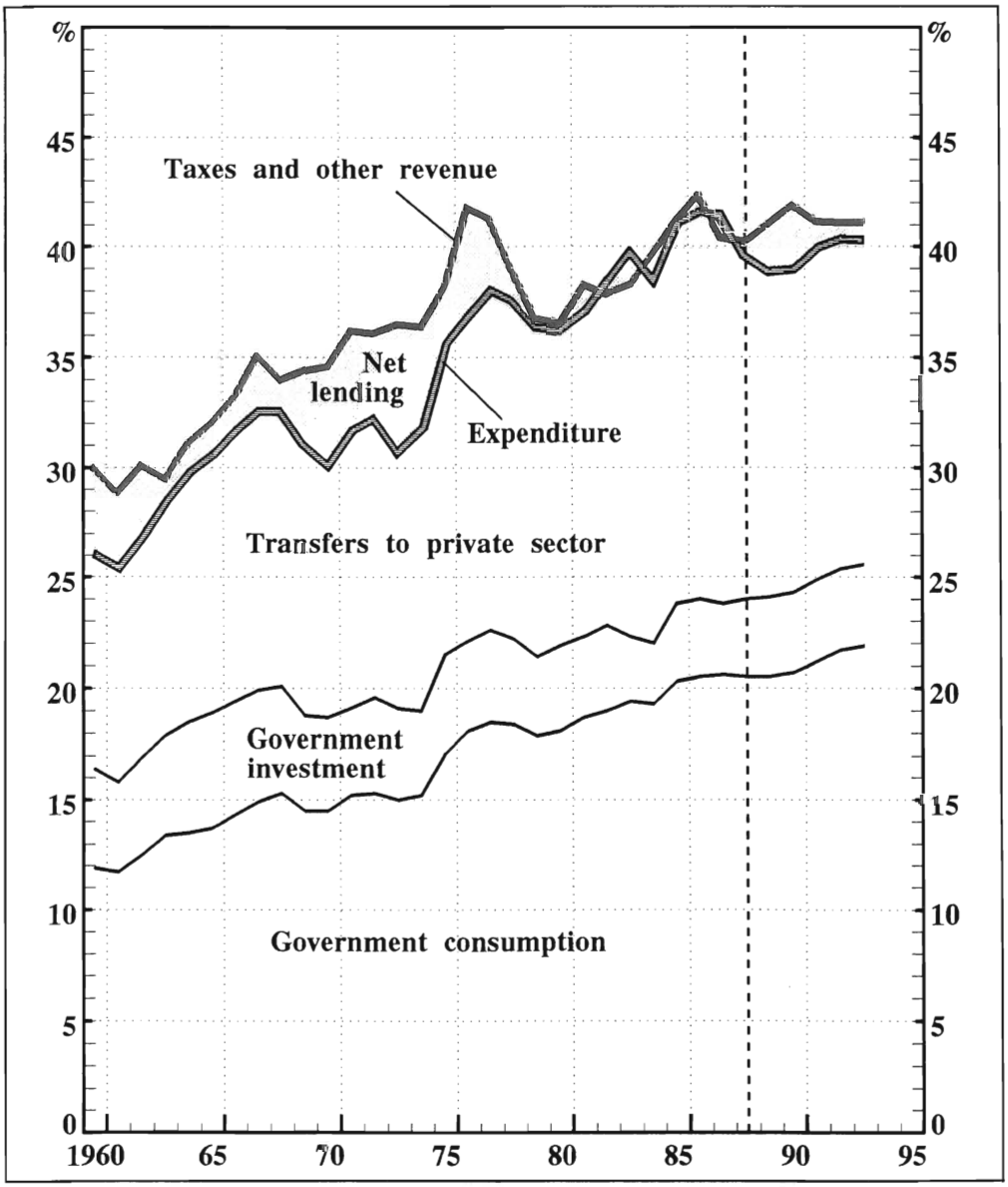
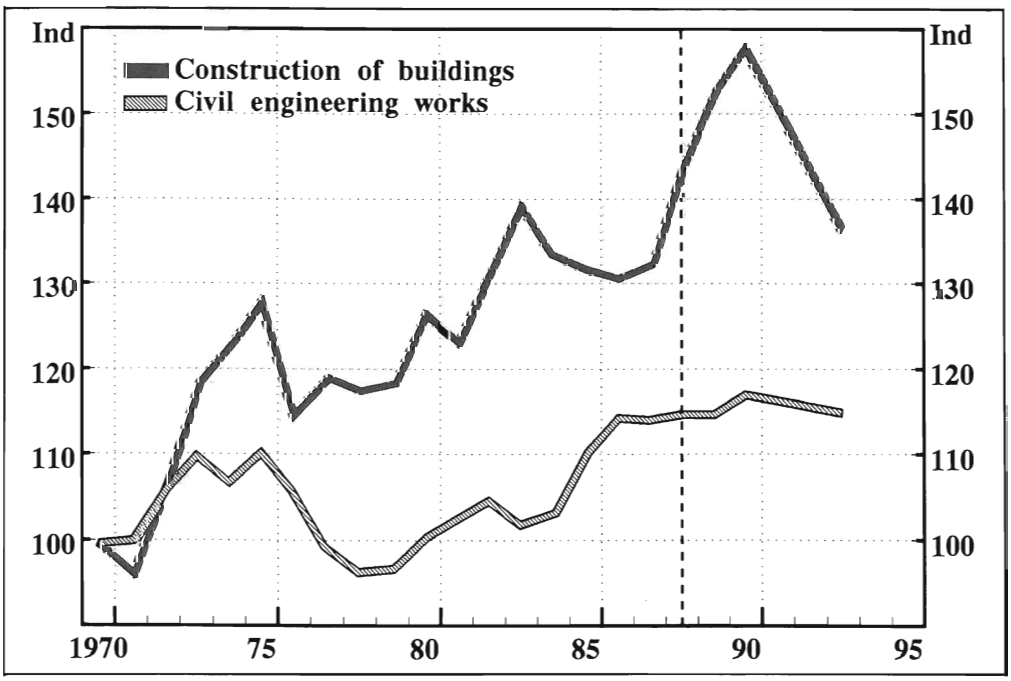


Table IV:7. GDP by kind of economic activity.

Activity	1988* Bill. FIM	1988* % shares in 1985 prices	Annual change in volume, %			
			1973→78	1978→83	1983→88	1988→93
Agriculture	11.5	3.1	0.1	4.2	−6.5	−1
Forestry	12.8	3.5	−2.2	1.5	2.1	2
Industry	104.4	28.5	1.1	5.2	3.7	2.5
Construction	33.7	7.6	−0.7	2.9	1.0	−1
Services	233.8	61.0	2.6	4.2	4.5	3
− Imputed bank service charge	−13.3	−3.7	0.4	3.1	9.9	7
GDP in basic values	382.9	100.0	1.6	4.3	3.3	2

Figure IV:15. Volume of construction, 1970 = 100.



2.6. Production: Growth to Decline Below OECD Average

The structural changes in production that have occurred during the past few years are due to continue. Industrial growth will be fastest in the largest manufacturing branches: the metal, forest, and chemical industries. The output growth of the other branches will be lackluster and the hard times of the consumer goods industry will continue. Even though the demand prospects may seem good, the shortage of labor will hamper the expansion of output in many branches. The internationalization of Finnish business operations will continue to pick up speed. New production units will be set up or acquired, especially in the EC countries. Operating under the same conditions as the competitor countries is often

Table IV:8. Value added in industry by kind of economic activity.

Activity	1988* Bill. FIM	1988* % shares in 1985 prices	Annual change in volume, %			
			1973→78	1978→83	1983→88	1988→93
Total metal and engineering industries	34.8	33.6	3.0	7.4	5.2	3.5
– basic metal industries	4.7	3.7	8.0	4.2	4.3	2
– manufacture of fabricated metal products and machinery and equipment	30.1	30.0	3.0	7.8	5.3	3.5
Total forest industries	18.8	16.4	–2.1	4.2	3.9	2
– wood industry	4.9	4.3	–3.6	3.3	2.3	–0.5
– paper industry	13.9	12.1	–1.5	4.6	4.6	2.5
Chemical industries	9.1	10.2	1.9	3.6	4.1	3.5
Food manufacturing industries	11.1	10.1	0.5	4.2	2.1	1.5
Textile, wearing apparel and leather industries	4.4	4.6	1.0	1.5	–2.9	–3
Other manufacturing	14.6	13.3	1.6	6.6	4.3	1
Total manufacturing	92.9	88.3	1.3	5.3	3.6	2.5
Mining and quarrying	1.3	1.4	4.0	5.1	2.6	1
Electricity, gas and water	10.3	10.3	4.2	3.7	4.5	3
Total industry	104.4	100.0	1.6	5.2	3.7	2.5

much easier and more profitable than exporting from Finland. Investment to expand production in Finland will be considerably lower when the present phase of vigorous investment in the forest industry is over.

The focus of output is still clearly shifting towards the service sector, whose share of the labor force and output is growing. A significant trait of the service sector is that traditionally it has largely been sheltered from foreign competition and this is not expected to change much in the near future. The prices of services will continue to rise faster than other prices,

Table IV:9. GDP in service industries.

Activity	1988* Bill. FIM	1988* % shares in 1985 prices	Annual change in volume, %			
			1973→78	1978→83	1983→88	1988→93
Trade, restaurants and hotels	45.1	20.5	0.1	3.5	4.8	2
– Wholesale trade	18.5	8.9	0.6	4.2	5.8	2.5
– Retail trade	18.8	8.4	−0.3	3.2	3.9	1.5
– Restaurants and hotels	7.8	3.2	0	2.6	4.8	2
Transport, storage and communication	30.8	13.8	1.1	4.3	4.2	2.5
– Transport and storage	22.4	9.6	−0.1	3.2	3.0	2
– Communication	8.4	4.2	5.4	8.0	7.6	4
Financing and insurance	17.9	7.5	2.5	5.6	10.2	5
Letting and operating of dwellings and use of owner-occupied dwellings	22.8	10.9	5.2	3.8	3.8	2.5
Real estate and business services	27.6	10.7	5.5	8.5	7.7	4
Other private services	24.3	9.6	−0.7	2.8	3.4	2
Total private services	168.5	73.0	1.6	4.4	5.3	3
Producers of government services	65.4	27	5.3	3.9	2.5	2.5
– Central government and social security funds	20.1	7.9	2.6	3.5	2.0	2
– Local government	45.3	19.1	6.7	4.0	2.8	3
Total	233.9	100.0	2.6	4.2	4.5	3

which will have spillover effects on the open sector by weakening its competitiveness. The domestic travel service sector will continue having a hard time getting its share of consumers' travel expenditures. On the other hand, many service sectors will suffer from chronic labor shortages.

Even though the outlook for the service sector is still rather good, its growth may fall short of expectations if the overall economic growth has to be curbed substantially. The growth in services is based largely on the quickly increasing private consumption, which has been financed by extensive borrowing. This trend is forecast to change, so the growth prospects of the service industries may soon turn rather bleak.

2.7. Employment: Unemployment Has Fallen Sharply but Might Resurface

The growth in the size of the labor force slowed down considerably during the past five-year period. It will grow at a steady pace until 1993. The working age population will increase by about 53 thousand persons and the labor force by about 23 thousand persons.

The labor supply in the highest age groups is being pared back by early retirement systems. The rules associated with retirement are such that semi-retirement has lost its popularity, so valuable experience of the aging workers is being lost all at once instead of gradually. The worst strain of the rush to early retirement is estimated to have already passed and the amount of those individuals between 55–65 opting for early retirement will level off during the forecast period.

Table IV:10. Balance of manpower resources, 1000 persons.

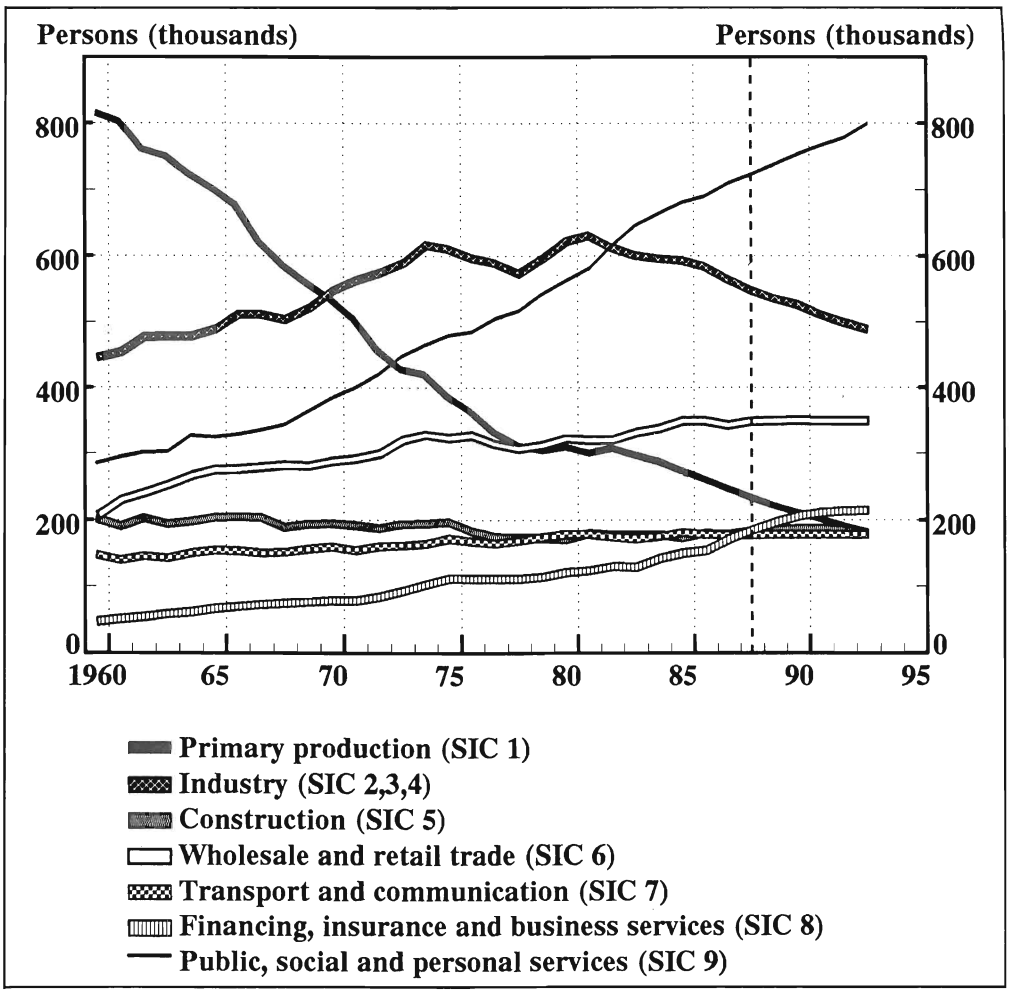
Item	1978	1983	1988	1993	Changes 1978→83	Changes 1983→88	Changes 1988→93
Population	4 753	4 856	4 955	5 004	103	99	49
Population of working age (15–74 years)	3 579	3 681	3 720	3 773	102	49	53
Labor force	2 372	2 528	2 546	2 569	56	18	23
Unemployed	172	138	116	145	−34	−22	30
Employed	2 200	2 390	2 431	2 425	190	41	−6
Unemployment rate, %	7.3	5.5	4.5	5.6	. .	. .	. .
Labor force participation rate, % [1])	66.3	68.7	68.5	68.1	. .	. .	. .

[1]) Labor force/population of working age, %

The demand for labor in the period of 1984–1988 increased by about 41 thousand persons. The increase was based mainly on the service sector, as the size of the work force in other sectors declined. The same general trend will hold throughout the forecast period.

The size of the manufacturing industry's labor force has rapidly dwindled. In some branches the decline has been caused by a weakening of product demand. In other areas the high labor costs and the resulting weakened competitiveness have forced productivity to be raised by automation and pruning of the work force. This trend will continue in the near future. Due to structural changes the labor laid off by firms cutting back their operations are not subsequently hired by those expanding industrial firms which suffer from a shortage of labor since the labor requirements are too different.

Figure IV:16. Employed persons by kind of economic activity.



The public sector and other services already account for about 30 percent of the labor force, but by 1993 this share will rise to 33 percent. The size of the work force engaged in the public sector will increase quickly, even though attempts have been made to limit the growth. Local government needs more workers to perform its own expanding functions, but part of the growth stems from a new law in Finland obliging the local government to hire young unemployed persons and others difficult to place.

The unemployment rate will start at small figures with the number of unemployed under 100 thousand persons. At the same time there is an acute shortage of labor in certain fields. It is clear that the mismatching of structural factors such as professional and regional criteria prevents pushing the number of unemployed down much lower.

Labor policy has recently been focused primarily upon young persons and the chronically unemployed. The local governments are obliged to hire members of these groups if they fill certain criteria. The Ministry of Labor has also striven to improve its job placement operations.

Unemployment will rise in the coming five-year period. This is due to the problems associated with the external imbalance, which will bring about a tighter economic policy and a slowdown in the economic growth after next year. The problems related to the labor market dynamics will not disappear during the next few years.

2.8. Financial Markets: It is Finally Demand and Supply Which Matter

The policy of the Bank of Finland has been based during the past few years upon keeping the external value of the markka stable, which is to say keeping the exchange rate of the markka within a previously agreed upon range. This has been done in an attempt to affect, for instance, the inflation expectations and behavior in the economy.

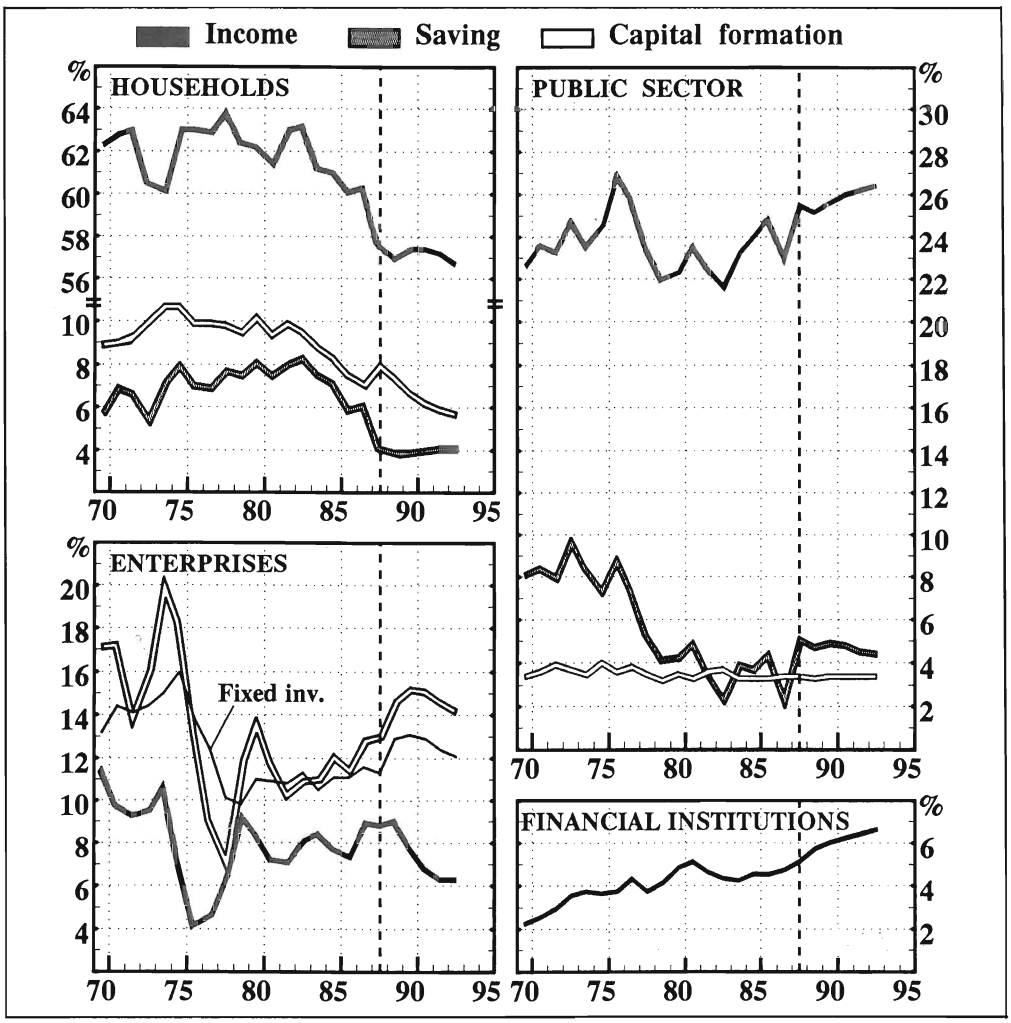
In the autumn of 1988, the Bank of Finland signaled the market that it aimed to raise market interest rates. This sparked an immediate rise in interest rates, but interest rates did not stay high for long because it increased the inflow of capital which served to lower rates at the beginning of 1989. The Bank of Finland did not abandon its aim of raising domestic interest rates. It changed tactics instead in mid-March by seeking to increase the exchange rate uncertainty. The range within which the currency index delineating the external value of the markka was shifted downward by four percent. The index is such that the lower the value of the index, the higher the external value of the markka. The markka then appreciated in the market quickly thereafter toward the new lower limit. This revaluation of the markka and the subsequent drying up of liquidity on the market served to raise short-term interest rates considerably.

The revaluation of the markka and the consequent advocation of freer movement for the external value of the markka mean in practice

the abandonment of the policy of a stable markka. The Bank of Finland is no longer publicly tying its hands by attempting to keep its exchange rate policy within the bounds set by the prevailing currency index. By creating exchange rate uncertainty the central bank is seeking to foster the independence of its interest rate policy. If the Bank of Finland wishes to maintain the independence of its interest rate policy, it must actively strive to affect exchange rate expectations. The change in policy can also be interpreted as indicating that the central bank wishes to take a more active role in reining in the overheating economy.

The internal funding of companies in the form of retained earnings has developed favorably during the last few years. Vigorous investment has, however, boosted the need of companies for financing. The profitability of the business sector is expected to decline substantially during the

Figure IV:17. Income, saving and capital formation by sectors in relation to GDP.



forecast period. At the same time as the investment remains high, the financial state of companies will deteriorate considerably.

The development of the financial markets, the liberalization of capital movements and the transition to positive real rates of interest have affected the financial behavior of companies. The significance of the money and stock markets as sources of finance have increased. The internationalization of companies and the gradual freeing of the capital movements have fostered growth of the foreign currency debt and direct foreign investment.

During the forecast period the financial requirements of companies will remain high due to their weak financial state. The tendency of firms to take foreign currency loans will be encouraged by the high real interest rates but, in turn, discouraged by the increase in exchange rate uncertainty. High real interest rates and higher exchange rate and interest rate risks will increase the significance of financial management by companies.

For the past few decades the household sector has continuously been a net borrower. The sector has financed its investment with the saving of the other sectors. The financial position in terms of net borrowing has been becoming more balanced, but 1988 saw a dramatic shift in this trend. As the savings ratio of the household sector fell while the investment rose, this sector's financial position weakened substantially. The financial state of this sector is expected to stabilize somewhat during the forecast period.

An important reason for the sharp change in the financial state of the household sector has been the deregulation of the financial markets. The demand for credit pent up during the days of regulated markets has been unleashed swiftly in the light of favorable income expectations. The credit expansion has been reflected in the sharp rise in housing prices, which has in turn further increased the need for borrowing. Due to the increase in the property value of housing, the wealth of households relative to borrowing have not declined at an aggregate level. More and more individual households are approaching their borrowing limits as they reach the upper constraints of their ability to make payments.

The banks have played a key role in the development of the short-term money market. They have utilized the market both for their own funding and for transferring reserves between banks, which has guaranteed the necessary means and liquidity for the market. Firms and other financial institutions have used commercial paper and other money market instruments when obtaining funds. The business sector has also used the money markets as an inter-company liquidity distribution channel. The role of the central government as a borrower in the money markets has been small, but it nevertheless actively invests its cash surpluses in the money market.

The dramatic expansion of credit associated with the liberalization of the financial markets has postponed structural changes in the banking sector. The slowdown in the extension of credit and the increasing competition in the financial markets will compel the banking sector to improve the efficiency of its operations to fit a deregulated market. Making

the capital adequacy requirements the same in Finland as in other Western countries will put domestic and foreign banks on the same competitive footing, which will improve the efficiency of the financial market. It may also lead to growth in the margins in the banking sector, since the return on equity will have to be increased somewhat relative to the total assets.

The sharp growth in bank credit is expected to slow down considerably. The growth in the volume of housing investment by the household sector will peak and the state of this sector's finances will gradually stabilize. The steps taken by the Bank of Finland to curb the bank lending may indeed bring about sluggish adjustment in the households' portfolios.

The demand for credit by the business sector, on the other hand, will stay high, owing to the weakening of the financial position of the sector. The banks' foreign currency loans will continue to expand rapidly, so that the current account deficit can be financed via the present channels. Foreign financing is nevertheless expected to offer strong competition for the domestic banks.

CHAPTER V

Norway: On the Track of Long-Term Balanced Growth?

Contents

1. Upswing, Downturn, and . . . ?

Up till the early 1970s the Norwegian economy on the average showed the same patterns of development as the economies of other industrialized countries. GDP per capita was above the OECD average, but well below the figures of Sweden and Denmark. A decade later, Norwegian GDP per capita exceeded that of all neighboring Nordic countries, and of most other countries in the world.

By the mid-1980s the Norwegian economy seemed outstanding by international comparison. Unemployment, which never exceeded 4 % of the labor force, was reduced to 1.5 %. GDP growth rates were impressive, and consumption levels were significantly increased. Still the balance on public and external accounts were comfortably in the black. Only inflation was a little discouraging.

This development is, however, only Part I of the story. Part II concerns the effects of the 1986 oil price collapse, and the imbalances this revealed in the Norwegian economy. The balance on external accounts immediately deteriorated. Huge deficits resulted. The Norwegian krone (NOK) was devalued, and inflation increased. Interest rates rose. Domestic demand fell. In turn, production stagnated. Bankruptcies increased significantly in number, and most financial institutions experienced severe losses. Eventually, in 1988 unemployment started to rise. Hence, Norway is currently struggling to find a way out of this uncomfortable situation.

Medium-term prospects are not, however, necessarily gloomy. The major political concern has been attached to the rather huge deficits on external accounts. 1989 will show a surplus. Inflation is declining, and interest rates are coming down, approaching the OECD average.

The main focus of this country chapter is not, however, on short- and medium-term prospects, but on the potential for long-term balanced growth in the Norwegian economy. In this way it supplements the country chapters on Norway in our two previous Nordic books, which have focused on the vulnerability in Norwegian revenue making (Berrefjord and Heum, 1984), and on the domestic recession due to the oil price collapse (Berrefjord et al., 1987).

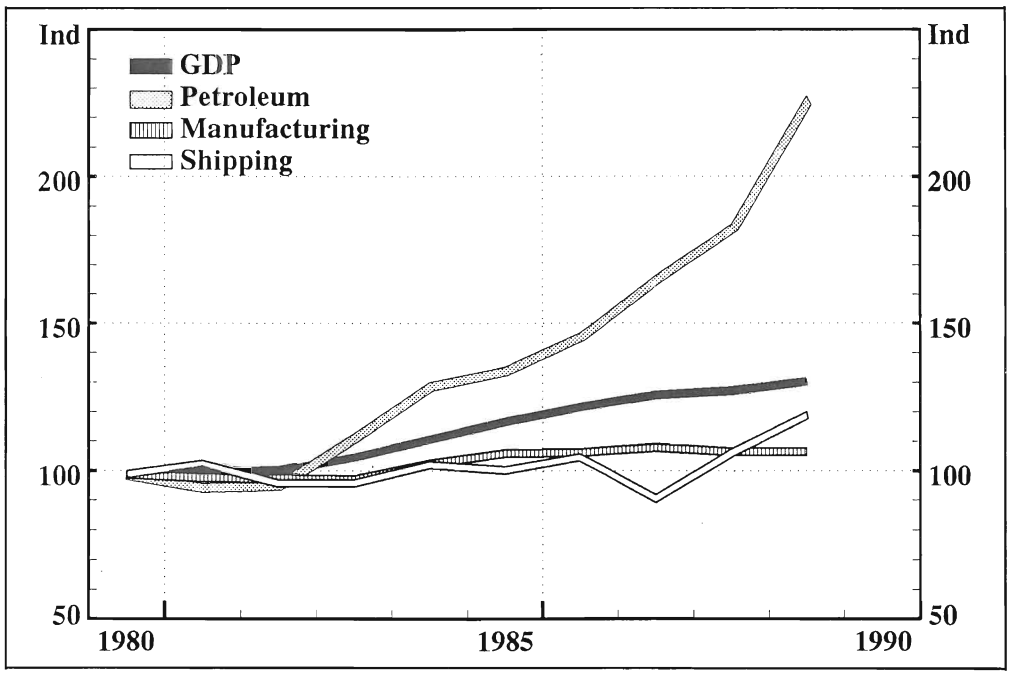
The chapter begins by referring to the peculiarities of Norway's economic development through the 1980s as they appear when we apply aggregate measures. These aggregate patterns are based on the composition of industries in the Norwegian economy, and on the performance of business. Hence, we proceed by examining changes in Norway's portfolio of industries and the development of Norwegian business over the last few decades. Finally, we approach the outlook for the Norwegian economy by discussing uncertainties regarding macroeconomic policies, petroleum revenues and business renewal. These elaborations, revealing the prospects for long-term balanced growth, will also pinpoint the major challenges ahead.

2. The Peculiar 1980s

During the 1970s Norwegian GDP grew annually by more than 4 % in volume terms. The Norwegian economy featured a new and expanding petroleum industry, stagnation in manufacturing, and a shipping industry in crisis. Unemployment was well below OECD levels – at 2 % of the labor force. This was, however, accomplished by allowing the external accounts to incur huge deficits. Entering the 1980s, net foreign debt amounted to more than 40 % of GDP, while the public sector was running a deficit. The latent inflationary pressure was significant, due to a wage and price freeze, which had pushed inflation well below international levels.

GDP has in volume terms continued to grow by more than 3 % on an annual basis throughout the 1980s (Figure V:1). The petroleum activities, in particular, have contributed to this with an annual average volume growth of almost 8 % in this period. On the other hand, similar measures show that the output volume in manufacturing has grown by only 1 %. Average growth in shipping has been at the same level. The growth pattern for this industry, however, features significant annual variations as Norwegian shipowners have relocated their business operations – first out of Norway, and recently back again.

Figure V:1. Volume growth in Norwegian production, 1980–1989. GDP and selected industries. Index 1980 = 100.



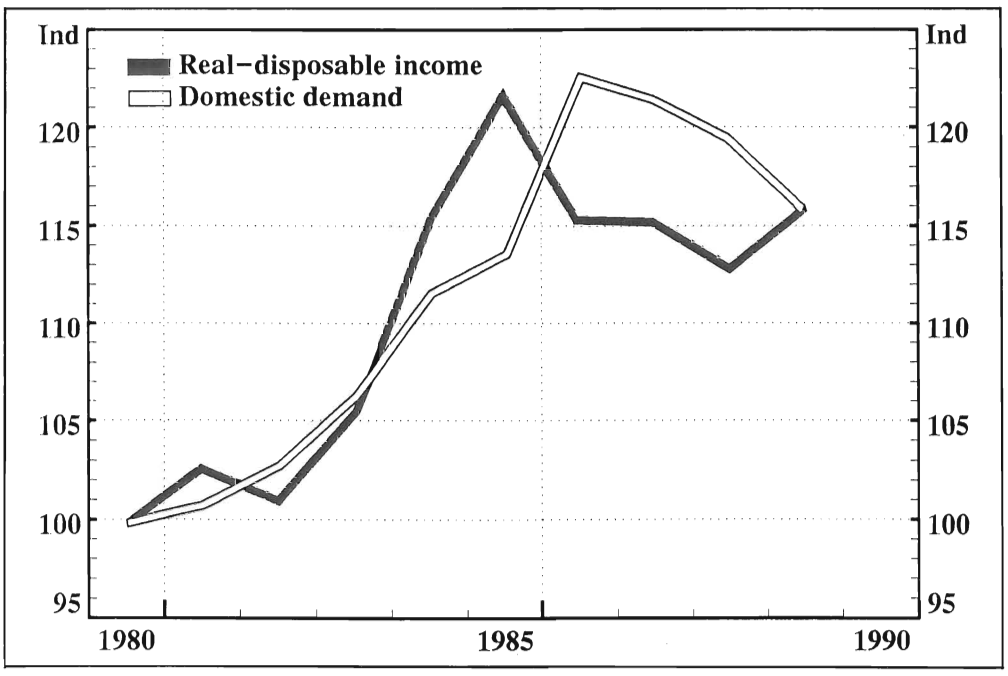
Source: Calculated from National Accounts, The Central Bureau of Statistics

This rather favorable volume development of Norway's production is, however, contradicted by the development in Norway's terms of trade. Terms of trade remained fairly stable from 1980 to 1985. In 1986 the oil price collapse caused an almost 20 % deterioration in Norway's terms of trade, which continued to weaken in the subsequent period. By 1989, Norway's terms of trade were 25 % below the level which prevailed through the first half of the 1980s. Hence, Norway's real disposable income is not reflected by the developments in volume growth. National real disposable income has fallen since 1985, which in turn has negatively affected growth in domestic demand (Figure V:2).

Real disposable income has decreased more rapidly than domestic demand. Hence, the development in domestic demand has caused the external accounts to deteriorate (Figure V:3). Deficits occurred after several years with rather substantial surpluses. The balance on current account is, however, improving quite significantly, and will show a surplus again in 1989.

The rapid deterioration on Norway's current account in 1986 enerated extensive speculations against the krone, which forced the government to devalue. The devaluation, however, took place while domestic production was running in high gear, thus increasing the existing inflationary pressure. In consequence, inflation picked up speed. Higher inflation and severe imbalances on external accounts in turn caused interest rates to rise.

Figure V:2. Norway's real disposable income and the volume of domestic demand, 1980–1989. Index 1980 = 100.



Source: Calculated from National Accounts, The Central Bureau of Statistics

At the political level efforts were taken to ease the pressure that was built into the economy. Public sector growth was restricted. Efforts were taken to reduce tax advantages of holding debt, and to keep wages under control. The wage settlements in 1988 and 1989 kept wage increases at a moderate level, due to a fairly strict wage and salary control act.

Despite these contractive political measures, high interest rates have probably been the major factor in curbing domestic demand. A major factor contributing to the rapid expansion in Norwegian demand during the mid-1980s had been an extensive supply of credit following a liberalization of credit markets. Households, for instance, have over the 5 years following 1983 increased their debt 61 % on the average compared to the development of their disposable incomes. On the other hand, their liquid assets have only increased 26 % when making the same comparison. In consequence, the development of domestic demand during this period could not be predicted according to the income development of the economy. Actually, the mid-1980 expansion of domestic demand, became much stronger than almost anyone had expected, whereas households and firms, as well as local communities became significantly more indebted. Then, the higher debt had to be serviced, with increasing cost, while real incomes stagnated, and even fell for several groups in the late 1980s. Consequently, less was left to finance consumption and investment. In other words: several contractive

Figure V:3. Norway's balance on current account, 1980–1989.
Percent of GDP.

Source: Calculated from National Accounts, The Central Bureau of Statistics

mechanisms were at work. The rapid expansion of domestic demand a few years earlier had been "surprisingly" strong, but so was the following contraction.

However, by curbing domestic demand inflation has been brought down to international levels. As the balance on Norway's current account has been restored, interest rates have also been reduced. They still are, however, somewhat above international levels.

These improvements have nevertheless been accomplished by allowing unemployment to rise. Norwegian employment rose by almost 10 % measured in man years from 1983 to 1987, mainly to serve the boom in domestic demand of the mid-1980s. In 1988, however, stagnation in domestic demand really hit these businesses. Shutdowns and lay-offs increased in number. In a little more than one year the number of unemployed tripled. Open unemployment has never been higher in 50 years, equalling almost 4 percent of the labor force during 1989. In addition, another 2 % are employed on special labor market programs, while the capacity of schools, universities and the military to admit more students and recruits has been substantially expanded.

In other words; the Norwegian economy prospered during the first half of the 1980s when the international economy was still struggling to recover from the setbacks during the 1970s. During the second half of the 1980s, however, the international economy has been developing favorably, while Norway has been running into severe economic trouble. These problems were mainly initiated by price fluctuations in one important raw material market: the oil market. Just two decades earlier, nobody knew that petroleum existed in Norway's territory.

3. The Industrial Base

In a small, open economy like Norway's balanced external accounts are crucial for how the economy develops. In order to secure steady and firm growth, the major task is to make sure that the economy is sufficiently diversified in terms of competitive resources in businesses which exploit international markets.

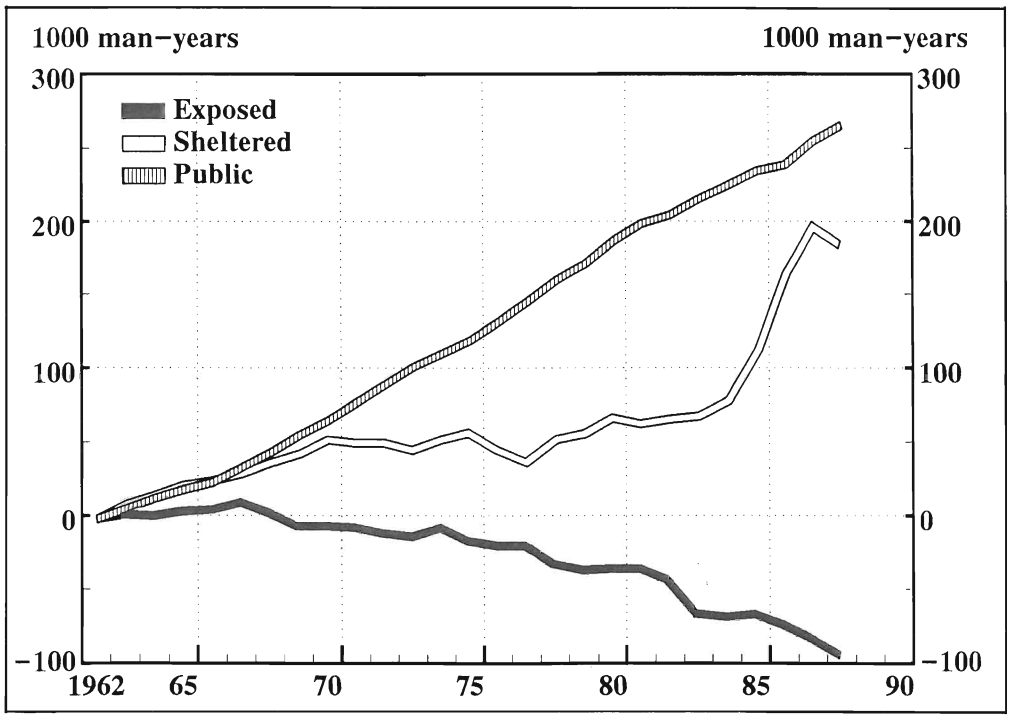
Different industries are to a varying degree exposed to international competition. Nevertheless, a dichotomy drawing a line between businesses which directly have to take international competition into account, and those which are not, is both justified and helpful to analyze the underlying patterns of industrial development which may affect the balance on external accounts. The first group of businesses is called producers of tradables, or the exposed sector of the economy; the second represents the sheltered sector, or producers of non-tradables. In addition we have the public sector.

3.1. Reallocating Resources from Producers of Tradables to Producers of Non-Tradables

To understand the current situation of the Norwegian economy, it is necessary to apply a relatively long time perspective on how the composition of Norwegian industries has developed. Figure V:4 shows the net changes of labor input in exposed and sheltered sectors of the economy since the early 1960s. All through this period, sheltered industries – and public sector production – have demanded an increasing amount of labor. Until the early 1970s, however, this demand only captured the growth in the labor force. Since then, the demand for labor within these sectors has been satisfied at the direct expense of labor allocated to exposed industries, as well. Labor input in exposed industries has been reduced from 380 000 man-years to 300 000 from 1970 to 1988. During the same period, labor input in the sheltered industries and public sector production has increased by roughly 400 000 man-years from 1.1 million in 1970.

The public sector has for the last 25 years absorbed the bulk of the increase in the labor supply. In the mid-1980s, however, the demand for labor from sheltered businesses increased rapidly. As already mentioned, this was triggered of by a sharp rise in domestic demand. At this point, however, it is sufficient to notice that since 1970, when the build-up of

Figure V:4. Net changes in labor input by sheltered and exposed industries, 1962–1988. Accumulated man-years.



Source: Calculated from National Account Statistics, The Central Bureau of Statistics

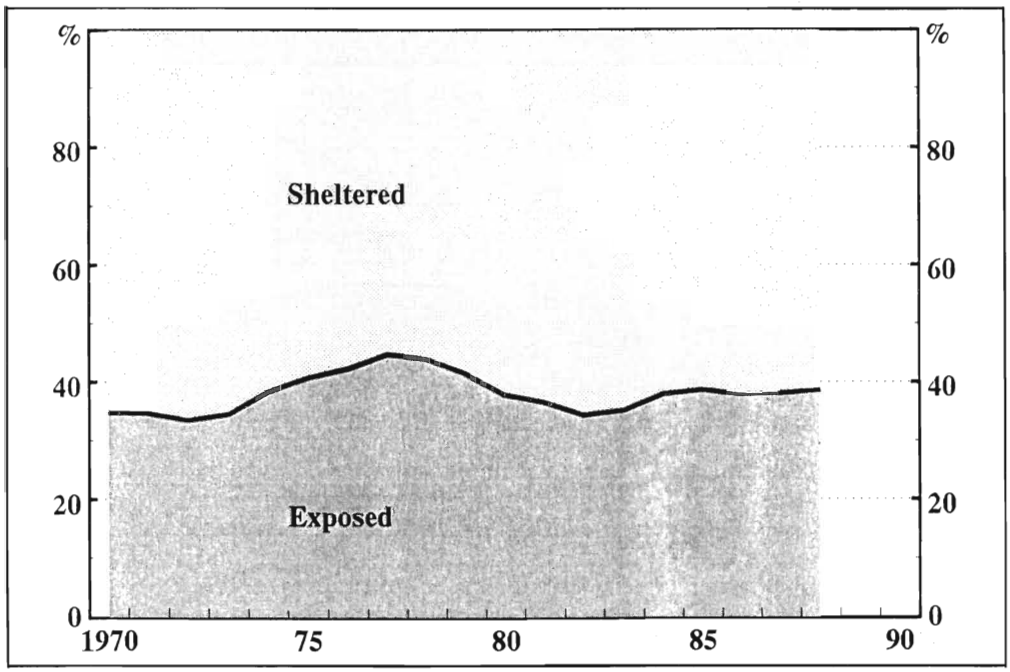
the petroleum activities started, the input of labor has been increased in the sheltered sector of the economy, and reduced in the exposed sector.

This reallocation of labor has only moderately been "compensated" by a reallocation of capital in the opposite direction. To some extent such a reallocation took place in the mid-1970s. However, as Figure V:5 describes, investment in the exposed sector has amounted to 35–40 % of gross fixed capital formation in Norwegian businesses all throughout this period.

3.2. Bidding Strongly for Oil in Composing the Tradable Sector

The exposed sector of the economy may be classified in three subgroups: 1) Traditional export industries, which include shipping; manufacturing of paper products, pulp, metals and chemicals; and mining; 2) Import competing industries, which include the bulk of remaining manufacturing; and 3) Extraction and pipeline distribution of oil and gas. The net changes in labor input for these three groups are shown in Figure V:6.

Figure V:5. Gross real investment by exposed and sheltered industries, 1970–1988. Percent of total business investment. 5-year moving averages.

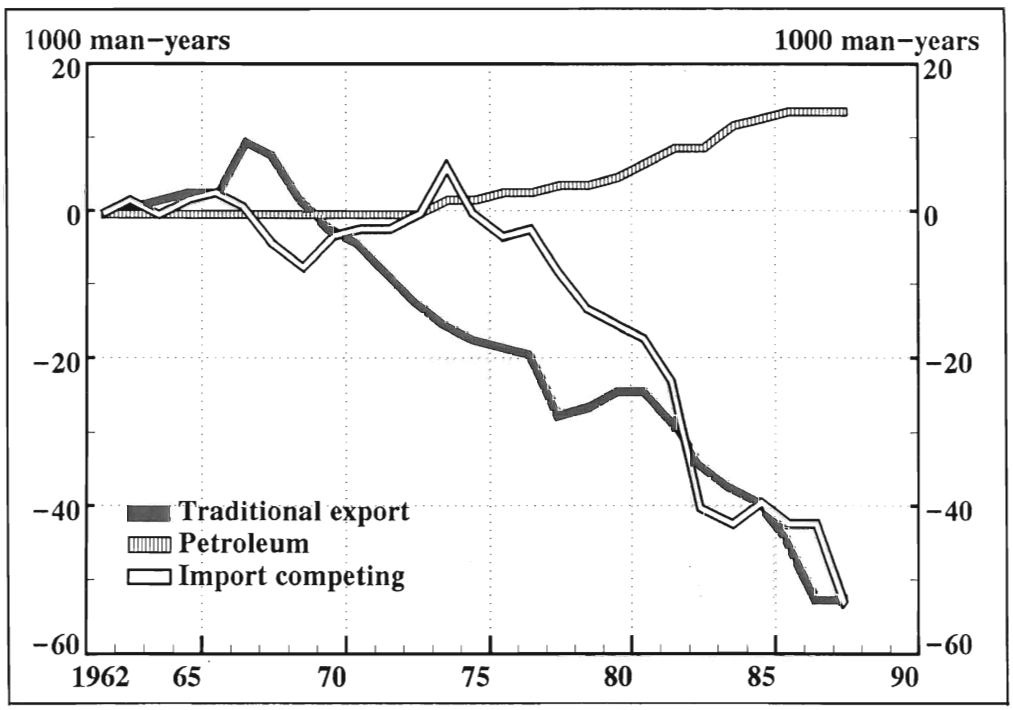


Source: Calculated from National Account Data, The Central Bureau of Statistics

While the oil and gas activities escalated, traditional export competing and import competing industries have reduced their demand for labor by almost 100 000 man-years. The oil and gas production only make use of 15 000 man-years. Relatively speaking, the reduction has been most notable in traditional export competing industries, demanding almost 45 % less of Norwegian labor in 1988 than in 1970. The structural changes in Norwegian shipping account for most of this. The import competing industries demand 20 % less.

Considering the allocation of capital, investments in oil and gas extraction accounted for 20 % of gross fixed capital formation in the exposed sector in 1970–1974; increasing to some 40 % in the latter half of the 1970s, to 55 % in the first half of the 1980s, and to more than 60 % in the latter half of this decade. Investments in manufacturing have decreased somewhat in volume terms, but have, nevertheless, been kept at rather high levels throughout this period. Shipping investments in Norway have, however, been dramatically reduced. In the mid-1980s Norwegian shipowners disinvested in Norway, partly to reinvest abroad. This trend changed in 1988, mainly due to the formation of an international ship register in Norway (NIS), which allows registered ships to be crewed by foreign sailors at low costs. Currently, world-wide shipping and shipping related operations are increasingly conducted from Norway.

Figure V:6. Net changes of labor in different groups of exposed industries, 1962–1988. Accumulated man-years.



Source: Calculated from National Account Statistics, The Central Bureau of Statistics

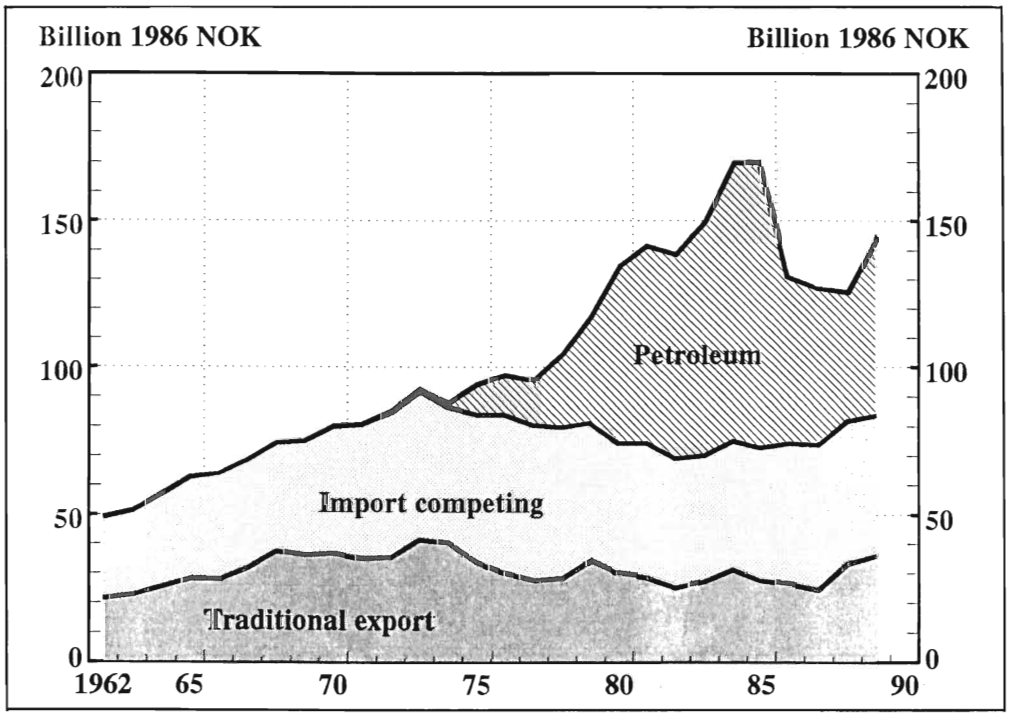
3.3. Creating a More Vulnerable Industrial Base for Norwegian Revenue Making

The allocation of labor and capital affect the distribution of revenue generation between the different sectors of production. Despite an almost unchanged input of labor, the traditional export and import competing industries could – due to productivity growth and the input of capital – show a steady increase in value added in the pre-oil period of Norwegian production.

However, revenues in import competing industries have stagnated since the early 1970s. In traditional export-oriented industries it has been reduced. Nevertheless, value added from the tradable sector of the economy continued to rise in real terms (Figure V:7). The increasing volume of Norwegian petroleum production, which benefitted from high and increasing oil prices, was the sole reason for this. The value added from petroleum production a decade after it started in 1971 was larger than the sum of value added from traditional export and import competing industries.

The revenues generated from exposed industries have increased at almost the same annual rate from the early 1960s till 1986. In that re-

Figure V:7. Value added in different groups of exposed industries, 1970–1988. Billion 1986-NOK, deflated by import prices.



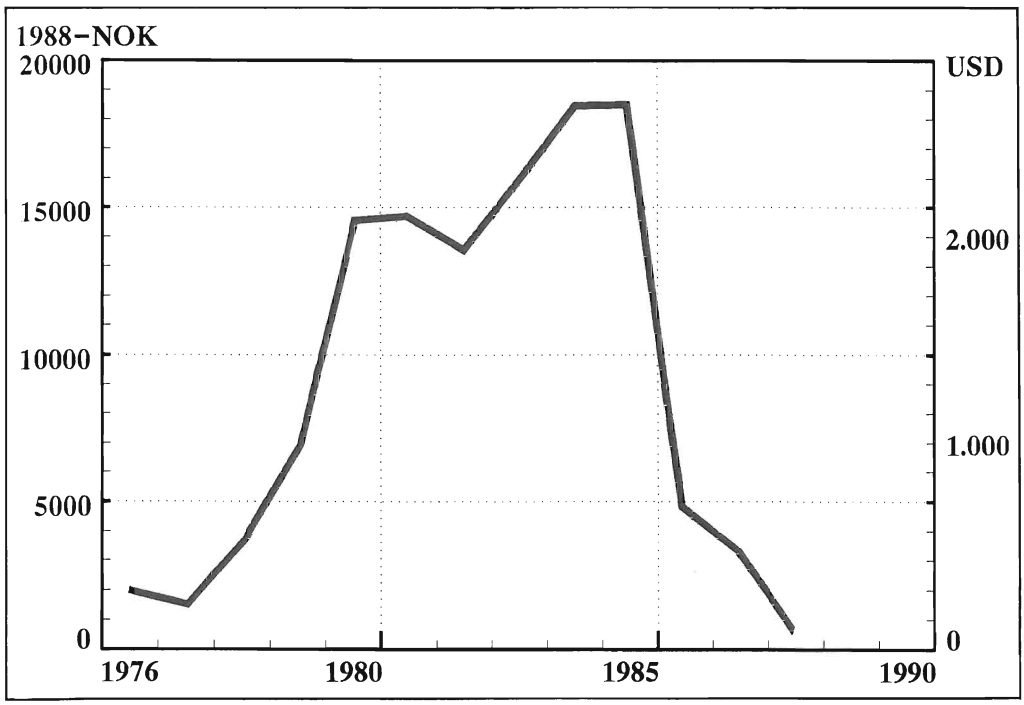
Source: Calculated from National Account Statistics, The Central Bureau of Statistics

spect, Norway differed from other industrialized countries, which experienced stagnation through the latter half of the 1970s and early 1980s. This allowed Norway to keep a relatively rapid increase in domestic demand, which provided employment for its home market-oriented industries. In the late 1970s, industries were also to some extent supported directly, to counteract what was expected to be a brief downturn in international business cycles. This proved false, however, as the prevailing problems turned out to be more structural than cyclical. But, even if the role of direct subsidies has been reduced during the 1980s, domestic demand continued to expand. It culminated in 1984–1986 when demand rose by an annual rate of 6.5 %.

This peculiar development of domestic demand initiated business adjustments to grab the market opportunities that had been created. Creativity and factors of production were channeled into businesses to serve this demand, as reflected in the figures on allocation of production factors.

In consequence, Norwegian revenues were becoming increasingly dependent on Norway's new tradable, petroleum, which for the time being was extremely profitable. From 1980 to 1985 the annual rate of return on petroleum investments exceeded 60 % on the average. The

Figure V:8. The Norwegian oil rent per capita, 1976–1988. 1988-prices.



Source: Calculated from Outlook on the Norwegian Economy 1988, The Central Bureau of Statistics (ØA, No 1/1989)

magnitude of these profits to Norway may be illustrated by per capita calculations of the oil rent, defined as returns on petroleum investments exceeding the "normal" rate of return on business investments (Figure V:8). During 1980–1985 this labor-free income equalled between USD 2000 and USD 2500 per capita, then almost disappearing when oil prices dropped.

Such drops in windfall gains do not cause problems as long as these incomes are not counted on to keep the economy running. For a time during 1980–1985, Norway's huge oil rent contributed substantially to surpluses on external accounts (Figure V:3). But during the mid-1980s, they were increasingly playing a role in domestic demand. So, by 1986 the surplus on current account would have vanished due to increasing imports even if oil prices had continued to stay at the 1985 level. Altogether, this indicates that Norway by 1985/1986 had actually geared up the economy under the presumption that the high oil prices of the early 1980s would continue to prevail. In other words, Norwegian revenues and Norwegian wealth had over a rather short period of time become severely exposed, or vulnerable, to incidents affecting the international oil market.

3.4. Business Performance

The preceding sections clearly show that Norwegian businesses increasingly have allocated resources to exploit opportunities generated by domestic demand. In general, we may regard producers sheltered from international competition as being positioned so that they can more easily compensate cost increases by raising sales prices, instead of increasing efficiency in production. As can be seen from Table V:1, the rapid production growth in several of the sheltered industries has been accompanied by poor performance in labor productivity over the last 10 years.

Table V:1. Labor productivity by production sectors, 1973–1988. Annual average percentage change.

	1973–78	1978–83	1983–88
EXPOSED SECTOR			
Export competing manufacturing	0.2	9.0	3.8
Import competing manufacturing	0.2	1.9	3.4
SHELTERED SECTOR			
Sheltered manufacturing	−2.5	−0.6	0.9
Construction	1.9	1.3	1.4
Wholesale and retail trade	2.7	0.6	1.7
Financial services	−0.5	−3.0	−0.5
Business services	2.2	1.6	−0.3

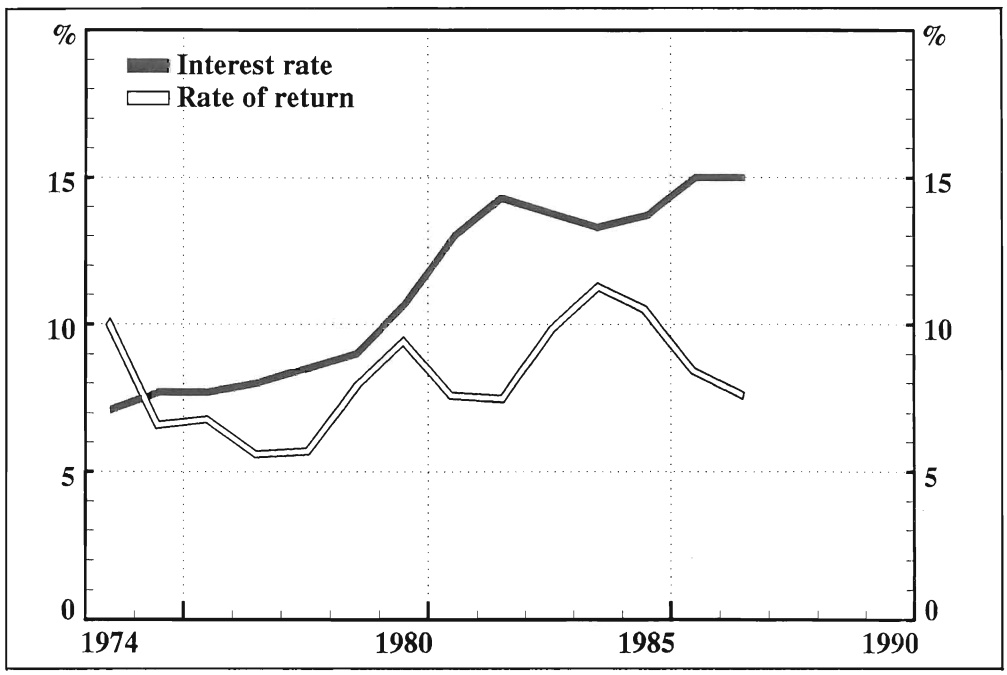
Source: Calculated from own estimates and NOS, National Accounts

Exposed manufacturing industries have on the average a better productivity record in the mid-1980s than other industries in the Norwegian economy. Their performance is almost in line with what we find in other Western European countries. However, when considering the whole period since 1970, the picture becomes less flattering. During the 1970s and 1980s labor productivity in Norwegian manufacturing has grown by an annual average of 2 %, compared to 4 % in the manufacturing sector of countries with whom Norway has the closest economic relations.

The measurement of labor productivity does not take the effects of other production factors than labor into account. "Total factor productivity" is another measure capturing production growth that cannot be directly ascribed to changes in input of labor and capital. Sheltered production does not, however, improve its performance on this score. While the annual average change in total factor productivity for the 1980–88 period was 3.9 % in export competing Norwegian manufacturing and 1.5 % in import competing, it was negative with 1 % in sheltered manufacturing, and private services had only .3 % productivity growth (Calculated from St.meld. no. 4, 1988–89). In general these productivity scores have, however, improved since 1986.

Evidence clearly indicates that differences in performance may be accounted for by the competitive environment in which production

Figure V:9. Return on capital before taxes compared to the bond rate for private credit institutions, 1974–1987.



Source: Calculated with data from the Bank of Norway and Statistics on Manufacturing Accounts, The Central Bureau of Statistics

takes place. While Norwegian export-oriented manufacturing during the 1970s and early 1980s has performed in line with similar industries in Sweden and Finland, according to total factor productivity scores, manufacturing industries directed towards the domestic Norwegian market developed less favorably (Vuori, 1988). And this performance was significantly poorer in relative terms during the 1970s than in the 1960s. There is no reason to believe that sheltered industries outside manufacturing have performed better. Hence, the economic development and industrial policies of Norway have over the last 10–15 years allowed substantial parts of Norway's business to move into a domestic market where efficiency requirements have been weak.

Despite this productivity record, however, the crucial problem in Norwegian production is reflected in Figure V:9. Internationally oriented businesses, which to a large extent is to say manufacturing, petroleum production and shipping, have to play a crucial role for the development of the national economy. Since the 1970s, however, and in particular throughout the 1980s, the return on investment in manufacturing has – with the exception of the boom of the mid-1980s – increasingly lagged behind the interest rate. Thus, it has been hard to attract capital and talent to this strategically important industry. Recent developments indicate, however, that profits in Norwegian manufacturing are improving.

3.5. Production is Increasingly Directed by Big Business

Norwegian business has been characterized by small-scale production. The main exceptions have been energy-intensive process industries producing metals, paper and chemicals for the world market. The offshore oil and gas projects further required large-scale operations, by Norwegian standards. This did not, however, really alter the composition of Norwegian corporations. Throughout the 1970s, value added generated on a world-wide basis in the 10 largest industrial corporations, ranked according to employment figures, amounted to 15–20% of value added in Norwegian manufacturing and petroleum production.

As Figure V:10 shows, this situation changed during the 1980s. A money surplus generated by the petroleum activities and the liberalization of Norwegian credit markets, initiated restructuring processes among Norwegian business firms and an increase in direct foreign investments. Mergers and takeovers were the main elements in this process, and by 1988 the 10 largest corporations generated revenues on a world-wide basis equivalent to almost 45 % of value added in Norwegian manufacturing and petroleum. The relative size of the "next 20" corporations has not changed that much during the same period. Nevertheless, by 1988 value added in the 30 largest corporations equalled more than 57 % of total value added in the same Norwegian industries.

This does not exactly mean that 10 corporations control half of Norway's production in these industries. Parts of their production take place abroad, but it is hard to document exactly how much. However, if value added in these corporations is divided according to how their labor force is distributed between Norway and abroad, we can calculate a good estimate: The 10 largest corporations apparently control almost one third

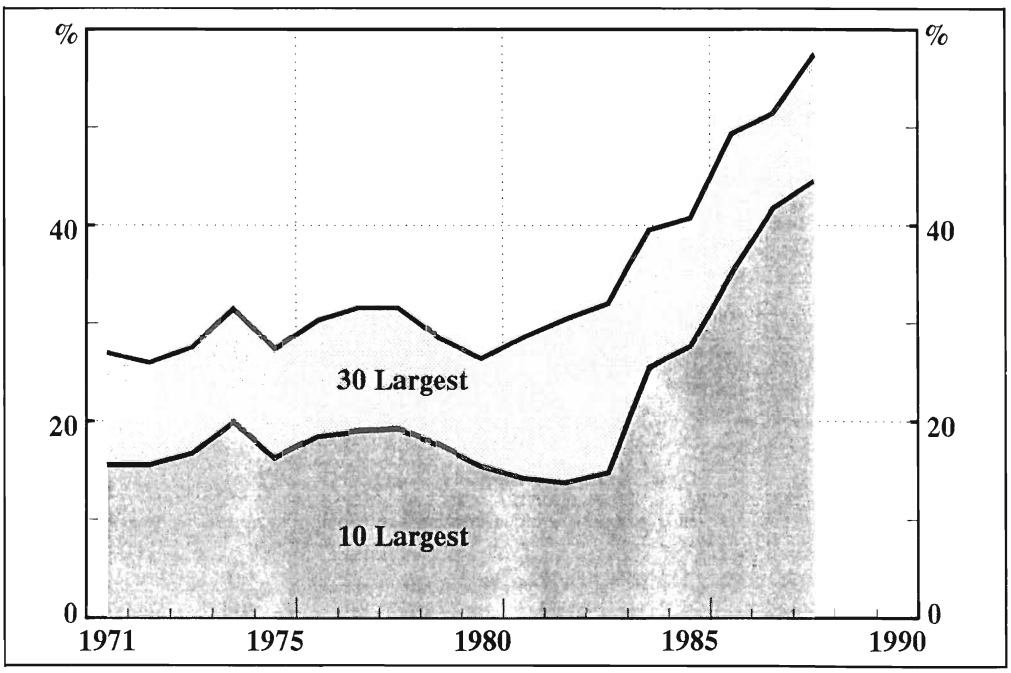
of the revenues derived from Norwegian manufacturing and petroleum production; the 30 largest control almost 45 %. Besides shipping, these are the strategic important industries when it comes to the balance of payments.

3.6. International Positions of Norway's Business

The product composition of a country's exports indicates in what lines of business domestic production holds international positions. From Table V:2, which presents the composition of Norwegian exports by product categories, we see that international competitiveness of Norwegian business heavily depends on the natural resource base of the country. Raw material production (oil, gas, fish, forestry) and energy intensive process industries (paper, metals, chemicals, oil products) account for more than 50 % of Norwegian exports.

The reliance on competitive advantages which nature has provided is an important feature of Norwegian industries. The main industry founded on the knowledge base of technology and organization, has been shipping. Throughout the 1970s, however, the crises in international shipping also struck Norwegian shipping, and reduced its con-

Figure V:10. Value added in the largest industrial corporations in Norway, 1971–1988. Share of value added in Norwegian manufacturing and petroleum output. Percent.



Source: The Institute of Industrial Economics

tribution to the Norwegian economy. As this more or less coincided with the huge discoveries of Norwegian oil and gas, the reduced importance of shipping has been compensated by a more extensive Norwegian reliance on natural resources.

Exports from bulk industries take place in large quantities to rather few customers. This is reflected in the country composition of Norway's exports; the 5 most important importing countries buy two thirds of Norway's commodity exports. Data are not available for service exports, but these should be far more diversified in this respect.

It should, however, be pointed out that production based on natural resources has undergone important changes. Products have been upgraded – paper replaces pulp, ferro-alloys are increasingly sophisticated and of high quality, and the share of raw aluminum is being reduced in aluminum exports (Svendsen 1989a, 1989b; Eliassen and Svendsen 1989). In addition, the Norwegian capacity to refine oil has been expanded, even though the profitability of these investments is questionable. This upgrading of energy-intensive products is, furthermore, accompanied by more sophisticated production processes. The rapidly growing fish farming industry, despite its inherent biological risks, is another example in this respect. Its current export value of NOK 5 billion is close to the total export of all traditional fish products.

The corporations and decisions at the company level are crucial to the conduct of the operations that decide the nation's economic devel-

Table V:2. Norwegian exports by product categories, 1970, 1980 and 1988.

	1970	1980	1988
Crude oil and natural gas	0.0	30.7	23.7
Commodities, except oil and gas	53.0	38.2	47.1
Fish and fish products	6.2	3.3	4.9
Paper and pulp	3.5	2.0	2.8
Metals	12.8	7.9	12.9
Chemicals	4.0	4.3	5.8
Oil products	.7	1.9	2.2
Machinery and transport equipment	8.1	6.5	9.1
Second-hand ships	4.1	1.8	1.5
Other commodities	13.7	10.4	8.0
Services	47.0	31.1	29.2
Shipping	37.4	20.0	15.0
Pipeline transports and oil related services	0.0	2.6	1.7
Other services	9.6	8.5	12.5

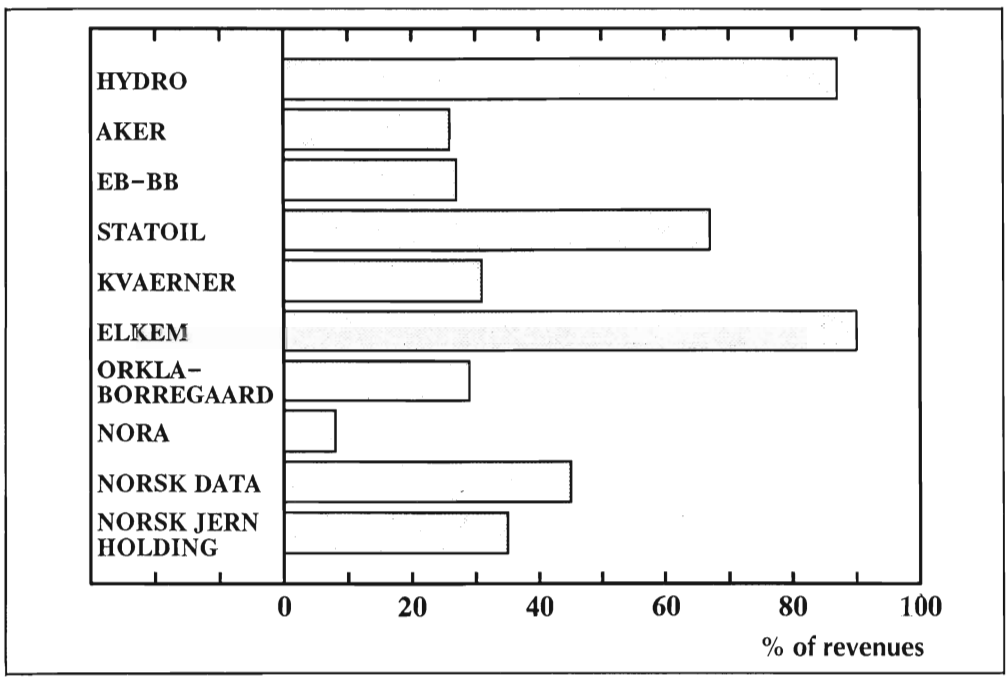
Source: Calculated from Foreign Trade Statistics and National Accounts, The Central Bureau of Statistics

opment. Hence, an important point of departure to consider medium term prospects, is to study the largest corporations in strategically important production – such as manufacturing and petroleum. Focusing on the 30 largest (cf. page xx), it is evident that almost 50 % of what they produce in Norway is exported. Taking their foreign production into account, more than 60 % of their corporate revenues are billed abroad. Hence, at this aggregate level the international orientation of Norwegian business is rather impressive.

Underneath this rather extensive aggregate international orientation, it is a fact that the degree of internationally conducted businesses vary considerably among the largest corporations. The two largest corporations, Norsk Hydro and Statoil, account for 70 % of what the 30 largest corporations bill abroad. Including Elkem, 75 % of foreign sales in this "group of 30" is taken care of. And these three corporations are the main exception to the rule that the major corporations, ranked according to their use of Norwegian labor, are heavily dependent on domestic demand (Figure V:11).

The 10 largest exporters account for 90 % of the exports from this group of 30 corporations. Or to put it another way: 10 corporations are responsible for more than 30 % of all Norwegian exports. In other words, besides relying on the sales of a few raw material and semi-manufactured products to buyers in a few countries, Norwegian exports have to rely on the strategies and management skills of a few corporations as well.

Figure V:11. Foreign billing in percent of corporate revenues in the 10 largest industrial corporations in Norway, 1988.



Source: The Institute of Industrial Economics

4. Approaching the Future

Examining Norway's future economic development, we will pay attention to what we regard as the major determinants of Norway's economy. Before we elaborate on these, however, we will discuss certain lessons that also may be drawn from the developments during the past 20 years.

4.1. Lessons of the Past

The Lesson of the 1970s: In most parts of the industrialized world, the 1970s were a decade of economic stagnation. Norwegian manufacturing and shipping were not sheltered. Nevertheless, the development of Norway's economy departed from that of most other countries. In some sense this may be explained by the social democratic political governance of Norway, which was strongly based on the idea of safeguarding employment and trying to achieve a smooth development of the national economy through fiscal policies. More important, however, is probably that Norway at the time was becoming increasingly aware of the values of its newly discovered petroleum. Thus, Norway could afford to pursue policies which were more or less impossible to exercise in other industrialized countries. Quite a few tried, but ran into severe imbalances in their economies.

Norway's industrial policies of the 1970s were also founded on these ideas of stabilizing domestic demand, and of direct support to industries and companies, which were considered to experience "temporary" economic problems due to international business cycles. This analysis, however, failed to take into account that temporary problems may turn out to be not so temporary after all.

All businesses must adjust to changing market conditions. However, when more or less all business problems are treated as cyclical, policies tend to be counter-productive with regard to the necessary structural adjustments. As long as politicians are willing "to pay the bill" to make a business profitable, production will continue more or less as before. Performance records will, however, increasingly lag behind. This, of course, will in turn affect the total economy, resulting in deteriorating productivity and a national business community which increasingly are locked in mature and sunset industries. With the exception of the new petroleum business, such patterns of development picture the industrial activities of Norway in the 1970s. Thus, the lesson of the economic and industrial policies of the 1970s is that one cannot treat all business problems as cyclical. Difficulties in business mostly reflect changing structural conditions, meaning that the business community itself holds the prime responsibility for solving them.

The Lesson of the 1980s: The ideological response to these rigidities which were built into the adjustments of the business community, was a swing to the point of view that economic and industrial policies should be conducted at "arm's length" to business. Deregulation should allow the price mechanism to clear markets. Economic policies should be general; industrial policies should not intervene in the market processes.

This ideological shift, however, was advocated more strongly than it was actually implemented. But taxation was eased, while public sector activities were increased. The state's huge revenues from petroleum taxation in the first half of the 1980s provided a financial affluence which allowed the state to meet most demands without running into fiscal constraints. The expansion of public sector activities that took place, reinforced the expansive pressures that were created in the private sector of the economy. The supply of credit escalated rapidly due to the liberalization of credit markets, and the build-up of Norway's petroleum activities was still going on. Hence, economic policies in the first half of the 1980s fueled an already fast growing economy, creating a pressure which took economic experts and politicians by surprise.

Similarly, the contractive measures introduced by the governments after the price of oil fell in 1986, have caused a much sharper drop in domestic demand and living standards than intended, simply because they have reinforced other contractive mechanisms that experts overlooked. Hence, it is clearly demonstrated that the tuning of fiscal policies cannot be conducted according to how it used to work in the 1960s and the 1970s, simply because the underlying conditions are changing. The lesson of the 1980s, then, is also a major challenge to scholars. In particular macroeconomic policies need to be based on a more thorough understanding of what is going on at the micro-level of the economy.

The Lesson of 1986: The oil price fall in 1986 took Norway by surprise in two respects. First, hardly anyone expected oil prices to fall as much as they actually did. In fact, the majority did not really consider the possibility of falling oil prices at all. The escalation of Norway's petroleum production had taken place in a peculiar situation. Norway had so far only experienced high and increasing petroleum prices. Attention was focused on exploration to discover more resources, and on how to develop them. Market considerations were more or less neglected as the market did not seem to cause any problems for this new business. Actually, Norway did not experience any market setbacks in this area until the British turned down the deal of buying Sleipner gas in 1985. And even then this was widely interpreted to result from internal political conditions in Great Britain.

Secondly, few were aware of the extent to which Norway's revenue generation had become dependant on the petroleum activities. The oil rent was tremendous, and it affected the level of domestic demand in general – through reinvestment in new upstream projects in Norway, through the government spending of her share, and – not least – through the expectations it created among Norwegians in general. Hence, as long as the oil price stayed high, the petroleum revenues worked as a blanket covering the underlying patterns of development that should have given reason for concern. The result was that internationally oriented businesses that were not related to petroleum stagnated.

The 1986 oil price fall fully revealed this underlying pattern of development, which is discussed in the previous sections. Everybody experienced that Norwegian incomes had become severely exposed to the development in a single raw material market. As the effects became clear over the following two years, almost everyone now realizes that future income should be generated from a broader industrial base than the one Norway has developed since 1970.

4.2. Determinants of the Future

Broadening the industrial base is the key to secure steady long-term growth in the Norwegian economy. This challenge contains two tasks: To provide for a sufficient diversification of competitive Norwegian business to deal with the risk aspects of generating revenues at the national level, and to upgrade Norwegian production to deal with the aspects of growth in Norwegian revenues.

Of course, time is needed to achieve countable results in these areas, just as the current industrial structure has developed over decades. Hence, two factors are of prime importance for Norway's economic development in the short- and medium-term future: As long as the petro-exposure persists, the amount of revenues that are generated from Norway's petroleum production must be regarded as one important determinant. The other concerns the speed and magnitude of profitable renewal in non-petroleum related Norwegian business. In addition, the ability to provide a favorable macroeconomic environment enhancing this process of renewal may be considered a third determinant for the future development of the Norwegian economy.

These determinants – or driving forces – are mostly subject to Norwegian control. Volumes of petroleum production, industrial renewal, as well as macroeconomic measures, result from mainly endogenous decisions. Only the international prices on petroleum and some other commodities are clearly important exogenous factors in determining the economic future of Norway.

4.3. Norwegian Petroleum Outlook

In 1988 the total volume of Norway's oil aud gas production was 85 million tonnes of oil equivalents (mtoe.). Crude oil makes up for almost two thirds of this production.

As can be seen from Table V:3, proven oil and gas reserves on Norway's continental shelf add up to 4600 mtoe. Hypothetical reserves are

Table V:3. Remaining proven Norwegian oil and gas reserves. Mtoe. January 1989.

	Crude oil	Natural gas
Fields:		
Currently in production	660	460
Decided for production	295	500
Under consideration	800	1 900
Total proven reserves	1 755	2 860

Source: The Institute of Industrial Economics

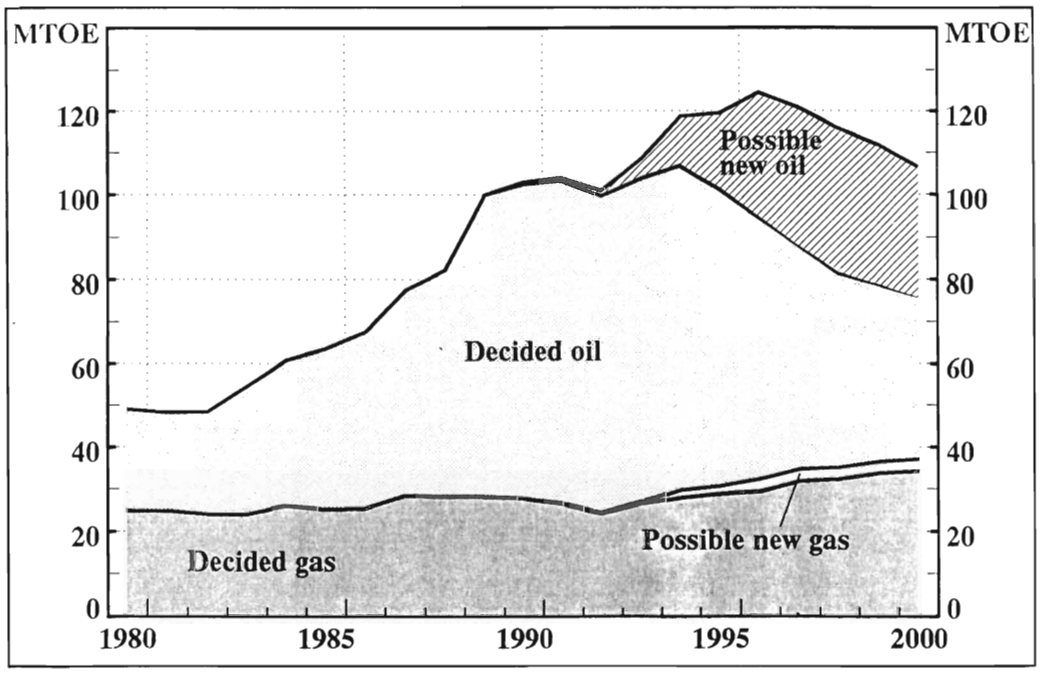
estimated at 1200 mtoe., and speculative reserves are reckoned to be another 2400 mtoe. Of the proven reserves more than 60 % is natural gas, and gas accounts for 70 % of the proven reserves that have not yet been decided to be developed. Gas may further be expected to constitute the main part of hypothetical and speculative reserves.

In 1989, production volumes of Norwegian crude will increase by 30 % compared to 1988. An annual oil production of 65–70 mtoe. means that proven oil reserves will allow current levels of production for 25 years. The huge gas reserves allow for current levels of natural gas production for more than 100 years.

Future levels of production will depend on the profitability of available reserves. Assuming oil prices stay at USD 15–18 /bbl (1988-prices) over the foreseeable future, current technology will allow several profitable developments of the fields currently under consideration. Actually, 400 mtoe. – or one half of the crude oil reserves which are under consideration – will then justify production. The remaining half of the oil reserves are connected to reservoirs which mainly contain natural gas. Hence, they cannot be developed without producing the gas as well.

If we assume development of the profitable oil reserves to start as soon as is feasible from a technical and organizational point of view, Norway's capacity for crude oil production will rise to a level of 95 mtoe. a year, or 1.9 million bbls/day by 1996 (Figure V:12). Sooner or

Figure V:12. Norway's production capacity for crude oil and natural gas, 1980–2000. Mtoe.



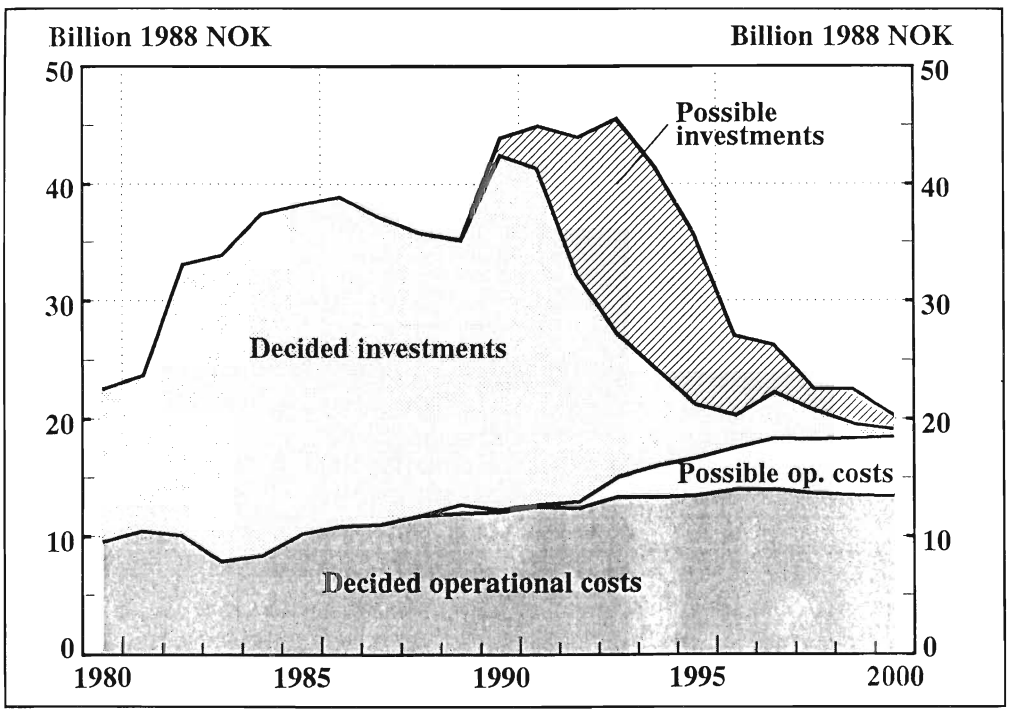
Source: The Institute of Industrial Economics

later these production volumes are bound to be reduced. The decrease which is marked in the figure, however, does not seem very likely as current estimates do not reflect efforts to increase the rate of depletion, or to include marginal reserves and new oil discoveries. Recent exploration activities have, however, been rather discouraging, which either means that the richest provinces have already been explored, or that we are currently faced with difficulties arising from exploration in new – and different – geological structures.

As far as natural gas is concerned, proven reserves are huge, which means that exploration for new discoveries does not have first priority. Current production levels can easily be expanded, but restrictions apply to what volumes the markets will absorb. Besides, potential gas sales will at any time have to face competition from other, and quite often lower cost, producers. The Soviet Union and Algeria are of particular importance as far as the European market is concerned.

The conditions in the gas markets are not ripe for substantial increases in Norwegian gas exports in this century. Continental Europe, which is the main market, has contracted most of the gas supplies needed, at least till the turn of the century. Great Britain, as the other major gas consumer, will probably be in need of imported gas. As the only gas exporter to Britain, Norway may benefit from this. But towards the end of

Figure V:13. Total activity levels in the Norwegian oil and gas sector, 1980–2000. Investments and operational costs.



Source: The Institute of Industrial Economics

the 1990's this is not likely to cause any increase in current volumes of Norwegian gas sales to Great Britain. The gas market can also be considered on a Nordic basis, and the possibilities for overseas sales of liquified natural gas (LNG) are being looked into. These opportunities will, however, signify only minor volumes in our time perspective.

Unchanged volumes of gas and higher volumes of oil mean that Norway's extractive production will increase over the next 7–8 years (Figure V:12). Then, however, output volumes will level off. Sooner or later it will have to drop, but may be not until 2010. In other words, the coming growth in Norwegian petroleum production will most likely be temporary, constituting an important ramification for the discussion of the prospects for the Norwegian economy and business community in a longer time perspective.

This temporary expansion of Norwegian production capacity in the petroleum sector, further means that Norwegian petroleum activities will run at a high level well into the 1990s. Investment volumes will stay high until 1993/94, and operational and maintenance costs will increase in scale throughout the decade. This cannot, however, prevent a descaling of the total activity level in the sector throughout the latter half of the 1990s (Figure V:13), which probably will be the case even if new, large oil discoveries are made.

The high activity levels in the petroleum sector, which will prevail well into the 1990s, constitute another important ramification when considering short- and long-term prospects for the Norwegian economy. Long-term growth in Norwegian revenues will depend on the ability of Norwegian business to exploit market opportunities that are not related to Norwegian petroleum. However, while the nation has to prepare for non-petroleum related industries to take over as the growth engine for the economy, Norway's business community and Norwegian labor will be heavily involved in expanding Norway's capacity to produce more oil and gas.

4.4. Transformation of the Petroleum Wealth is a Prerequisite for Long-Term Growth

As stated, Norwegian petroleum exports will in the short- and medium-term increase Norway's reliance on petroleum as far as revenues are concerned. In the 1990s Norwegian petroleum volumes will be twice the level of the early 1980s, when petroleum revenues "flooded" the economy. On the other hand, these higher volumes will contribute positively to easing the constraints which the balance on external accounts may cause on Norway's economic development over the coming years.

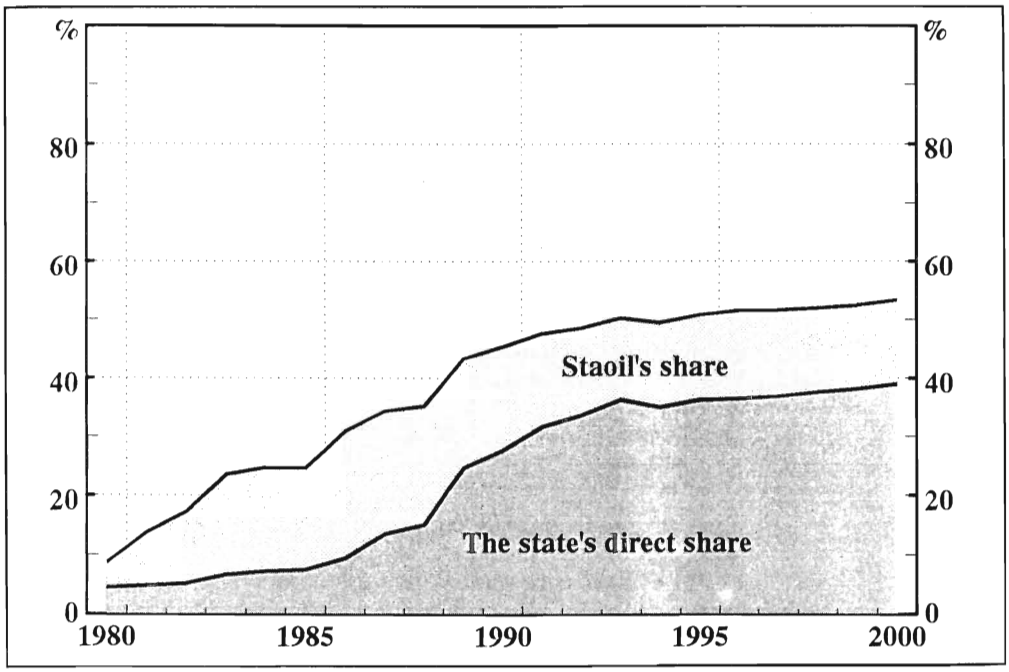
Looking beyond 1995, however, growth in the exposed sector definitely has to come from industries other than oil. Then, non-petroleum related industries have to secure the required growth in the exposed sector of the economy to meet the welfare ambitions of the society. To achieve that is really the Norwegian challenge, underlining the importance of transforming the oil wealth into a broader based industrial wealth.

This task of transformation is really one aspect of business development in general. It concerns the processes of strengthening and developing industrial competence and skills on the basis of existing industrial knowledge. Whereas this in general takes place on the basis of renewable resources, the transformation of wealth from a non-renewable resource concerns the development of industrial skills into quite different lines of business.

Here, the viable options for the nation coincide only to a small extent with the business opportunities of the oil companies involved. The oil companies will stay in business by reinvesting profits from upstream activities into new upstream projects on a world-wide basis as long as oil is profitable to exploit. In addition, some will find investments in downstream projects to be a viable business opportunity, but that will most likely be outside of Norway. Oil companies are just occasionally likely to invest in other lines of business in Norway. Hence, the oil rent which the oil companies earn in Norway will most probably be reinvested in business projects abroad. This may generate a new base for corporate earnings, but not a new revenue base for Norway.

As a major collector of the oil rent, the Norwegian state holds a prime responsibility as far as the transformation of the oil wealth is concerned. In the 1990s the Norwegian state will, through different arrangements, directly control more than one third of Norway's petroleum volumes.

Figure V:14. The state's and Statoil's shares of Norway's oil and gas production, 1980–2000.



Source: The Institute of Industrial Economics

Including the state-owned Statoil, the state will be the owner of more than 50 % of Norway's petroleum production (Figure V:14).

Holding this position, the state is more or less bound to consider reinvestments of the operating surplus which it gets from these activities to secure the future economic development of the Norwegian economy. Besides, it is as the collective instrument of the society in a key position to influence industrial transformation within Norway's business community through the economic and industrial policies that are pursued. Keeping the importance of industrial transformation in mind, this should mean that the skills of the Norwegian state beyond a doubt are challenged in a way that probably has no parallel in any industrialized country.

The state certainly faces difficult tasks. Certain guidelines, however, seem quite obvious. Petroleum revenues should not be used for consumption purposes only, as consumption of wealth cannot provide any firm base for the Norwegian economy. Hence, one has to make sure that investments are made in activities that can provide Norwegian business with new opportunities in a longer time perspective. Education and research are two such activities with no serious constraints on their potential business applications. Furthermore, one should make sure that a business based on non-renewable resources does not crowd out too much – or does not completely strangle the growth – of the already existing industrial competence oriented towards international markets.

In this last respect Norway has sins to pay for, although they should not be unretainable. It has been a deliberate policy that as much as possible of the Norwegian oil activities should be carried out by Norwegian business. This is partly due to the intention of having the oil business conducted within a system based on national control. But it has also been an element in an industrial strategy. By letting Norwegian business handle the complex and challenging tasks necessary to exploit petroleum in offshore areas, Norwegian business has been expected to acquire competence and capabilities that would strengthen its industrial base. The idea was to apply this to serve offshore petroleum activities in other parts of the world, or – by investigating other applications for these capabilities – to move into other markets.

Entering the 1990s, phase one of this strategy seems to have been implemented. The petroleum sector has served as a dynamic growth engine in Norwegian business over the last 15 years. Norwegian business has grasped its share of the Norwegian petroleum activities, while approximately 40 % of research and development activities financed by all Norwegian industries in the 1980s, have been connected to offshore petroleum activities. The rapid adjustment of the new Norwegian oil projects to the oil price fall, prove – at least to some extent – that these efforts have been worthwhile.

Nevertheless, so far no significant results, or even large scale attempts to extend the market base for this broad petro-related business in Norway, can be traced. The undertaking of market cultivation from this industry, being expected to fulfill these industrial ambitions in Norwegian oil politics, has mainly consisted of efforts to step up Norway's own offshore petroleum activities. As a result, Norwegian authorities have failed in their attempts to limit the scale of the domestic petroleum sector.

Over the next 5 years Norwegian petroleum activities will run in high gear, and the volume of Norwegian petroleum production will increase. Indeed, the sector will represent a larger share of the domestic economy. Hence, it is crucial to hedge business development outside the petroleum sector from fluctuating incomes caused by the unpredictable market of oil. A foreign currency fund may be an important measure in this stabilization respect. Such a fund may, in the future, function as an alternative revenue generator, as it will pay dividends that may easily be included in the domestic economy on a permanent basis.

The crucial point for Norway, however, is not to become mainly a recipient of interest payments, but also to develop the industrial base of Norwegian production. This raises interesting and fundamental questions regarding the state's role in a small, mixed economy, as the state actually is the major collector of Norway's oil rent. In fact, the state's position in Norway's oil and gas production means that in the mid-1990s it is likely to collect 25 % of the operating surplus in all exposed industries in Norway. We have not included Statoil in the state figures. Indeed, this requires a well considered industrial strategy – also on behalf of the state. This apparently contradicts the current principle in Western societies that business matters ought to be left to the business community. The point is, however, that the Norwegian state, through its involvement in domestic petroleum activities, has become a major participant in the business community without really recognizing the responsibilities which this implies. So far, such questions have only been vaguely discussed. The undertaking of the state's (peculiar) economic role will, nevertheless, be quite decisive for Norway's economic development.

In this respect it is also important to make the domestic petroleum-related businesses prepared for the downslide in Norwegian petroleum activities, caused by a shortage of undeveloped oil resources and volume restrictions in the markets for natural gas. It may sound like a paradox, but public authorities must convince the business community of its need to devote their efforts to exploit new business opportunities, on the basis of competence and capabilities that participation in the domestic petroleum activities have provided.

If this can be linked to a more coherent strategy at the political level to enhance business opportunities on a broader basis than that pursued for the last 15 years, there should be a reasonable chance of success. So far, economic policies have improved the macroeconomic setting for a more balanced industrial development in Norway. But economic policies cannot do the work alone. The capabilities and skills of the business community will be decisive.

5. Economic Prospects

5.1. The Range of Possible Outcomes

Above we have raised three issues which we expect will determine Norway's economic future in the short and medium term: 1) The amount of revenues from the petroleum production; 2) The speed and magnitude of industrial renewal, and 3) The success of macroeconomic policies in balancing and stabilizing the economic development. In a very long time perspective, the first factor will have to lose its importance at the national level. We do not, however, consider it likely until well into the next century. Regarding the amount of revenues from Norway's petroleum production, we have explained why we expect volume output to increase quite substantially until the mid-1990s. This seems quite certain, unless installations or reservoirs should physically break down. Revenues are, of course, not only determined by volumes, and the price of oil has proven to be unpredictable. It may turn out to deviate substantially – up or down – from current levels, which represents the assumption made in Chapter I. When applying this assumption, however, our prime reference is that Norway will receive rather huge revenues from its petroleum production over the coming years.

As regards the effects of industrial renewal and of macroeconomic policies on Norway's economic future, we will for simplicity make a distinction between success and failure for each of these variables. Regarding the question of industrial renewal, success will mean that the process of broadening and diversifying the internationally competitive competence of Norwegian business is on a good track by the mid-1990s, when domestic demand impulses from the petroleum sector are expected to decline. Failure, on the other hand, will mean that the degree of diversification is stable and that more time is needed to get this process started. Regarding macroeconomic policies, success should imply that Norway achieves a comprehensive balance in its economic development, i.e. full employment is restored without rising prices or distorting external and public accounts. Failure means that these balance issues are not kept under control.

The differences between successful macroeconomic policies and extensive industrial renewal on the one hand, and failure in stabilizing the economy and not achieving a broad competitive-based revitalization of Norwegian industries on the other, mark the range of possible outcomes for Norway's economic development. The first, which may be labelled the "Renewal 2000" scenario, will provide a steady development over the medium term, while establishing a firmer base for Norway's long-term growth. The second extreme will, on the other hand, be characterized by "stop and go" in the economic development: The business sector will not contribute to reducing unemployment in the short and medium term. Then, policies will be forced to respond to this through the public sector. As the financial position of the state, due to our assumption on petroleum revenues, can be expected to develop without serious constraints, whereas external accounts are not likely to be in the red in the short and medium term, this may lead to actions which cause the economic development to resemble the one Norway experienced in the 1980–86 period. This "Da Capo"-scenario will mean that the vulner-

ability of Norwegian revenues will persist over the next decade. By the mid-1990s economic growth will be low.

The difference between these two extreme outcomes, may not be easily traced in annual average growth rates until the mid-1990s. They will, however, definitely differ in balance scores also in the medium term. Whereas full employment is restored and other balance issues are kept under control in the renewal alternative, unemployment will be deeply rooted – or at least latently threatening – in the latter. Policy efforts to cope with this will cause the balance on external and public accounts to deteriorate. Further, inflation may once again get out of control, mainly because the inability to solve the unemployment issue gradually will distort the social foundation on which Norway's production is built.

In reality, neither of these extremes may prevail. However, the slower the processes of industrial renewal, the harder it will be to pursue policies which can provide balanced growth. Balanced growth will most likely prove to be a prerequisite for avoiding distortions and delays in the processes of renewal within the business community. Thus, Norway's economic development obviously faces the risk of running into a vicious circle.

Nevertheless, when considering the future, we have to pay attention to the importance of learning. Indeed, policy makers now widely recognize that the key to secure Norway's economic future is to broaden its industrial base, which means that they acknowledge the need of letting this concern influence future economic policies. Further, they are now probably well aware of the risks of treating structural problems as cyclical, even though in practice it is hard to distinguish between the two. They also now recognize the risks of fueling the domestic economy with huge windfall gains, after the 1983–86 experience.

However, despite the impacts of learning we cannot neglect the inherent risks in Norway's current economy. If the processes of industrial renewal are delayed, the problems will be severe. The current policies, which to a large extent imply individual sacrifices in the short run to achieve collective benefits in the future, may then lose support. Hence, the development of wages and prices may get out of control, while unemployment persists. High unemployment is also likely to force politicians into making decisions which they know work in contradiction to their long-term objective for industrial development.

This holds in particular, if petroleum revenues turn out to be as high as assumed, or higher. Then, a reasonable balance will be achieved on Norway's current account. Thus, external constraints will not apparently limit efforts to reduce unemployment through the public sector, if private business fails to employ more labor. In this respect the awkward parliamentary situation facing the current coalition government, represents another complication. It does not make it easier that the three coalition parties, so far, have not committed themselves to a comprehensive economic policy. Rather, their economic policy runs the risk of being caught in between contradictory targets: tax cuts on the one hand, and additional public transfers to families and farmers on the other. Hence, we fear that Norway's economic development over the forecasting

period will repeat the development of the first half of the 1980s. Current public budgets are according to what we should expect under this scenario: While Norway's petroleum production in 1989 is higher than ever before, the balance on general government's account will probably be in the red for the first time in 10 years. This deficit will increase to just over 1 % of GDP in 1990 according to the budget passed by the Storting (parliament).

We should not, however, forget the possibilities of a third scenario, either. Significantly lower petroleum revenues than predicted would probably lead to severe imbalances in the Norwegian economy almost regardless of how the remaining economy develop in the short- and medium-term. It will have an immediate influence on the balance-of-payments, which, in turn, will affect inflation, employment and the balance on public accounts. Thus, an economic development over the forecasting period like the development of the latter half of the 1980s, cannot completely be ruled out.

5.2. Estimates towards 1993

Considering the 1990s, we fear that the chances for Norway's economy to change course from the 1980s are not the best. We think the petroleum revenues once again may cover unfavorable underlying patterns of the development.

When predicting the economic development up to 1993, however, we do not expect this to cause great differences in macroeconomic

Table V:4. Balance of resources and expenditure, 1970–1993.

	1988 mill. NOK	Annual average Change in volume, % 1971–80	1981–85	1986–88	Estimates 1989–93
GDP	594.242	4.7	3.2	2.9	2.0
Imports	217.453	3.4	4.1	0.0	1.0
Total resources	811.695	4.3	3.5	2.1	2.0
Exports	213.117	5.4	4.7	3.3	4.0
Consumption					
– private	308.753	3.6	3.4	0.8	1.5
– public	122.614	5.3	4.2	2.2	3.0
Investment (incl. inventories)					
– private	145.189	3.4	1.3	2.4	−2.0
– public	22.022			9.5	0.0
Total demand	811.695	4.3	3.5	2.1	2.0

Source: Calculated from National Accounts, The Central Bureau of Statistics.
Estimates by The Institute of Industrial Economics.

growth variables. Differences will first occur in balance scores, even though they may be hard to trace in the period considered. They will be most notable when considering the market orientation and performance of the large strategic corporations in Norway's economy, which then, in turn will show up in macroeconomic statistics in a long-term perspective. Looking just 4 years ahead, this will hardly be noted in national figures.

Our estimates for the national economy until 1993 are summarized in Tables V:4–7. The estimates are presented as average annual changes. 1988 is applied as the base year.

Increased petroleum production will contribute to a rather strong increase in total exports. We also expect exports from manufacturing and shipping to increase. It should, however, be pointed out that a substantial share of the increase in Norway's exports will take place in the first part of the period. From 1990 growth rates are expected to level off.

Private consumption decreased in 1987 and 1988 after having grown rapidly in the preceding 3 years. Private consumption has continued to fall in 1989, but is expected to turn around. The annual average growth rate is calculated at 1.5 percent for the period.

Public consumption will continue to increase over the forecasting period. The annual growth rate will, however, be low compared to the 1971–85 period. It is, nevertheless, expected to grow faster than private consumption. Our estimate is 3 percent as an annual average up till 1993.

Private investment fell sharply in 1989, and is estimated to fall also in 1990. Traditional exports in manufacturing and shipping are currently generating huge profits, which partly will be reinvested. Investment in the petroleum sector is, furthermore, expected to increase in the early 1990s. Altogether this is likely to cause an upswing in the level of investment from 1991. This upturn, however, is not expected to be strong enough to prevent a lower investment level in 1993 compared to 1988. The annual average growth rate is estimated to be negative 2 percent.

Public investment is not expected to increase over the forecasting period. A minor downturn during the first part of the period is expected to be replaced by a moderate upswing in the early 1990s.

Imports have decreased by more than 10 percent in volume terms over the 3-year period of 1987–89. The expected increase in consumption, investment and exports in the years to come will, however, contribute to rising imports from 1990. We estimate the annual average growth rate at 1 percent over the forecasting period.

If exports, consumption, investment, and imports develop as described above, the annual GDP growth rate will be 2 percent on the average during 1989–93. This is well below the estimated average for the OECD area, and substantially below Norwegian growth rates over the last decades.

A GDP growth rate of 2 percent is not sufficient to restore full employment. Assuming that the labor force participation rate does not de-

cline, we expect unemployment to stay at the current level also at the end of the forecasting period, even though it temporarily may be brought down. Consequently, we fear open unemployment in the range of 4 percent of the labor force in 1993, and another 2 percent will be participating in special labor market programs.

During 1989 Norwegian inflation has been brought down to the OECD average. It is likely to stay there through 1990. In our opinion, difficulties in solving the unemployment problem, will, however, distort the possibilities of keeping costs and wages down through mutual actions involving the government, the business community and the labor unions. Hence, inflation may easily increase again. Actually, we expect it to rise above the average OECD level in the early 1990s.

Table V:5. Balance scores, 1970–1993.

	1970	1980	1985	1988	Estimates 1993
External accounts,% of GDP					
– Trade balance	–1.3	6.1	8.2	–0.7	5.0
– Balance on current account, excl. net interest payments	–1.6	4.5	6.2	–2.3	3.5
– Interest payment net	–0.5	–2.6	–0.9	–1.7	–1.5
– Net foreign debt	11.4	32.3	9.7	21.2	12–14
Public sector (consolidated) surplus, % of GDP	0.7	3.4	8.1	0.7	0.0
Unemployment,% of labor force	1.7	1.7	2.5	3.2	4.0
Labor force participation rate, %	60.4	67.0	68.5	71.1	72.0
Inflation (consumer prices)	11.0	10.0	5.7	6.7	5–6

Source: Calculated from National Accounts, The Central Bureau of Statistics. Estimates by The Institute of Industrial Economics.

Table V:6. Balance of manpower resources, 1972–1993.

	1988 Thousand persons	Average annual change, %			
		1972–80	1981–85	1986–88	Estimates 1989–93
Population	4.222	0.5	0.4	0.5	0.4
Population of working age	3.071	0.8	0.4	0.6	0.3
Labor force	2.183	1.8	1.2	1.9	1.0
Unemployment	69	2.1	9.1	10.6	8.0
Employed	2.114	1.0	1.0	1.7	0.5

Source: Calculated from National Accounts, The Central Bureau of Statistics. Estimates by The Institute of Industrial Economics.

Applying the assumptions on the price of oil and on non-energy raw material prices from Chapter I, we predict the value of Norwegian exports to become rather high. Even though imports are expected to grow from 1990, too, we expect that Norway again is facing a period of surpluses on current account. These surpluses are, however, subject to the fiscal policies that are pursued. Nevertheless, we expect this surplus to be in the range of 2 percent of GDP in 1993.

These surpluses will reduce Norway's net foreign debt. In 1988 this debt equalled 21 percent of GDP. In 1993 we expect the GDP share of net foreign debt to be 12–14 percent.

If our oil price assumption prevails, combined with the expected increase in Norway's petroleum production, the state will receive substantial revenues from the petroleum sector. Even though Norway's extraction of petroleum will be almost at its peak during the forecasting period, it is, nevertheless, uncertain whether these revenues will cause the consolidated public budget to balance. In a longer time perspective this should be of general concern, as the petroleum revenues cannot be considered as ordinary revenues. Oil and natural gas are non-renewable resources. Hence, it would be more relevant to regard the registered revenues as wealth transfers. Revenues in the ordinary sense should rightly be only the return on these assets. Considering petroleum revenues in this manner, public budgets also in the forecasting period can be said to balance with rather huge deficits. Applying the prevailing accounting principles, however, we expect a reasonable balance on the consolidated public account over the coming years.

Table V:7. GDP by kind of economic activity, 1970–1993.

	1988 mill.NOK	Annual average change in volume, %			
		1971–80	1981–85	1986–88	Estimates 1989–93
Agriculture, forestry and mining	20.235	1.9	2.0	1.9	1.5
Petroleum and pipelines	49.436	–[1]	6.1	10.7	5.5
Manufacturing	95.921	1.3	1.3	0.1	1.5
Construction and electricity supply	60.594	3.5	2.6	2.4	–1.0
Shipping	12.808	2.9	0.0	–3.2	5.0
All (other) private services	220.980	4.1	2.7	2.9	2.5
Public sector production	92.316	5.8	4.2	2.3	2.5
Correction items	41.955	9.0	2.6	–3.7	0.0

Source: Calculated from National Accounts, The Central Bureau of Statistics. Estimates by The Institute of Industrial Economics.

[1]) Oil production did not start until 1971, and then on a small scale only. Annual average volume growth for this sector during the second half of the 1970s (1976–1980) is almost 40 %.

6. The Potential for Long-Term Balanced Growth

In a small, open economy balanced economic growth must be supported by a domestic business community which is able to compete successfully in international markets. So far, Norway has relied heavily on her natural resources in this respect. The growth potential for these natural based industries is, however, limited. The non-renewable petroleum resources will not provide further growth when looking beyond the mid-1990s. Fisheries, for example, suffer from ecological problems, and the abundant supply of rather cheap energy will not last forever. Hence, in a long-term perspective Norwegian economic growth must to a greater extent be supported by improved international competitiveness based on human capabilities: knowledge and organizational competence.

With the exception of shipping, and a few manufacturing companies, the prevalence of knowledge-based industries – or artificially created competitive advantages – is rather rare in Norwegian production. This means that the national task to sustain the Norwegian level of welfare when entering the new century represents a big challenge to the business community, and to the leading corporations in particular.

On the doorstep of the 1990s, the macroeconomic setting seems to be fairly good for fostering development of Norwegian business. Economic policies have succeeded in adjusting domestic demand downwards. Supported by international business cycles and more stable oil markets, Norwegian revenues generated on international markets are currently sufficient to achieve a reasonable balance on external accounts. This is likely to prevail over the next 5–6 years. The cooperation between organized labor and employer organizations has, furthermore, contributed to low wage increases and, in turn, lower inflation. As a consequence, interest rates are coming down towards international levels.

These results have, however, been accompanied by large-scale unemployment. By Norwegian post-war standards, the current rate of unemployed labor is critical. This challenges the ability of the political system to distribute incomes and jobs without distorting the more favorable macroeconomic setting which has been achieved. Failing in that respect, the expected improvements on Norway's external accounts are likely to lead politicians – struggling in a "Catch 22" like situation – to decide on measures with short-term positive effects on employment, but which in the longer run will cause severe imbalances in the Norwegian economy.

In a mixed economy, like Norway's, the state in general holds a crucial position to influence economic development. This role of the state is becoming even more evident as the Norwegian state also is the major collector of profits from Norway's temporarily increasing petroleum production. Then, the state also bears responsibility for deciding on how this oil rent is to be channeled into investments which can provide future earnings for the society. Like it or not, the state has to attend very seriously – and closely – to business challenges.

There is, of course, a considerable risk that these revenues from the petroleum sector will not be invested to the long-term benefit of the

society. The state may, for instance, be fooled by opportunistic business interests, and get involved in high risk business projects. As previously seen it may also be tempted to solve welfare issues benefitting from fiscal surpluses in the short run, even though their long-term financial support is uncertain.

It must, however, also be pointed out that almost no matter how perfect the state performs its economic and industrial policies, Norway's long-term economic development primarily relies on the competence of the business community. Neither economic policies, nor financial affluence due to the exploitation of non-renewable natural resources, can in a long-term perspective compensate for lacking or inferior industrial skills and capabilities. Therefore, Norway's economic challenge in the 1990s seems to coincide with the strategic challenges facing its population of business firms.

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CHAPTER VI

Sweden: Structural Problems Still There to be Solved

Contents

1. Introduction

In our previous Nordic analysis (dated 1987) we predicted a slower rate of real growth for the Swedish economy as compared to the OECD area and a higher rate of inflation than the OECD average. We also emphasized that an improvement in this situation required that total consumption, including public consumption growth had to be reduced. The domestic cost situation furthermore had to be improved to stimulate investment. Even though the forecast period for "Nordic 1987" has not yet ended, we observe that our forecasts – up to mid-1989 – have been well in line with the actual development. When taking a more detailed look at the aggregate forecasts, however, we find that the average annual change in exports has turned out to be slightly overestimated, whereas private consumption is correspondingly underestimated. Increasing exports at the cost of reduced private consumption in total demand was one of the key policy issues behind our forecasts. The main contributor to that demand since 1984 had been private consumption. Contrary to our assumptions this development did not materialize even if a reduction in private consumption and an increase of investments were achieved.

For our forecasting period up to 1993 additional policy problems appear on the horizon. Assumptions have to be made about the outcome of

- **the comprehensive Swedish tax reform** announced in October 1988 by the Minister of Finance on the behalf of the Social Democratic government and scheduled to start in 1991. Three governmental investigations were carried out to underpin the implementation of the reform.

  These covered the areas of:

  * reformed income taxation (RINK)
  * reformed corporate taxation (URF)
  * indirect taxes (KIS)

  The results of these investigations were presented to the Minister of Finance in June 1989. During the autumn 1989 a parliamentary decision was made to implement a first step of the tax reform already in 1990. However, the political turbulence in Sweden in the beginning of 1990 with the Social Democratic government resigning will perhaps postpone the implementation.

- **the effects of the abolishment of the Swedish foreign exchange control regulations**. The intention to abolish all the regulations before the end of 1989 was expressed in the yearly plan from the Ministry of Finance, which was published in early January 1989. To show that the intentions were serious some parts of the foreign exchange control regulations were abolished already in the end of January. The speed of abolishment was conditioned by finding acceptable ways of registering capital flows for tax control purposes. In May these problems were settled and a more or less complete abolishment of exchange controls was announced to take place on July 1, 1989. In assessing the medium-term competitive effects of the abolishment, assumptions about Swedish relations to the EC are crucial.

- **the European Community question**. Is Sweden going to apply for membership during the forecast period or is the Swedish government going to make an explicit announcement about whether it intends to apply for membership during the early 1990s? The government has declared that it intends to match both in speed and extent the EC harmonizing and deregulation. But a crucial issue in assessing the medium-term prospects of the Swedish economy is to know in what way this intention affects business decisions about where to invest.
- **the change in the social insurance system**. The change in the population structure with an increased relative number of elderly people calls for a radical increase in contributions to finance this form of insurance. This issue will be put on its edge during the forecasting period.

In the beginning of the 1990s, the Swedish economy is at a crossroad. The very favorable development during the 1960s turned into problems in the mid-1970s. Since then a return to slow growth has occurred. Depending on the policy decisions on some of the issues mentioned above, higher growth may result. However, in our policy projections we are not very optimistic about this. The abolishment of the foreign exchange control regulations and the increased economic integration leave little leeway in policy making, without incurring high social costs. We assume that the proposed tax package will be fully introduced during the forecast period, but that the high level of taxes will persist. We see this deviation from the international tax level as damaging for the Swedish economy. Concerning EC membership, we interpret the statements from the Social Democratic government to mean that it is not going to apply for membership, nor is it going to declare any intentions about future membership before the next election, in 1991. Furthermore, even if there is an ongoing Swedish harmonization with EC regulations, we regard – for the whole forecasting period – this membership question as highly uncertain. Seen from a corporate investment perspective this means increased incentives for investing abroad.[1] Finally, for the social security system to function, we expect increased charges towards the end of the forecasting period.

In addition to the reforms mentioned above, new ones may appear during the forecast period as a result of an ongoing debate about inefficiencies in the public sector. We cannot, however, anticipate such potential reforms in our forecasts. We also have to disregard effects during the forecasting period of a potential decision to postpone the Swedish disinvestment of nuclear power, which is slated to start in the mid-1990s.

One important "fine-tuning" policy measure has to be considered in our forecasts as it concerns almost the whole forecasting period and may involve some redistributional effects. This measure consists of mandatory savings from September 1, 1989 up to the end of 1990. The savings are to be repaid in 1992–93.

In what follows we will discuss the development of the Swedish economy during four subperiods: –1980, 1980–1985, 1985–1988 and

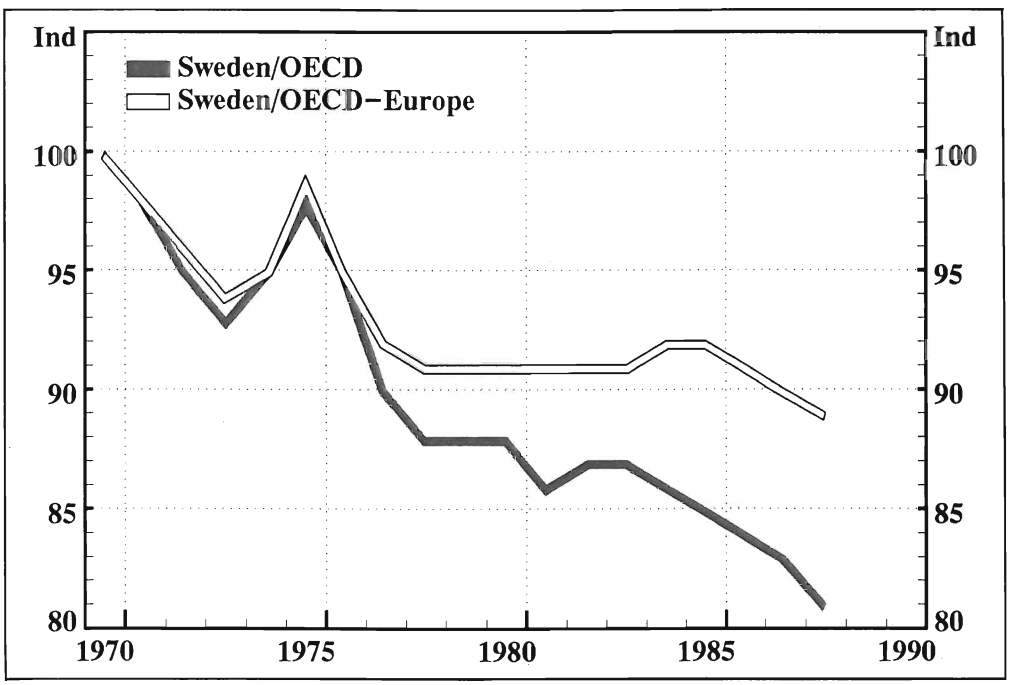
[1] A recent IUI-study (Braunerhjelm, 1990) shows that uncertainty about future Swedish relations to the EC is causing investments to be shifted out of Sweden.

1988–1993 (forecasts). Section 2 will show how an unbalanced Swedish economy emerged during the years following the first oil crisis. Section 3 highlights the corrective measures taken during the first part of the 1980s. In section 4 we discuss the inadequacy of these measures based on observations during 1985 up to mid-1989. The key question is whether the remaining problems are structural. And if so, a radical policy change is needed to get the Swedish economy back to a reasonable growth rate which will keep the Swedish standard of living on par with that of the wealthiest economies of the OECD area in the long run. Since we find some of the problems to be structural, we spend section 5 discussing different causes behind and a cure for these problems. Finally, in section 6, forecasts for the period 1988–93 are presented.

2. 1970s – When Trouble Began

Up to the mid-1970s the Swedish economy had – for many decades – been used as a reference case for a successful mixture of a market and a planned economy. Staying outside the two world wars, while even benefitting from them, appeared to have created a solid platform for growth. The capital formation needed for taking a position in the industrial world in the beginning of the 1900s was financed from abroad, and paid back at a – due to the First World War – favorable rate. The

Figure VI:1. Relative GDP development 1970–88.
Index 1970 = 100.

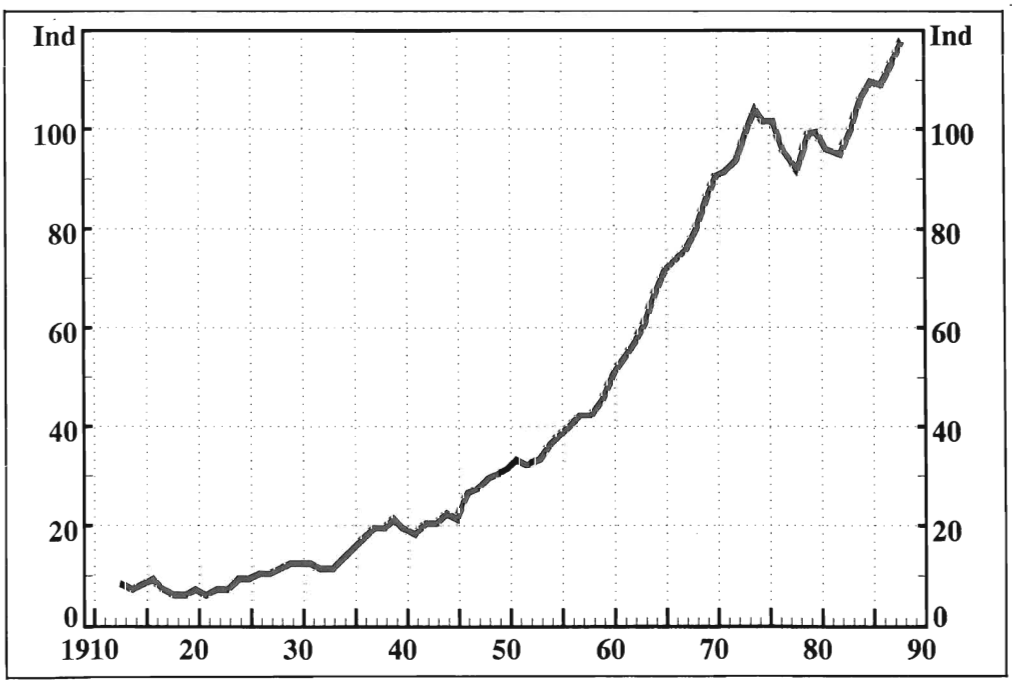


Sources: Sveriges Riksbank, SCB, Ministry of Finance

industrial sector also benefitted from the war through a greater export demand due to the urgent need to rebuild European industry and infrastructure. After some severe setbacks during the interwar period – like the deflationary crises following the First World War and the depression of the early 1930s – the actual take-off for Sweden as an advanced industrial nation occurred at the end of the Second World War. What emerged from this start was a nation with high capital formation and education per capita, high per capita income and with a well dispersed wealth in society. In the middle of the 1970s Sweden ranked among the highest in the world on all these counts.

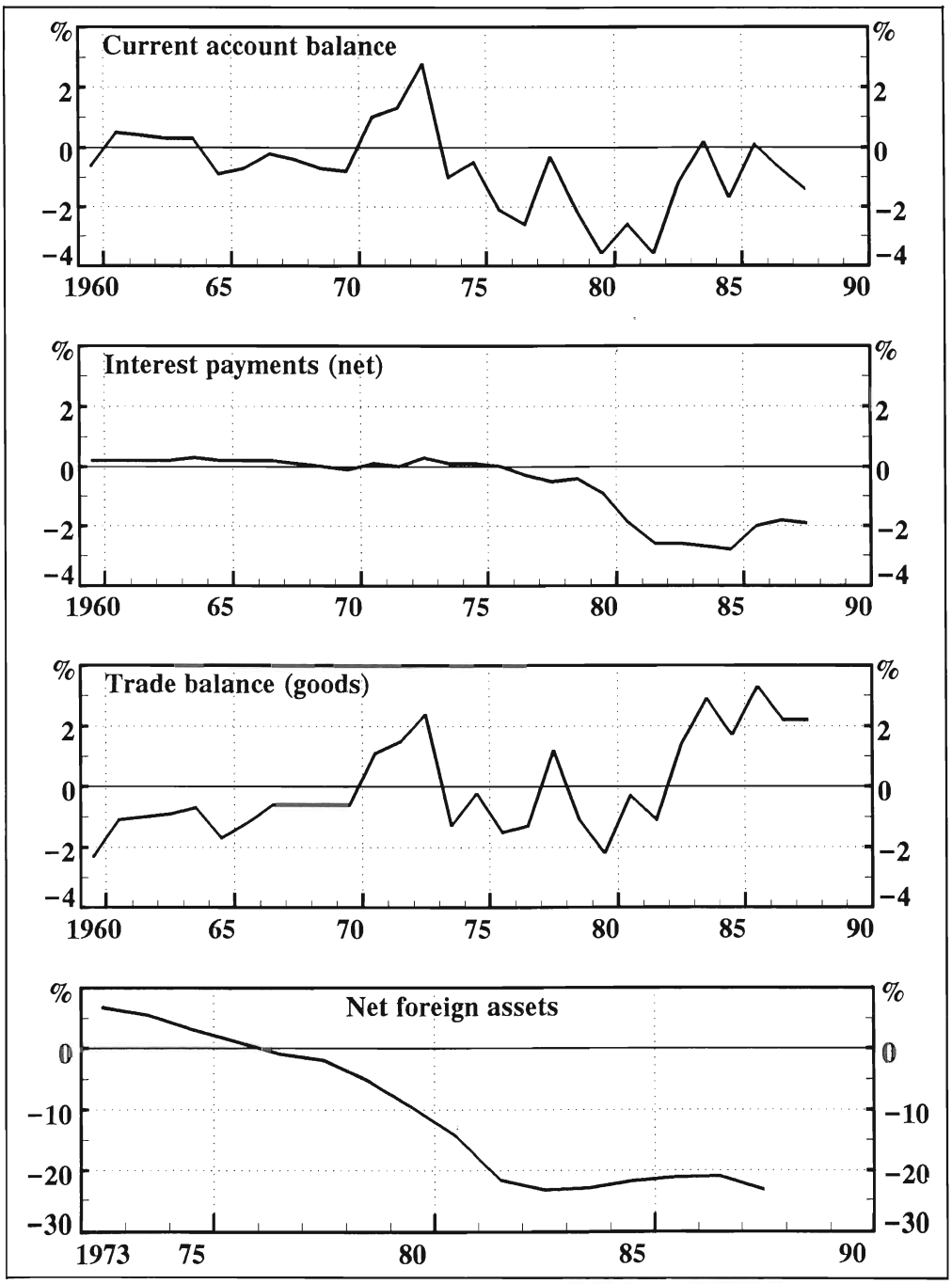
The turbulence in the world economic scenario at the end of the 1960s and the beginning of the 1970s – with the Vietnam war fueling world inflation, the breakdown of the Bretton Woods system and the first oil crisis – forced several domestic and socially unpleasant policy decisions on the small open economies. The Swedish government (the Social Democrats) believed in the efficiency of stabilization policy and opted for autonomy together with an exchange rate arrangement with a pegged exchange rate (the European currency snake), relying on the efficiency of the Swedish foreign exchange controls to curb destabilizing capital flows. Contrary to West Germany, which was the standard-setter within the Snake arrangement, the Swedish government conducted an expansionary domestic policy aimed at bridging the recession after the first oil crisis. This policy seemed initially successful. In the mid-1970s, however, several crisis signals appeared. **Real growth** in GDP tilted

Figure VI:2. Manufacturing production in Sweden 1913–88.
Index 1980 = 100.



Source: SCB

Figure VI:3. Swedish economy – external balances 1963–88.
Percent of GDP.



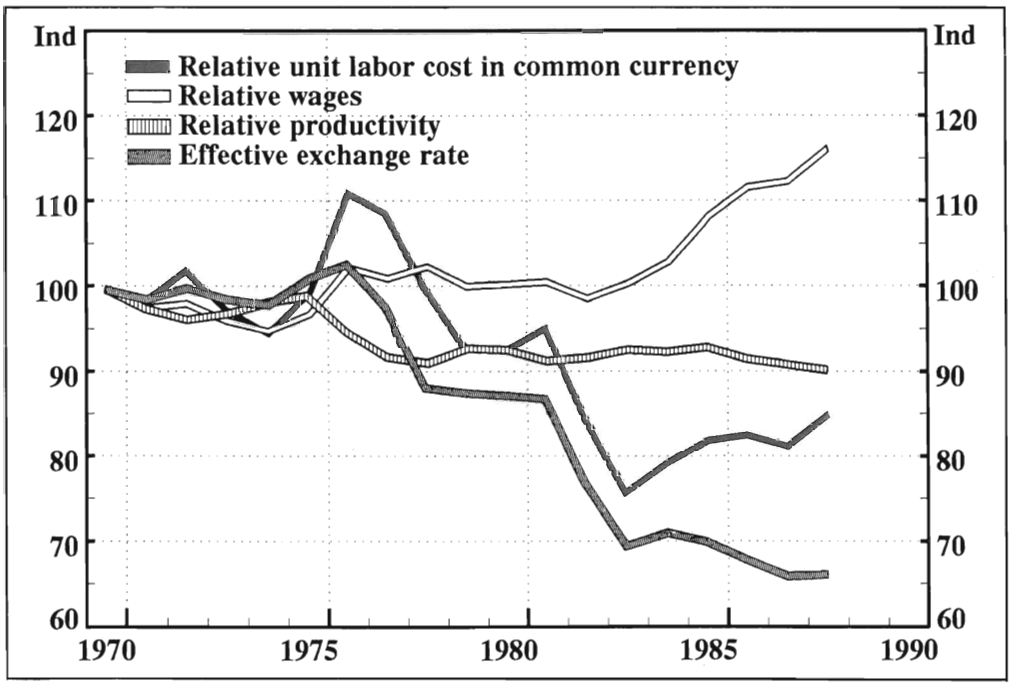
Sources: SCB, Sveriges Riksbank

downwards as did labor productivity. For the rest of the 1970s Swedish growth rates were considerably below the OECD average (Figure VI:1). After a peak in 1974 the annual increase in manufacturing production decreased for the first time since the beginning of the 1950s (Figure VI:2).

Full employment is the prime objective of the postwar period. Hence, the expansionary policy immediately following the first oil crisis seemed successful. In an international comparison, the rates of unemployment were very low as was seen in Chapter I (Figure I:19). This was the case even when people participating in labor market programs are included. Beside these programs the growing public sector absorbed unemployed released from the stagnating manufacturing sector. During the 1970s, the public sector added more than half a million jobs, while the private goods and energy production lost almost a quarter of a million jobs. Thus the rate of unemployment for the entire 1970s could be kept as low as 2 percent, but at the price of rapid inflation and accumulation of public and foreign debt. Hence, the degree of freedom in economic policy making was gradually reduced.

The first oil crisis brought Sweden into a period of persistent **current account deficits** and a consequent accumulation of foreign debt forcing drastic policy revisions at the end of the 1970s (Figure VI:3).

Figure VI:4. Swedish cost competitiveness in relation to OECD, 1970–88.



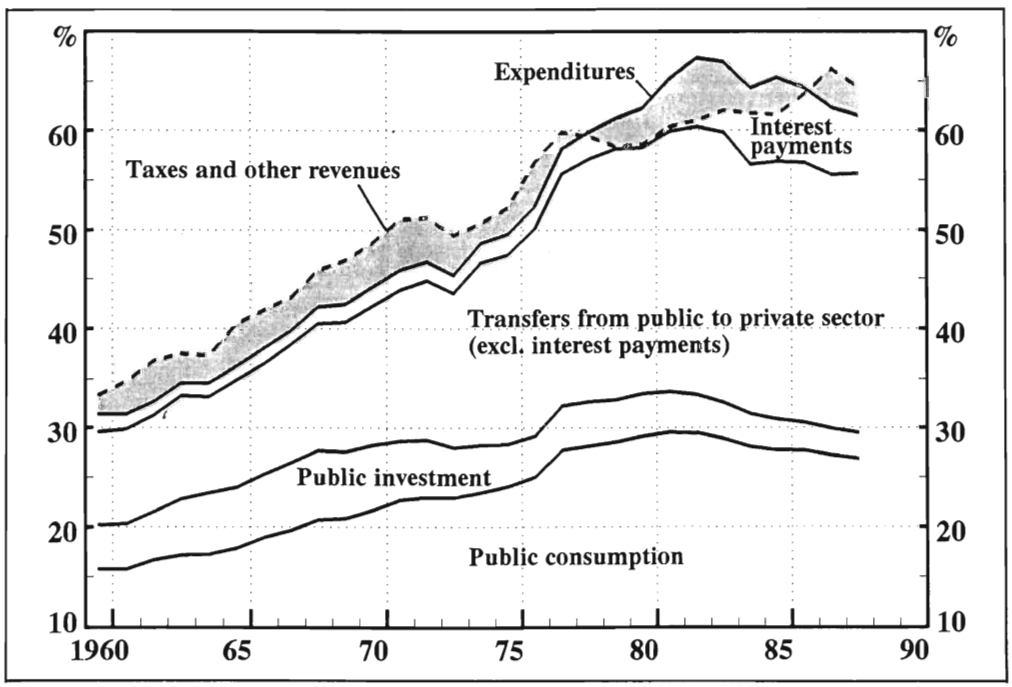
Source: OECD

When the dramatic change in the current account appeared in 1974, firms were encouraged to borrow abroad to finance the deficit. Looking at international interest rates only and disregarding the exchange rate component, fooled many inexperienced corporate managers in their decisions about borrowing in foreign currencies. Due to unsatisfactory accounting rules, the treatment of foreign loans resulted in profit figures that were too optimistic, which "supported" claims for higher wages from employees and for higher dividends from shareholders.

One important explanation for the wage explosion in the mid-1970s was that managers misread their current profits imagining the increases for 1973–74 to be permanent. The wage explosion of 1974–76 resulted in an increase in relative unit labor cost of about 20 percent (see Figure VI:4). At that time managers did not anticipate compensatory devaluations. The overwhelming, to some extent still persistent, problem in the Swedish economy – the cost crisis – was born.

In 1978 for the first time since 1959, a deficit occurred in the **consolidated public budget**. Tax revenues as a share of GDP levelled out temporarily this year while the expenditure share continued to increase (Figure VI:5). By 1978 the share of public sector spending relative to GDP had increased by about 15 percentage points (since the first oil crisis) and reached a historical height of 60 percent. The increased taxation to finance public sector expansion created new increases in expenditures caused by the ambition of politicians to prevent negative distributional

Figure VI:5. Revenue and expenditure of public sector. Percent of GDP.



Sources: Swedish National Institute of Economic Research, SCB

effects by public transfers to households and firms. Transfers from the private to the public sector increased 10 percentage points relative to GDP during the 1970s. Heavy subsidies to firms distorted the system of market signalling and made the necessary restructuring more costly. Despite – from an international viewpoint (Table VI:1) – the extremely high Swedish tax burden a period of continuous deficits in the consolidated public sector budget began.

Another sign of a deteriorating Swedish economy appeared in the mid-1970s as a substantial reduction in **total savings** as a percent of national income (Figure VI:6). The decline was accompanied by an almost equal decline in investment as a percent of GNI. A period with

Table VI:1. Total tax burden – Sweden in an international context.
Total taxes as percent of GDP.

Country	Total tax burden (%)	
	1980	1987
Sweden	49.4	55.3
Denmark	45.5	52.0
Norway	47.1	48.3
Netherland	45.8	48.0
Belgium	43.5	46.1
France	41.7	44.8
Luxembourg	40.9	43.8
Austria	41.2	42.2
Ireland	34.0	40.1
Great Britain	35.3	37.5
Finland	33.0	35.9
West Germany	38.0	37.6
Greece	28.6	36.7*
Italy	30.0	36.2
Canada	31.6	33.0*
New Zealand	33.0	32.9*
Spain	24.1	32.8
Portugal	28.7	32.4
Switzerland	30.8	32.0
Australia	29.0	31.4*
USA	29.5	28.9*
Japan	25.5	28.8*
Turkey	21.7	24.4*
Unweighted average		
OECD total	35.1	38.8
OECD Europe	36.6	40.4
EC	36.3	40.6

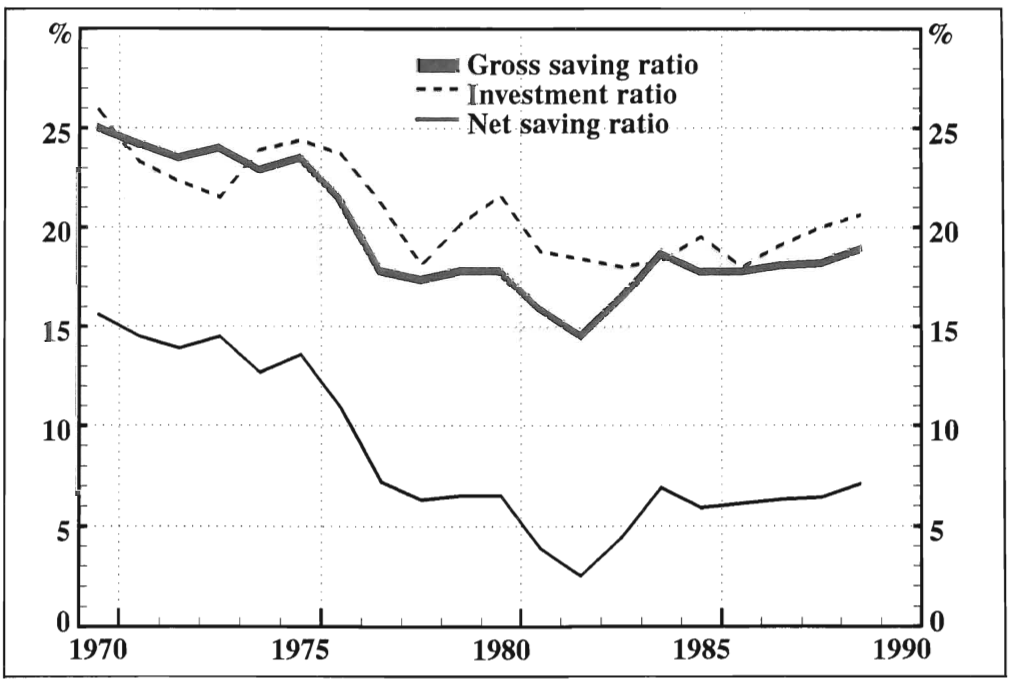
Note:* refers to 1986
Source: OECD Revenue Statistics

more or less negative net manufacturing investments started. Financial savings in the public sector started to decrease in the mid-1970s, while the start in 1976/77 of a policy with recurrent devaluations made financial savings in the private sector – especially in non-financial firms – improve considerably (Figure VI:7).

Finally, **Swedish inflation** developed a tendency to run slightly higher than in major competitor nations (Figure VI:8). Hence, in combination with a fixed exchange rate regime, a number of corrective devaluations became necessary.

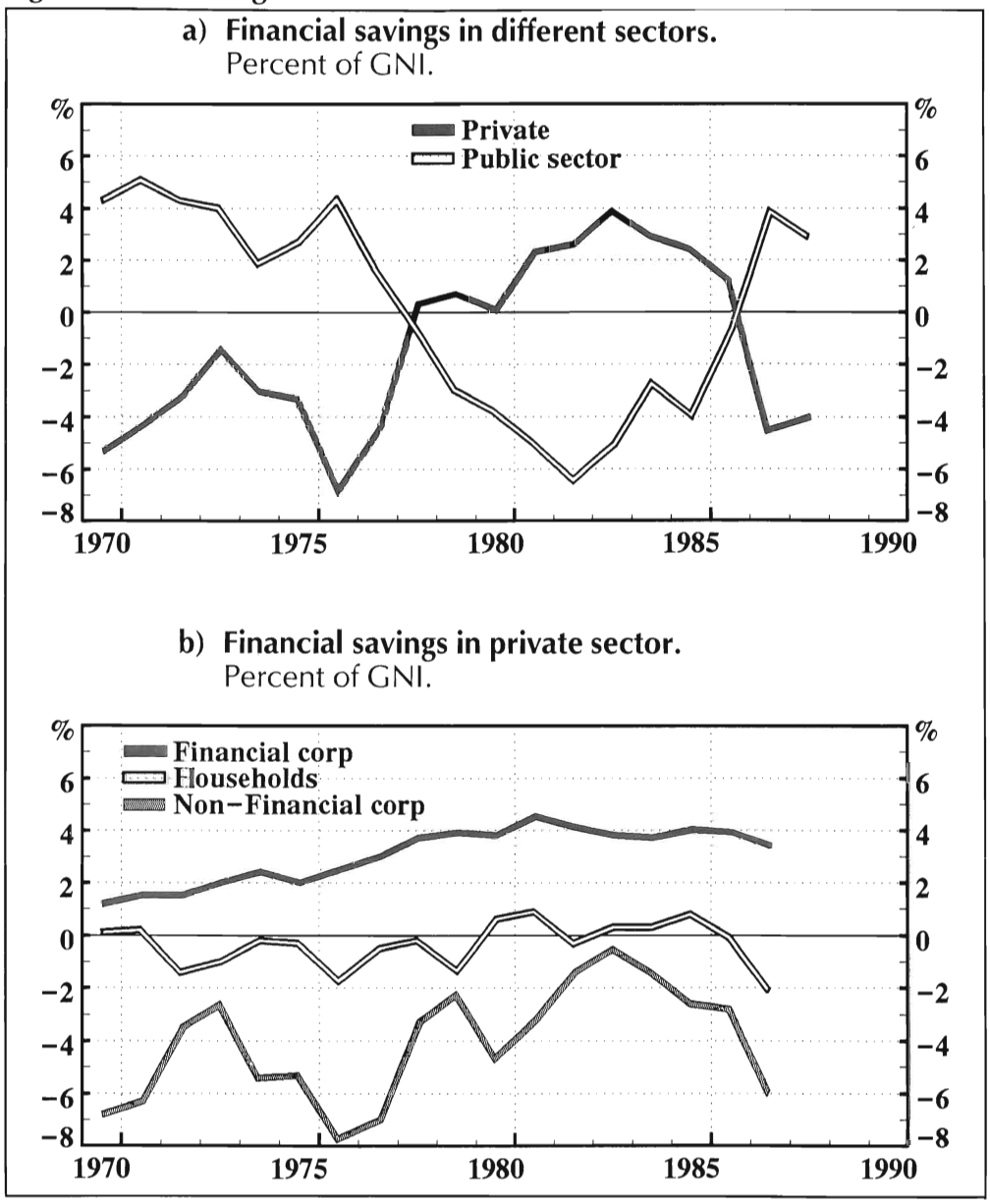
In conclusion, we can identify many causes behind the Swedish economic crisis during the 1970s. Among the international causes we find stagflation in the industrial countries and the large terms of trade loss for the oil importing part of the industrial world as the most important.

Figure VI:6. Saving and investment ratios 1970–88.
Percent of GNI.



Note: Gross saving ratio = gross savings as percentage share of GNI. Investment ratio = gross investments and inventory investments as percent of GNI. The difference between the gross saving ratio and investment ratio is equal to the balance of current account as percent of GNI. Net saving ratio = difference between gross savings and capital depreciation as a percentage share of GNI.
Source: SCB, Sveriges Riksbank, Ministry of Finance

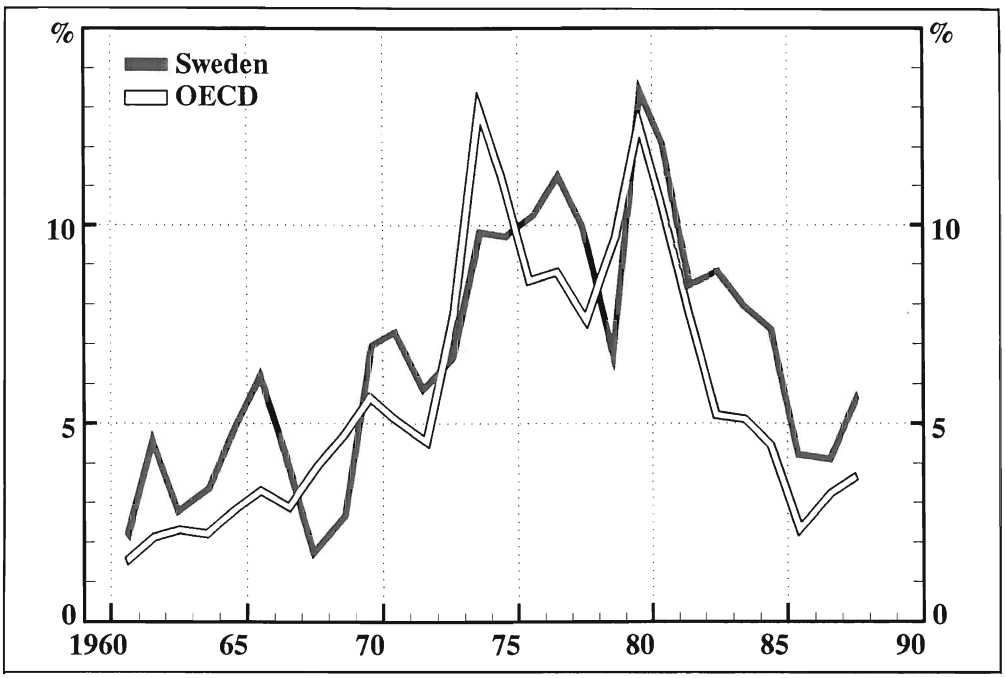
Figure VI:7. Savings 1970–88.



Source: SCB

Among the domestic causes we find the expansionary domestic policy, generating a substantial increase in public expenditures, and the Swedish cost-crisis generating deteriorating competitiveness most important. Significantly, a large part of the crisis was caused by inadequate domestic policies.

Figure VI:8. Consumer price inflation in Sweden and in the OECD area. Annual percentage change.



Source: OECD

3. The Beginning of the 1980s– a Cure to Restore Balance in the Swedish Economy

In the second part of the 1970s, concerns were raised about the deteriorating competitiveness of Swedish industry. As a first step to improve – or more correctly to restore – competitiveness in general the Swedish krona was devaluated a number of times in 1976–77. A brief recovery occurred but the major growth component in real GDP was public sector demand, which in the prevailing situation of deficient competitiveness had only negative long-run growth effects. The second oil crisis again put pressure on the krona. The wage formation process and the tax system were claimed tö contribute to the difficulties. In 1981 the Swedish krona was devalued by 10 percent, which brought it back, in a broad sense, to its purchasing power parity level. However, when the Social Democrats regained power in the autumn of 1982, they presented an economic policy package including a "once and for all" 16 percent devaluation which, together with a tighter fiscal policy stance, was labelled "the third way policy". "The third way" alluded to a third alternative to the expansionary policies of Mitterand in France, on the one hand, and to the contractionary policies of Thatcher in the UK and Reagan in the US, on the other. The policy was intended to increase profitability and to create incentives for expanding production and employment in the open (traded goods) sector. The measures in this policy

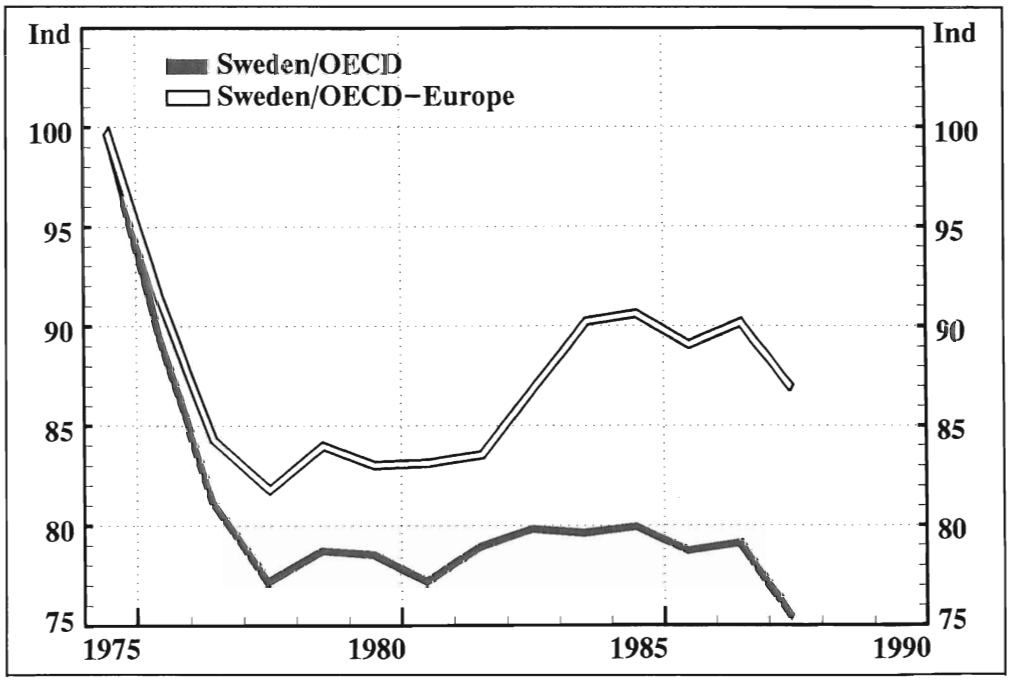
package were expected to generate an export-led development out of an anticipated debt trap.

The devaluations of 1981 and 1982 produced seemingly positive results. They generated a recovery with a substantial increase in manufacturing production. Swedish manufacturing output followed the development of the OECD average for some time (Figure VI:9) and likewise did the Swedish exports (Figure VI:3). Exports were contributing 3–4 times as much to growth as in the recovery of 1978–80. Gross investment started an impressive upswing after the devaluations (Figure VI:10) and became a major GDP growth component.

During the last few decades the growth and employment contributions of the **private** service sectors have often been emphasized as distinct from public sector growth. All private services grew during the 1970s, but this development seems to have slowed down somewhat in the beginning of the 1980s in favor of growth in manufacturing. As can be seen from Table VI:2, the share of services is high but expected transformation into a service-dominated economy is slow.

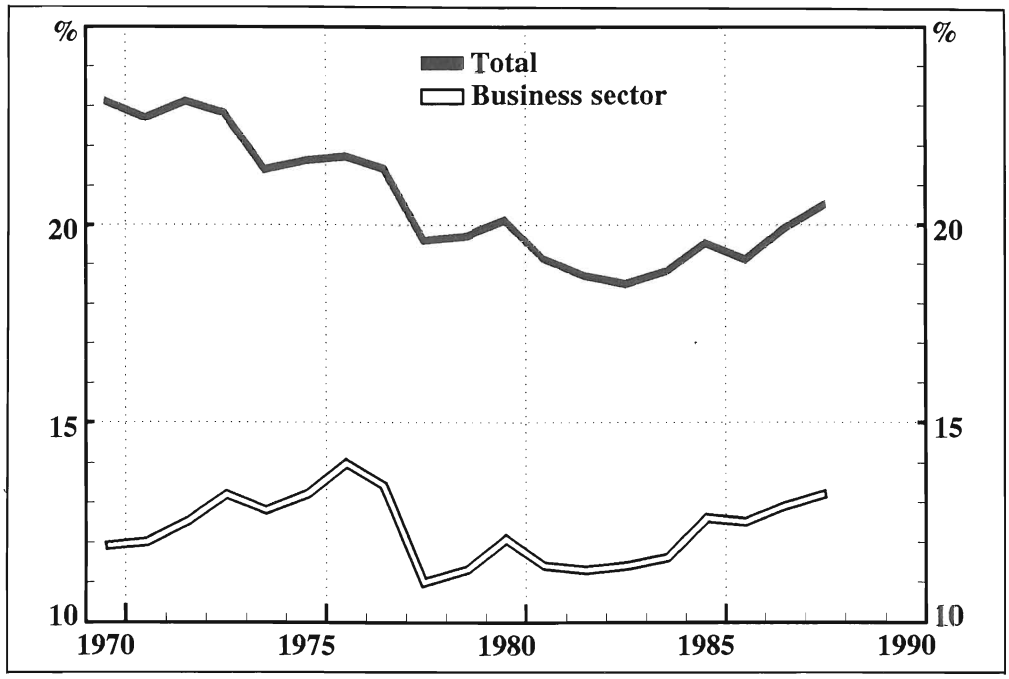
Investment is hard to assess since new forms of capital accumulation are becoming more and more important. Investment in R & D and marketing are needed to make volume expansion profitable. While there has been a complete stagnation in business spending on plant and equip-

Figure VI:9. Manufacturing production in Sweden relative to OECD and OECD-Europe 1975–88.
Index 1975 = 100.



Sources: OECD (Main Economic Indicators), SCB, Ministry of Finance

Figure VI:10. Gross investments 1970–88.
Percent of GDP, 1980-prices.



Source: National Account Statistics

ment since the 1970s up through 1982, intangible investments in R & D and marketing have been clearly expansionary. Increased fixed investment is, however, needed to restore volume expansion in goods production and employment for blue collar workers. The productivity development tells us that investments during the beginning of the 1980s were too low in that respect. The average percentage change in productivity for the total economy, measured as production per working hour, was just half as high as in our competitor countries (Table VI:3). However, this development is to a large extent due to the growth of the public sec-

Table VI:2. GDP – Sectors of production 1970–88.
Based on 1980-producer prices.

	1970	1976	1982	1988
Agriculture and forestry	4.9	3.9	3.9	3.3
Industry	27.2	26.1	23.2	24.6
Electricity, gas, water	1.9	2.4	2.9	3.5
Construction	9.5	8.5	8.2	7.9
Private services	35.3	36.1	36.4	36.7
Public services	21.3	23.1	25.5	24.4

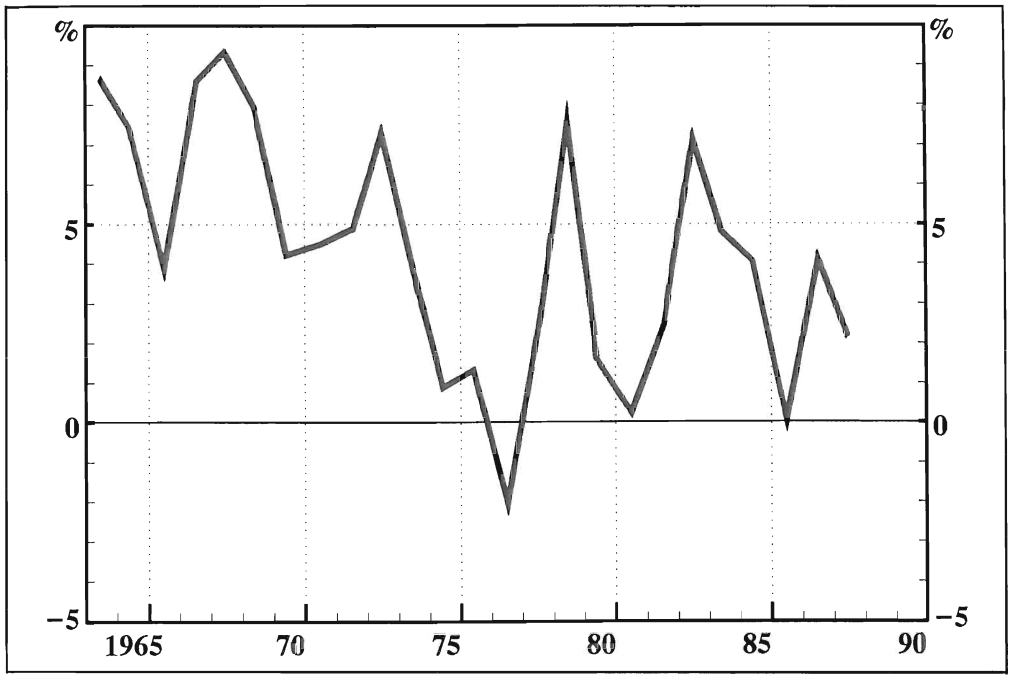
Source: SCB

Table VI:3. Productivity trends 1979–86, total economy.

	Average percent change
West Germany	2.0
France	2.3
Great Britain	1.9
Denmark	1.7
Finland	2.3
Norway	2.1
Sweden	**1.2**

Source: OECD Economic Outlook 43

Figure VI:11. Labor productivity in the manufacturing sector 1964–88. Annual percentage change.



Note: SNI 2 + 3
Sources: SCB, Swedish National Institute of Economic Research

tor, where productivity growth is assumed to be zero, while the development in the industrial sector is positive but still at an unsatisfactorily low level. (Figure VI:11).

The average rates of unemployment during the first half of the 1980s were, despite the recovery, higher than during the 1974–80 period, but still very low in an international comparison (Figure I:19).

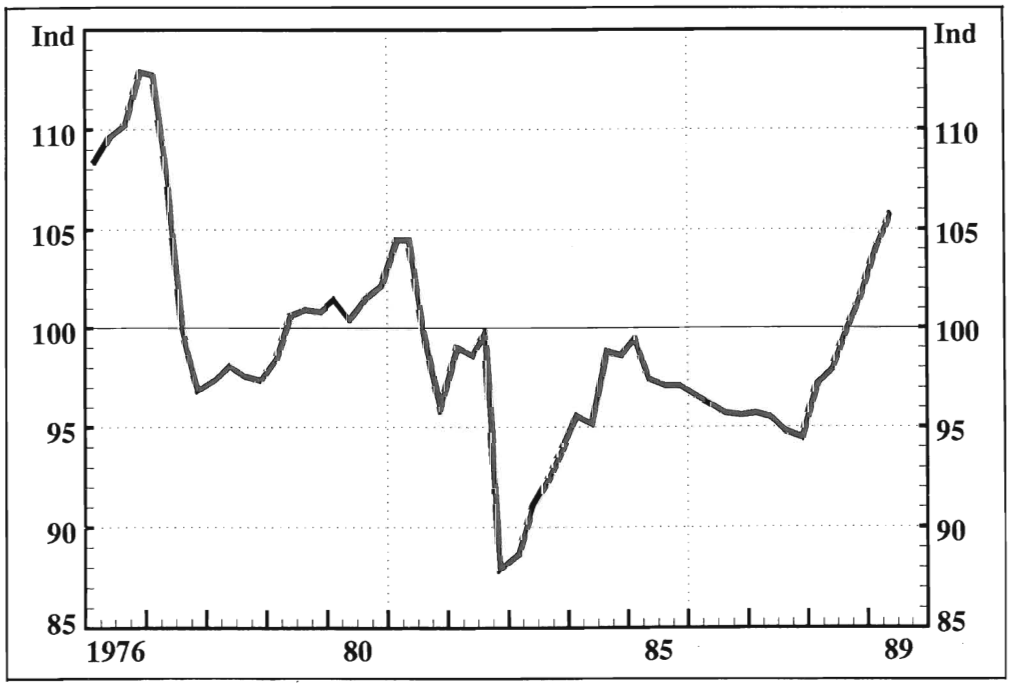
The devaluations in the beginning of the 1980s resulted in an increasing trade surplus in constant prices which turned the persistent current account deficits into a small surplus in 1984. The trade surplus deteriorated, however, and new deficits showed up already in 1985 (Figure VI:3).

Sweden's foreign indebtedness increased during the beginning of the 1980s. At the end of 1985, total public debt represented 65.1 percent of GDP. Public net foreign assets were equal to −16.2 percent of GDP, while total net foreign assets were −22.0 percent (Figure VI:3). The higher rate of private debt implied a closer integration with international capital markets and constituted an important source of short-term pressure on the Swedish krona. The increased private debt is one of many forces behind the ongoing integration of the Swedish economy with the world economy.

Due to fiscal restraint, deficits in the consolidated public budget began to decrease in 1982. The decline in international interest rates explained part of the decrease in the deficit from 13 percent of GDP in 1982/83 to around 5 percent 1985/86 (Figure VI:5). Higher tax revenues and some restraint in public expenditure growth contributed as well.

As a part of the "third way policy", efforts were made in 1983–85 to reduce inflation by dampening inflationary expectations but no other change in policy. In 1985 the target rate of inflation was set to 3 percent

Figure VI:12. Real effective SEK-exchange rate.
Index, 1980–82 average = 100.



Note: Calculations based on producer price index

by the government and very often stressed as a reliable goal. However, the actual outcome was 7.4 per cent as compared with an OECD average rate of 4.6.

Obviously, it is hard to bring inflation down this way, when the prospects of the economy are very uncertain. The lack of success in bringing down inflation to the average level in competitor economies meant that the price advantage achieved by the 1982 devaluation – measured as a favorable deviation from purchasing power parity – was almost completely used up in 1985 (Figure VI:12). After a dramatic increase in the trade balance in 1982–83, a levelling out in nominal terms started in 1984.

From having been the wealthiest country in the world in terms of GDP per capita, the devaluations had brought Sweden down to an anonymous position in such a ranking by the mid-1980s. In addition, a high tax burden and a persistently low productivity development in the public sector seemed to have become permanent.

4. The Second Half of the 1980s – Problems Reappear. Are they Structural?

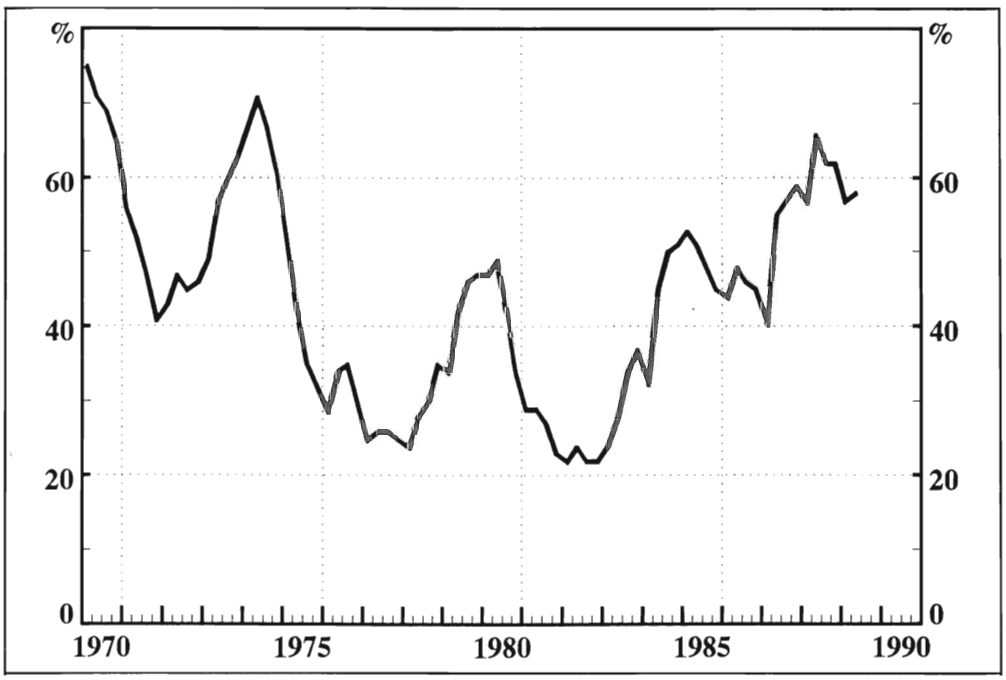
Real growth in manufacturing production decreased in 1986 but turned upward dramatically in 1987–88 due to expansion both in engineering and in the paper and pulp industries. Output growth, however, just kept pace with OECD Europe (Figure VI:9). The increase in engineering output in 1988 was dampened by the labor disputes in the early part of 1987. Manufacturing as a whole has been operating close to its capacity (Figure VI:13). This is particularly evident for the paper and pulp manufacturing but also for parts of engineering and the group of miscellaneous branches. The risk of a reduced propensity to export and of fueling the domestic inflation is obvious. Apparently, the Swedish manufacturing base is too small in order to nicely fulfill an export-led way out of the reemerging current account deficits.

Rapid growth in domestic demand appears to be part of the explanation. For the period 1985–88 policy makers have been unable to reduce the rate of domestic public and private consumption, crowding out exports in the second half of the 1980s. Increased investment and private consumption have resulted in high rates of imports.

4.1. Sweden has to Improve its Export Performance

From the mid-1980s the current account deficits have increased dramatically. The small surplus in 1984 turned into a deficit of SEK 15.3 billion in 1988. The 1986 surplus was due to the favorable development of the Swedish oil bill. In current prices, the net import of crude oil and petroleum products dropped from SEK 31.3 billion in 1985 to SEK 16.4 billion in 1986. As the volume imported increased, this effect is more than

Figure VI:13. Share of Swedish firms claiming full capacity utilization 1970–88.
Percent.



Source: Swedish National Institute of Economic Research

fully explained by price and exchange rate effects. For 1988 net imports were down to about SEK 11 billion. This further drop was, however, to some extent caused by decreased import volumes.

The trade surplus, furthermore, is diminishing in real terms, even though the krona has been very close to its purchasing power parity rate during the second half of the 1980s.

The increase in the current account deficit in 1987 was more or less caused by the decrease in the trade surplus. In 1988, however, the trade surplus remained fairly unchanged, while the service and transfer balance deteriorated. The current account deficit in 1988 was 1.4 percent of GDP and slightly smaller than the interest rate payments on Swedish net foreign debt, which was 1.9 percent of GDP (with net dividend remittances included, the figure is 1.7 percent). Thus the trade surplus of 2.2 percent almost balanced the deficit on the travel currency account (1.2 %), transfers (0.9 %) and "other" services account (0.4 %). Shipping still contributed positively (0.5 %).

What can then be done about the balance of services account in order to mitigate the current account deficit? The transfer net is growing at the same rate as GDP and the "other services" account is related to the high Swedish degree of internationalization and by that they are not

expected to decrease. What realistically can be influenced on the outflow side is the net flow of tourist expenses.

Another component that is possible to influence on the outflow side is that of interest and dividend payments over the border. The Swedish (public) indebtedness has improved during the second half of the 1980s. The total public debt, at the end of 1988, was about SEK 590 billion or 52 % of GDP after a peak of 68 % in 1984/1985. Public foreign loans measured according to the current rate method was about SEK 110 billion and slightly downward tilting. However, the budget for the fiscal year 1989/90 does not indicate any significant changes in interest payments. According to the yearly plan of the Ministry of Finance, interest payments are expected to be SEK 8 billion for 1989/90 and net exchange rate losses are estimated to SEK .6 billion. The dynamics of exchange rates and interest rates can of course change this picture.[1]

In contrast to the public foreign debt, the private foreign debt has grown dramatically by the end of the 1980s. Despite an increase in total foreign debt of about SEK 60 billion in 1988, interest payments rose only SEK 2.5 billion. Thus, considering that the increase was accompanied by a small rise in interest rates and the normal time lag, we can expect interest rate payments to increase from 1989. As a balance to these payments, remittances of dividends and rates of return on the foreign investments, which have been financed by loans, can be expected to show a higher yield on inflow from 1989 and ahead. Estimates of the size of foreign gains reinvested abroad suggest that the current account figures show too low a return on foreign investments.

Should Swedish current account deficits be regarded as short- and medium-term phenomena or do they mirror a structural problem? Deficits which have a negative long-term average as calculated for "normal" competitive and business cycle conditions belong to the last category. Thus, deficits because of large investments are not to be seen as structural as they will pay off in terms of increased production. In discussing potential structural problems in the Swedish economy of today we therefore have to assess to what extent the previous deficits have been a result of investments or of consumption. Assessing the current account development in such a way makes us inclined to characterize the deficits as structural.

4.2. Is Sweden no Longer Attractive for Real Investors?

Increased manufacturing investment in 1986–88 signals optimism among real investors. Excluding basic industries, for which investments have annually increased by about 15–22 percent, gives us average annual increases of about 9 percent for the rest of manufacturing. Production capacity seems, however, to react very slowly to the increases. Labor mar-

[1] A change of one percentage point in interest rates after July 1989 will imply a change in interest rate expenses of SEK .3 billion for July 1989/90, ceteris paribus. A change in the dollar/SEK exchange rate of 10 öre from the assumed rate SEK 6.38 will change the interest rate expense by SEK 36 million and the foreign exchange result by SEK 12 million for 1989/90.

ket rigidity and scarcity of skilled labor is one major explanation. Another explanation might be the attempts on behalf of the authorities to steer investments toward environmental protection. A third is that they just replace old capital: Further analysis is needed in order to provide a more detailed explanation.

In an international comparison, Sweden leads in terms of R & D investments in percent of value added. Thus, even in terms of soft investments we find optimism. This means that the base for future growth should be even better than what is indicated by traditional measures of hardware investments. R & D investments are compared to other business investments in Table VI:4. Several studies of Swedish export performance indicate, however, that despite the high rate of R & D investments the Swedish export industry has taken very little advantage of them (Horwitz, 1986; Ohlsson and Vinell, 1987; Lundberg, 1988), i.e. they have not paid off in terms of higher export market shares within the high-tech sector. Using gains of market shares as an indicator of success,

Table VI:4. Business investment indicators.
Billion SEK.

	1981	1984	1987
Fixed investment	91.3	125.1	167.6
Expenditure on R & D	8.5	14.4	21.7
Direct investment abroad (gross)[1]	4.0	8.3	19.8

[1] Non-financial enterprises
Sources: National Accounts, Statistics Sweden: Statistical Yearbook, various issues, Sveriges Riksbank; Main Science and Technology Indicators, OECD 1988

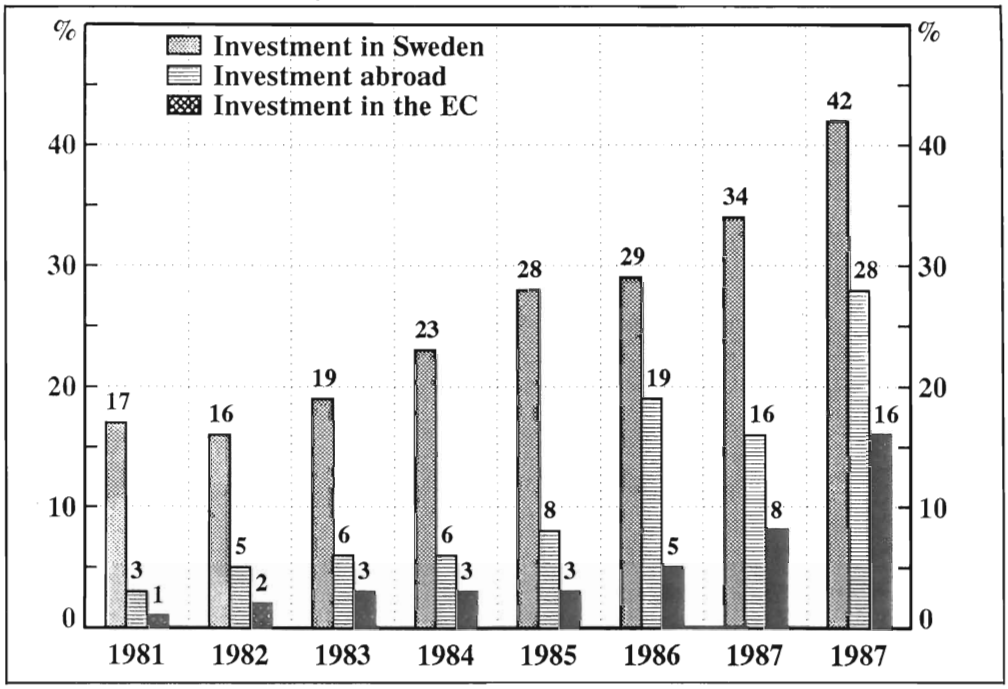
Table VI:5. Rate of return in Swedish industry and in the Swedish and foreign parts of Swedish multinational groups.

	Rates of return		
	1974	1978	1986
Swedish Industry	13	5	7
Multinational groups	14	8	11
of which			
in Sweden	13	5	9
abroad	19	14	14

Note: Total rate of return = $\frac{\text{operating profits before depreciations}}{\text{Total assets}} \times 100$

Source: Swedenborg et al. (1988)

Figure VI:14. Manufacturing investments in Sweden and Swedish investments abroad.
Current prices, billion SEK.



Sources: Federation of Swedish Industries, Sveriges Riksbank, SCB

may provide a false impression as the R & D investments in Swedish industries might have been exploited in foreign subsidiaries of Swedish multinationals.

Uncertainty about future Swedish relations with the European Community has prompted Swedish firms to opt for direct foreign investments (Table VI:5) whenever profitability at home is not clearly higher (Figure VI:14). Swedish labor market costs, energy policy, environmental policy, etc, suggest a similar propensity. But with Swedish membership in the EC many companies would probably have continued to invest in production capacity in Sweden (see Braunerhjelm, 1990).

4.3. Will Tax Reforms Solve the Labor Shortage?

The rate of unemployment has decreased during the second part of the 1980s. Frictional unemployment, however, remains. The demand for labor substantially overshoots supply. This labor shortage is both short-term and long-term. The Swedish economy in 1989/90 is overheated. Otherwise the shortage could be easily handled by increased wages. The approaching recession in the world economy will probably eliminate the short-term part of the shortage problem.

An inefficient allocation (at a given wage rate) of the labor force, notably skilled labor, due to incentive problems is a more severe problem.[2] The current tax system creates such problems and to solve them a tax reform has been proposed.

There has already been a slight increase in the supply which to a certain extent is to be explained by the minor marginal-tax reform in the mid-1980s (Björklund et al. 1989). The new taxation package to be implemented in 1990/91 will decrease the marginal tax rate, broadening the tax base and reducing the rights to deduct items before calculating the tax. The total tax burden will remain the same – around 56 % of GDP – or even slightly higher during the years after the introduction of the reforms. Dynamic effects, which are hard to assess, are then claimed to decrease the tax burden. The high average tax burden will still distort the market pricing mechanisms and fuel inflation. Thus, almost all incentive problems influencing the labor supply will remain. In addition to the incentive problems, other long-term problems exist. There are, for instance, problems caused by education and age structure. The wage-setting process is also universally claimed to be a source of labor market rigidities. A new pattern with decentralized bargains has been established since the mid-1980s but without any success in terms of bringing down unit labor costs in line with those of competitor economies.

4.4. Public Sector still too Vast to Allow Tax Burden to Decrease

The government budget turned into a surplus for the fiscal year 1988/89 despite a broadly neutral fiscal policy. This means that the budget deficit has dropped from –13.1 percent relative to GDP in 1982/83 to a surplus of 1 percent in 1988/89. But fiscal drag caused the direct tax burden to increase again to 25 percent of GDP. Indirect taxes fell relative to GDP because social security contributions recorded as indirect taxes were lowered in order to balance an increased contribution to health insurance and labor market pensions. As a net result the tax burden (including social security contributions) rose 1 percentage point. Despite this total government revenues were 1.5 percentage points lower than the previous year, when they were fueled by a temporary levy on pensions funds and insurance companies.

Another technical explanation refers to the decline of public expenditure relative to GDP. Due to changed accounting rules for interest payments on the national debt interest expenses were low in 1988/89 showing a temporary decrease of about SEK 7 billion. However, they will rise again the coming years.

One more reason for the surplus is the fall in the share of public consumption due to stagnating central government consumption. Public sec-

[2] The propensity to change jobs has dramatically decreased in Sweden. According to Holmlund (1984) the number of persons with at least one change of employer in percent of the number of persons with some employment experience has fallen from 13 percent in 1966 to 8 percent in 1982.

tor wages continued to rise but more slowly than wages in the business sector. 1988 was also the first year when the overall increase in the central government wage bill was limited to 4 percent. After the annual wage round this ceiling was raised to 5.6 percent.

The government budget surplus is expected to remain constant for the fiscal year 1989/90 as compared to the previous year. Expenditures are calculated to remain constant in real terms but interest expenditures will increase as a result of the accounting routine discussed previously in this section.

The consolidated public sector (central government, local government and social insurance) budget turned from a deficit of 5.7 % relative to GDP in 1982/83 into a surplus of 2.8 % for 1987/88. Government saving improved dramatically in the second half of the 1980s and was no longer negative, while local government still showed a deficit. According to the budget for 1989/90 this deficit will persist. The social insurance has long showed positive balances, which are expected to continue. But in a longer perspective, the insurance system is under pressure, unless relatively substantial increases in fees are made.

4.5. Domestic Sources behind the Increase in Inflation

According to OECD estimates the contribution of international factors to Swedish inflation has decreased after 1982 and the contribution deriving from domestic factors increased relatively. In the Swedish debate, the public budget deficit was long blamed for the Swedish inflation. Today the high level of public spending is still a source of price distortion but not as much of inflation. The high inflation requires a supplementary explanation.

Part of it is to be found in the high wage increases caused by the labor scarcity (Schager, 1988). The tax system (tax wedges) is an additional inflation factor. The now well-established perception in the export business that the government will always bail them out through devaluations in times of distress because of too high wage increases contributes significantly. Producers protected from foreign competition play an increasing role, due to the high sensitivity of prices and wages in this sector with respect to demand pressure and the only partial response to wage moderation in the exposed sector. The construction sector is the best example. Another domestic source of inflation is the prevalence of labor market rigidities due primarily to the absorbtion of industrial workers by the public sector during the mid-1970s. These workers have now lost their industrial knowledge as well as incentives to go back, which makes it hard to attract and adapt them to industrial work today.

4.6. Structural Growth Problems in the Swedish Economy

To conclude, most of the problems from the mid-1970s seem to have reappeared after the positive price effects of the 1981 and 1982 devaluations have dissipated. Rates of return in manufacturing are still, how-

ever, at an acceptable level. Sweden exhibits a lower growth in output than the OECD average, but higher inflation. Increases in hourly earnings are above those in competitor nations. The current account deficit is again increasing and the growth trend in the trade surplus has tilted downwards. A persistent current account deficit may not be a general signal of crisis, but for Sweden it is signalling structural imbalances. Capital formation is still very unsatisfactory with a continuously decreasing saving ratio of households and non-financial firms. In 1986 a dramatic switch took place making the pattern from pre-1978 reappear with the public sector as the major saver. Saving this way by having a high tax burden will lead to high allocational costs for the society in the long run. On the positive side it must be noted that the Swedish unemployment rate is at a very low level. Thus, the domestic situations look fairly good, while the external balances are getting worse.

Household saving has declined for years. Taking the reduced need for precautionary measures in Sweden into account the "new" corrected ratio is however more in line with international rates. The lower figures in more recent periods may also reflect the deregulation of financial markets, wealth effects and cycles in purchases of consumer durables.

The new tax package means a lower tax rate of capital income and reduced deductability of interest-expenditures from tax obligations. The suggested changes will, by increasing the after-tax interest rate, provide incentives for substituting current for future consumption, although counteractive income effects are to be expected. Important wealth effects on saving might appear with falling prices for real estate, following the increase in after-tax rates.

To be able to sustain an export-led growth out of the debt trap, the rate of production has to increase. In order to make the potential production grow – either via its immediate effects on capacity and capital intensity or its effect on total factor productivity – the capital stock has to grow. In an international comparison, growth has been sustained at a relatively low level since the early 1980s. Nevertheless, it has been financed by foreign savings. For more growth of capital stock to occur domestic savings have to rise. For this to happen, incentives for a longer time horizon in individual consumption planning have to be provided. This is a matter of less taxes for higher income and wealth groups, which is economically simple but politically difficult, as the current state in the tax reform debate shows.

5. Crucial Issues for Economic Growth in a Medium-Term Perspective

What are the reasons for the structural problems that have returned during the second part of the 1980s, and how should they be dealt with?

5.1. An Integrated World Requires a New Swedish Policy Attitude

In an increasingly integrated world there is no or very little room for "fine tuning" stabilization policy. The days for a successful mixture between market and planned economy are over. Three new forces overlapping with the nation-state have appeared which make it more or less impossible to conduct a successful stabilization policy. These forces consist of large and growing multinational corporations which view the world as one market, of regions into which the world economy is divided, like North America or regional cooperative agreements like the EC and, finally, of global flows of money, credit and investment. The new party program of the Social Democrats presented in 1989 noted the strength of these forces as it emphasized the need to be more market economy-oriented in policy. But in implementing their intervention policy they have so far shown no sign of any changes in attitude. The instability of the rules of the Swedish market, emanating from this policy, generates weaker growth by claims for substantial premiums for political risk.

In the Swedish economic debate of today, top representatives from the large multinational corporations have officially presented ultimata to the government on policy. Their message is that – if distributional and other policies that undermine the relative cost situation of Swedish producers are not radically changed – the companies have to shift production out of Sweden for profitability reasons. Financial markets already exhibit this with the turnover tax on securities trade being one example. The turnover tax on different money-market instruments, which was introduced in January 1989 has already had a devastating effect on the Swedish money market. After the increase of the turnover tax on trading in the stock market in 1986 the rate of liquidity (trading volume per market capitalization) has fallen from a top that year of around 35 percent down to 16 percent in 1988. More and more of the trade in Swedish shares takes place abroad. In 1988, 50–75 percent of the trading activity in the large Swedish multinationals Ericsson, Pharmacia, Electrolux, SKF, Atlas Copco and Asea took place in London or in the US. The danger of getting a thin and inefficient Swedish capital market is obvious. For the great number of companies, which have no access to the international capital market, this means higher costs.

As the Swedish currency regulation was more or less abolished on the first of July 1989 the market's opportunity to react to domestic "fine tuning" policy has increased. The market signals, whenever a non-harmonized action is taken, will be strong and we expect the government to realize the destructive effects of manipulating a segment of a highly integrated international capital market. Attempting to exploit an

imaginary or partial autonomy on the fiscal side might be quite damaging for the Swedish economy. Thus, we see the decision to abolish – from April 1990 – the turnover tax on money and bond markets as a first step in the urgent process of relaxing remaining asymmetries in capital taxation.

5.2. Sweden has to Remain an Industrial Country

As can be seen in Figure VI:14, Swedish investment abroad has increased dramatically during 1988 and continued to do so in 1989. This raises the question about what will happen if we extrapolate the current trend. Will Sweden lose its manufacturing base, and will firms ultimately leave the country also from a legal point of view? The share of Swedish sales abroad out of Swedish manufacturing subsidiaries is increasingly locally manufactured. Table VI:6 exemplifies the degree to which local production in the Nordic countries has expanded in favor of exports from Sweden. This, however, becomes a threat first when the increased local production is also a major subsitute for Swedish exports. Moving the production abroad in a moderate scale is no disaster as long as Swedish firms can enjoy the profits and remittances from this development. But up to mid-1989 there are no signs of such favorable development.

Table VI:6. Total sales in Nordic countries by Swedish multinational firms.
Mill SEK, percent.

	1965	%	1970	%	1974	%	1978	%	1986	%
Manufactured in Denmark	125	6	581	14	1192	17	1949	18	6559	24
Export from Sweden	1851	94	3442	86	5953	83	8935	82	21142	76
Total sales in Denmark	1976	100	4023	100	7145	100	10884	100	27701	100
Manufactured in Norway	245	9	429	10	624	8	1037	9	4490	13
Export from Sweden	2409	91	3808	90	7354	92	10081	91	29665	87
Total sales in Norway	2654	100	4237	100	7978	100	11118	100	34155	100
Manufactured in Finland	241	19	329	13	770	13	1108	16	3906	19
Export from Sweden	1034	81	2208	87	4987	87	5621	84	16219	81
Total sales in Finland	1275	100	2537	100	5757	100	6729	100	20125	100

Source: IUI data base

The high R & D expenditures as a share of GDP have long been referred to as a sort of guaranty for future prosperity. Unfortunately, recent developments indicate that even that part of corporate activity is nowadays to an increasing extent moving abroad.

Some will still look optimistically on the above developments and argue that Sweden is on its way into the information age where a healthy economy could be built on the basis of the service sector. Thus Sweden should be on its way to becoming deindustrialized and turning into a post-industrial economy. Many researchers like, for instance, Drucker (1988) predict, that in a couple of decades, the share of the work force engaged in manufacturing in the industrialized nations will be as low as 5 to 10 percent. The share for Sweden is about 25 percent and has been fairly constant since the beginning of the 1970s. The crucial question is to what extent services are traded and about the Swedish comparative advantages in (traded) services.

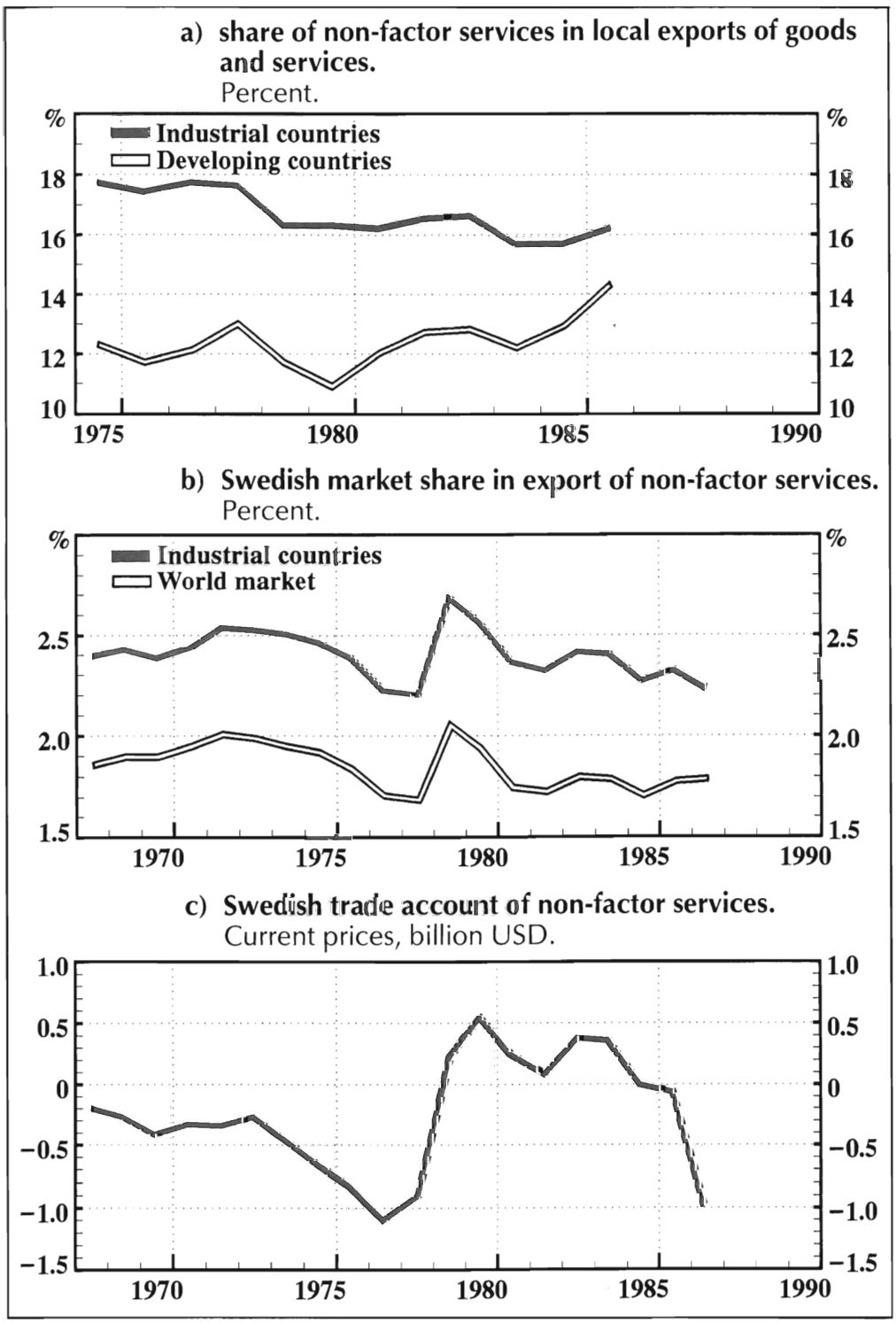
International trade in "true" services is very small. What is called "services" in international trade statistics is actually income on foreign investments rather than sales of those kind of services which make up a large part of national income. According to the IMF statistics, the industrial countries' trade in services other than factor income was about 16 percent of their total exports of goods and services in 1986. It has declined somewhat since 1970 in the industrial countries (Figure VI:15). For Sweden this share was in 1986 18 percent and not exactly to be seen as the source balancing the deficit on transfers and debt service. More discouraging from a Swedish perspective is that the Swedish trade in "true" services has shown deficits since 1986, perhaps signalling the absence of comparative advantages.

Furthermore, trade in services cannot possibly take a balancing role as many sevices involve face-to-face contact and cannot be widely traded internationally, until radical advances in telecommunications have occurred. In a service perspective, there is a large gap between Sweden as a producing nation and as a trade nation. Around 2/3 of the Swedish employment and income in 1989 was generated by the total service sector, while services in international trade remain just below 20 percent. The only sector with realistic opportunities in a near future to increase that figure is the financial sector with services from the banking and insurance companies.

The importance of manufactures in the Swedish international trade and as a swing factor in any future shifts in the trade balance must be stressed. There is a very close relationship between the change in the Swedish external balance and the export from the manufacturing sector when world economic conditions change.

Swedish debt service and international aid commitments imply that the trade balance has to show a considerable surplus. In 1989 the minimum surplus to cover public foreign commitments was about 2 percent of GDP. Is it actually realistic to rely on future service exports to maintain the Swedish consumption pattern? Statistical evidence is not encouraging.

Figure VI:15. Trade in non-factor services.



Source: IMF – International Financial Statistics

For the coming decade Sweden rather has to be reindustrialized to handle the current account problem. This is inevitable and the appropriate question is how to accomplish such a development.

5.3. Will Investment Prospects in Sweden Improve?

External balance requires that the domestic industrial base be broadened by new investments in Sweden. Since corporate investment decisions are a matter of risks and rates of return, a number of circumstances have to be changed for a return to long-term manufacturing capacity growth to be realized.

* The high degree of economic integration calls for economic political adjustments to international standards to remove tax and other wedges in the Swedish tax system and to establish some degree of predictability of political changes in market conditions. In particular this involves:
  - that uncertainty about future relations to the EC has to be eliminated. A "quiet" harmonization without any explicit "yes" or "no" to a future membership is not enough for potential investors in Swedish industry. (See Eliasson – Lundberg, 1989 and Braunerhjelm, 1990.)
  - that opportunistic policy measures resulting in changes in the rules of the market game – often with retroactivity – as a source of political risks be stopped. (See Oxelheim, 1988.)
  - that the tax system has to be harmonized. Even if the new proposal for corporate taxation is fairly in line with international standards, the total tax burden in the Swedish society creates distortive tax and price wedges in the factor markets. (See Södersten – Lindberg, 1983.) The incentive problem created by the tax situation has to be solved by reducing the size of the public sector through privatization.

* The prospects of the factor markets must be improved, which involves:
  - that the wage formation process be reformed. This probably means abandoning the so-called "solidaristic wage policy". (See Björklund, 1986)
  - that asymmetries and non-harmonized taxes in financial markets must be relaxed, for example, by an abolition of the turnover tax on trading of shares.

The apparent trend in 1970–87 toward a shrinkage of the manufacturing sector in Sweden has to be reversed as the underlying constraints on the Swedish economy situation call for reindustrialization. Stressing the importance of the industrial sector, it is alarming to find that during 1980–87 the number of employed in the industrial sector decreased by 75 000 persons, while the whole labor force grew by 200 000 persons. As mentioned, the number of employees in the industrial sector has decreased since 1970 by 148 000 persons while the public sector increased by 633 000 persons. With around 60 percent of total industry suffering from a shortage of skilled workers, it is easy to understand that

the propensity to produce abroad has increased. As is seen from Table VI:7 the problem is severe in all industrial subsectors.

In addition, with all these issues solved the expected return on investments in Sweden has to be high enough relative to other forms of investments. The perfect or near-perfect integration of the Swedish financial markets will mean that the expected risk adjusted return on financial investment will be the same regardless of currency or country of the investment. The real adjustment forced by that will involve large investment flows across borders, which will be larger the greater the tax wedges, political risks and the costs of Swedish labor. For an investment in the real sector, the access and allocation of production factors, notably skilled labor, are crucial. The appropriate question is if the firms find producing in Sweden a way of sustaining a risk adjusted rate of return that makes them grow faster than competing firms producing in other countries. For large parts of the Swedish industry this question boils down to

Table VI:7. Labor shortage in manufacturing and building industry. Percentage yes-answer.

	1988			1989		
	June	Sep	Dec	March	March	June
Shortage of skilled workers						
Textile, clothing and industry	64	59	50	56	58	48
Wood industry	57	62	62	59	56	64
Pulp, paper and printing industry	39	44	40	51	50	47
Iron and steel works	77	56	77	80	72	80
Engineering industry	70	73	67	72	71	76
Total industry	61	63	59	63	62	66
Shortage of salaried technicians						
Textile, clothing and industry	17	29	6	25	26	2
Wood industry	19	23	26	22	21	24
Pulp, paper and printing industry	15	16	12	17	18	10
Iron and steel works	20	17	64	61	54	61
Engineering industry	40	32	47	47	45	34
Total industry	30	26	34	35	34	28
Building and construction sector						
Concrete workers	75	82	62	62		81
Carpenters	82	89	70	71		84
Bricklayers	65	66	33	37		36
Salaried technicians	54	54	62	65		68

Note: Due to a change in the sampling process dual values are provided for March 1989, except for the building and construction sectors
Source: Konjunkturläget, Hösten 1989. Swedish National Institute of Economic Research, Stockholm, 1988

the question about cost efficiency.[1]) Before embarking on an analysis of the Swedish cost efficiency let us look at the prospects of an actual tax change and for increased factor market efficiency.

5.4. The Role of the Public Sector has to be Reconsidered

The employment problems of the mid-1970s were dealt with in a seemingly successful way. The consequences, however, have been a stagnation in manufacturing production, a large foreign public debt problem and a devaluation-prone inflation economy. The policy conducted to deal with the problems of the 1970s has led to the emergence of an institutional framework of seemingly irreversible character. It is true that the government has managed to decrease the share of consolidated public expenditures relative to GDP from 67.4 percent 1982 to 61.5 percent 1988. But the decrease in expenditures mainly originates in decreased transfers to industry (subsidies), while transfers to households have kept up with the rate of development of expenditures. Furthermore, the reduction of expenditures is explained by decreased public investment, moderate growth in public consumption and as mentioned, a decrease in interest expenditures. Hence, the slowdown in expenditures appears temporary as transfers to households, which constitute approximately 1/3 of the expenditures, in 1989 are expected to continue to grow at an annual rate above 10 percent due to commitments already made.

Public investments, moreover, have to grow after years of repressed maintenance and because of reinvestment needs. If decisions on those matters are not taken out of the hands of parliament and delegated to the market (via privatization), the high tax and public expenditure share of GDP will continue. And, which is important for our projections in section 6, structural problems of price distortions and a lack of incentives will remain.

5.5. Integration of Swedish Financial Market is Almost Perfect

Before the abolishment of the Swedish currency regulation was anticipated at the end of 1988, foreign investors or Swedish investors with funds abroad investing money in Sweden had come to claim a compensating risk premium of considerable size. The mere existence of an institutional framework in which everyone had to apply for permission to act, signaled an uncertainty about the outcome the next time permission is applied for. Even if they easily got the permission once, the framework created a doubt about the permission next time.

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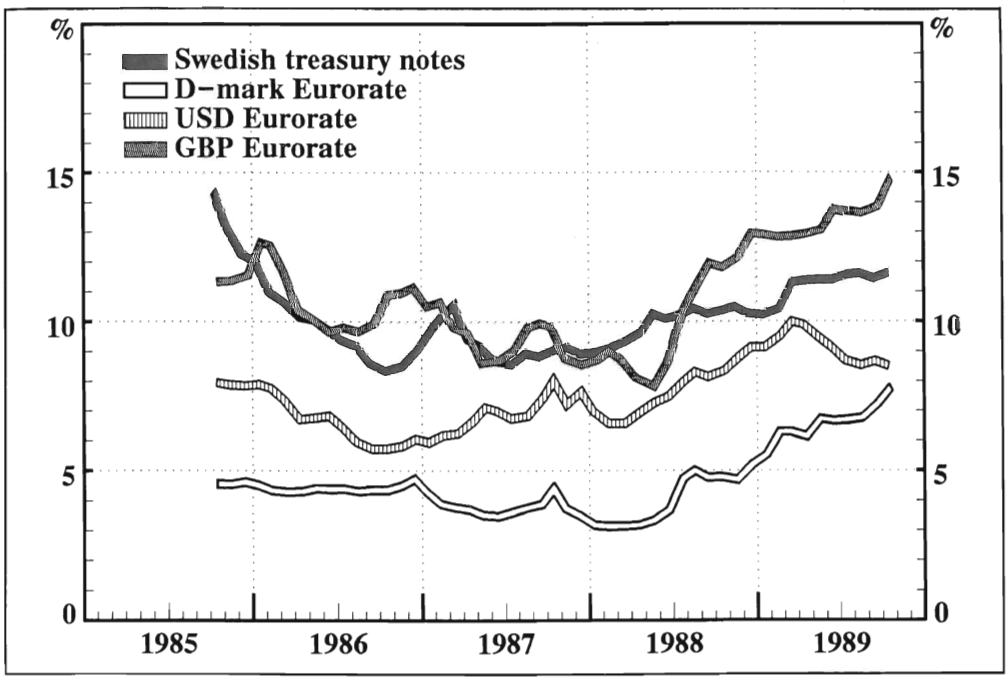
[1]) Besides this argument there are other arguments for moving the production abroad like, for instance, the argument behind diversification of risk due to the global pattern of cyclical variation and the argument that the kind of output Swedish companies produce often motivates a closeness to the market.

Immediately before the abolishment was announced, the risk premium was about 2 percentage points. After the announcement the gap towards the international interest level diminished, ceteris paribus. The political risk premium vanished to a large extent after July 1989. But as the ways transactions are carried out are still regulated the authority can exert some influence. Thus, a smaller risk premium is still being "charged". Measures of the financial integration (Oxelheim, 1988) show that the currency regulation lost its efficiency at an early stage of the 1980s. Intuitively, this is easy to understand in the light of increasing activities of the multinationals and of the large stock of corporate foreign loans. The Swedish capital market is today almost completely integrated in world financial markets, which means that conducting economic policy disregarding the rest of the world will result in high resource allocation costs.

The implications of perfect financial integration are equal, expected risk adjusted rates of return in Sweden and abroad. However, as is seen in Figure VI:16, this does not mean that Swedish and foreign nominal interest rates are equal. Due to the market assessment of the prospects of the Swedish economy and different risk premiums Swedish interest rates have during the second half of the 1980s been considerably higher than the average of corresponding rates abroad.

Figure VI:16. Interest rates.
Three-months rates.

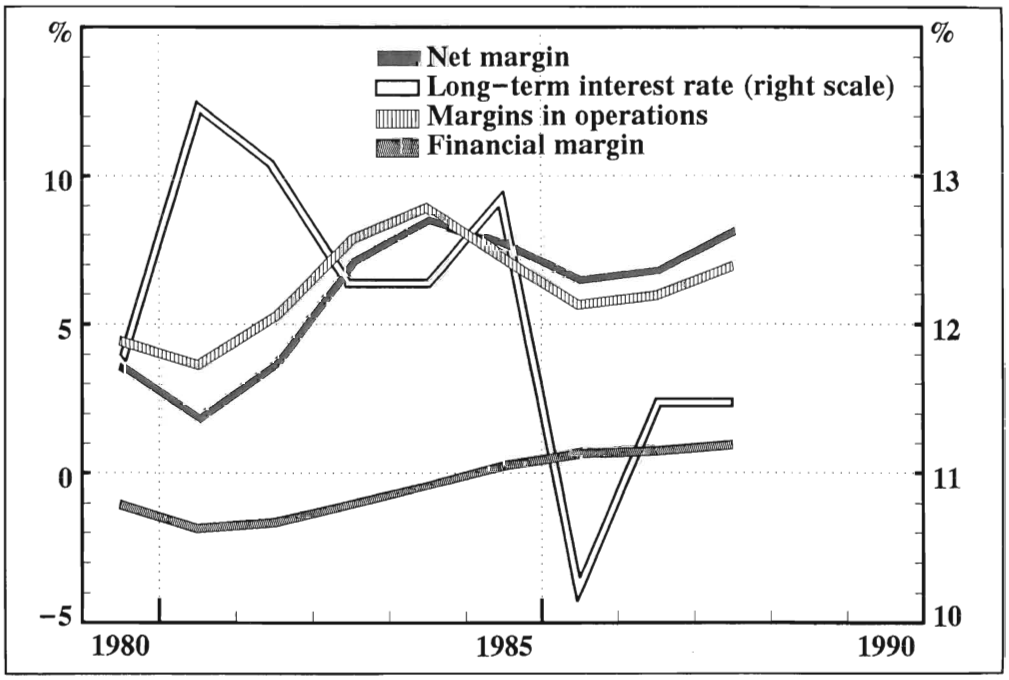


Source: Sveriges Riksbank

Historically high real interest rates and a drop in real rates of return on assets in manufacturing presented Swedish investors with an unfamiliar situation at the end of the 1970s. A negative gap between the anticipated rate of return and the interest rate meaning no compensating yield to cover the risk of making a real investment as opposed to an almost risk-free financial investment stopped investment spending almost altogether in a large part of industry, moving cash flows into financial assets. The disorderly situation in many markets generated by macroeconomic imbalances instead suggested that an even greater premium was needed. The lack of such a premium covering the uncertainty about wage claims and the future course of economic policy, particularly taxation of capital gains, contributed to the cautious attitude towards real investment among firms.

Figure VI:17 shows that the order has been restored after 1982 and that the relative attractiveness of real versus financial investments in Sweden has increased considerably. The abolition of the Swedish currency regulation has, ceteris paribus, increased that attractiveness to invest for at least highly leveraged firms with no scheduled production abroad.

Figure VI:17. Margins in Swedish industry and Swedish long-term interest rate.



Note: "Margins in operations" is defined as operating income after depreciation. "Net margin" is defined as result after financial incomes and expenses. "Financial margin" is defined as the difference between "Margin in operation" and "net margin". All figures are stated in percent of turnover.
Sources: Federation of Swedish Industries, SCB, OECD

To conclude, the financial sector now provides incentives for increased domestic investments during our forecast period and no shortage of capital for firms that can pay, i.e., that can expect a sufficiently high rate of return after tax.

5.6. Labor Market Rigidities have to be Relaxed

Also in the allocation of human resources the tax system creates inefficiencies. The tax system in combination with a too narrow wage dispersion have been considered the two major factors behind the rigidities in the labor market. They create an inadequate incentive structure, which leads to bottlenecks in the supply of certain categories of skilled manpower, low mobility, etc.

The labor market is characterized by bottlenecks on the labor supply side. Throughout the crisis years of the 1970s and throughout the 1980s

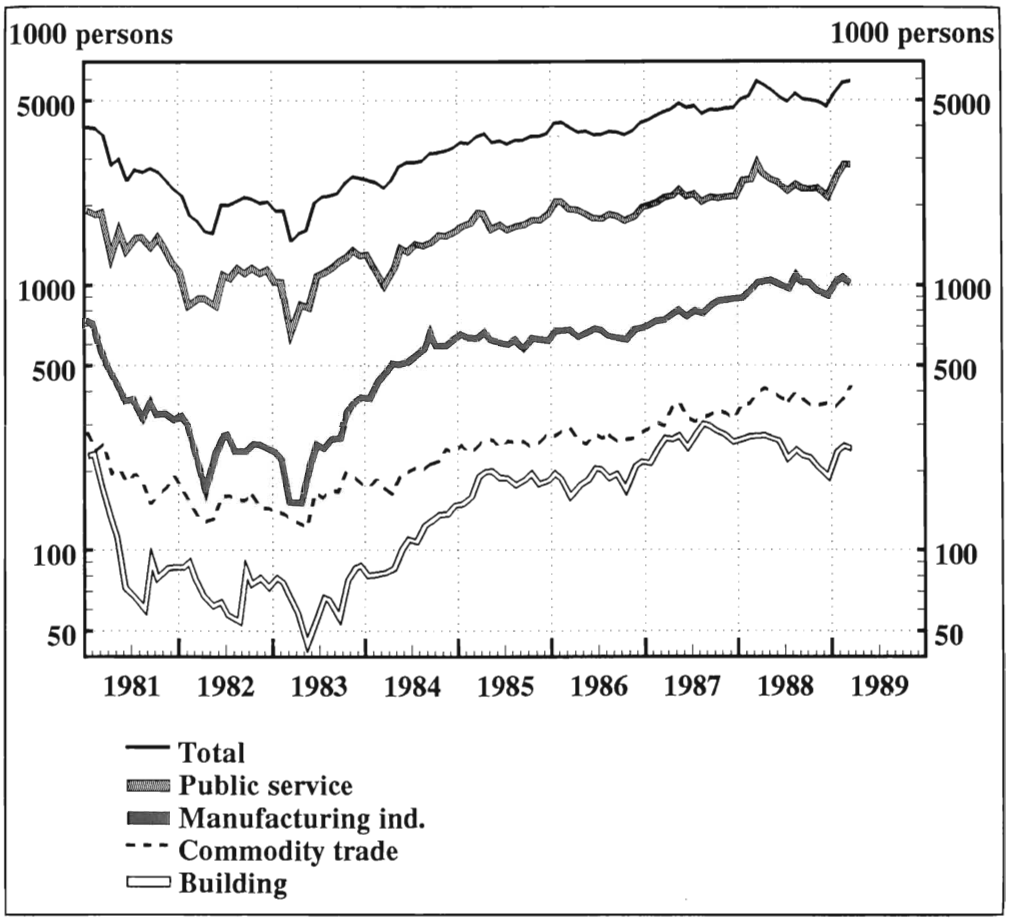
Figure VI:18. Shortage of workers and salaried technicians in manufacturing.
Percent yes-answers.

Note: There are breaks in the series at 2 Qr 1987 and 1 Qr 1988; In the case of Other workers the discrepancy between the old and the new sample in June 1987 is 3 percentage points; the higher figure (the new sample) has been used here.
Source: Swedish National Institute of Economic Research

several studies concluded that such bottlenecks, especially in regard to technicians, had to be removed to facilitate industrial expansion. The problem still exists and has, due to cyclical variations, been especially serious in 1988/89, as is exhibited in Figure VI:18. The long economic boom has increased the demand for labor in manufacturing, making it suffer from a severe lack of skilled workers, while the shortage of technicians seems to have declined.

The high growth in labor demand during 1983–88 can be seen in Figure VI:19. The upswing started half a year after the huge 1982 devalu-

Figure VI:19. Number of unfilled vacancies.
1 000s. Seasonally-adjusted monthly data. Log. scale.



[1] For jobs lasting more than ten days
Note: Altered routines at employment offices resulted in a break in the series between March and April 1982. Moreover, as of April 1981 vacancies are deleted from the statistics six weeks after notification.
Source: National Labor Market Board

ation of the Swedish krona. To mitigate the short-term problem in 1989 the government has intervened in the allocation process by supporting and encouraging the geographical mobility of labor and by changing the rules for immigrants so that they can start working sooner. Furthermore, as residential investment has increased in 1988, the government has sought to freeze or decrease the level of construction work in the most urbanized areas.

The annual increase in the supply of labor is shown in terms of hours employed in Table VI:8. The shortage exists despite the fact that the number of hours worked per week by employed persons has increased considerably. In absolute numbers it has increased almost 2 hours between 1980 and 1988. The most plausible explanation for this increase is the small reduction in the marginal tax rate, carried out in 1983–85. But the increased supply has not substantially reduced the problems.

The gap between unemployment and vacancies appears to be largely structural. A geographical mismatch exists (Figure VI:20), even though it may be small in an international context. Geographical immobility is a problem, which the government has tried to mitigate by an incentive package. As long as the manufacturing industry experiences a shortage of all kinds of workers this might help.

One structural solution to the shortage problems is that increased investments in 1988–89 will pay off in terms of higher productivity in the manufacturing sector.

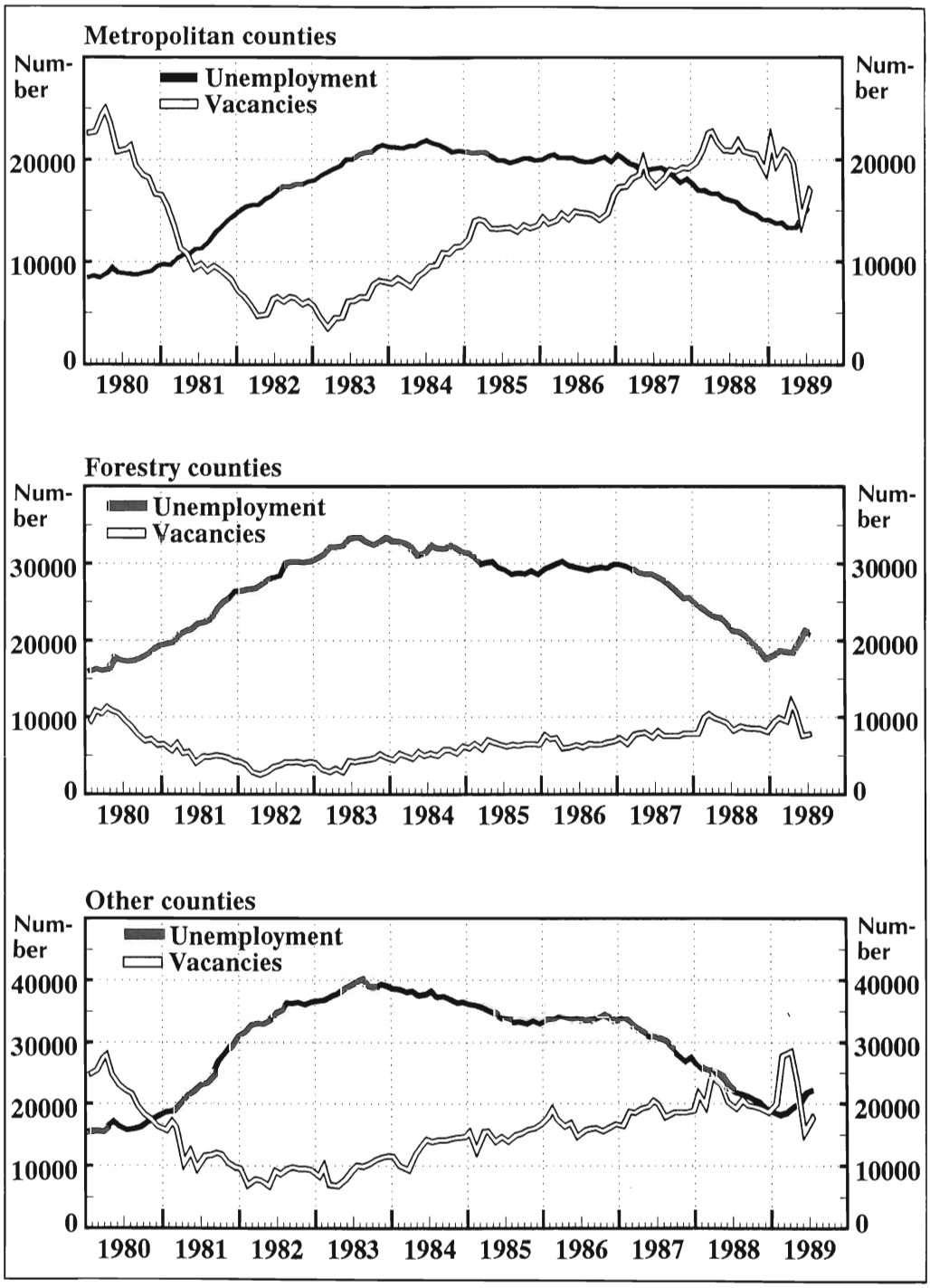
As all sectors have shortages, another solution is to increase productivity in at least some of them and by that ease the overall shortage and

Table VI:8. Production, productivity and employment.
Annual percentage change.

	Production			Productivity			Employment (hours)		
	1987	1988	1989[2]	1987	1988	1989[2]	1987	1988	1989[2]
Agriculture and forestry	−2.1	1.7	3.2	3.9	0.2	4.5	−5.8	1.5	−1.2
Mining and manufacturing	3.0	3.8	2.2	2.6	2.3	1.7	0.4	1.5	0.5
Electricity, gas, water	8.4	3.0	−2.3	3.7	1.5	−2.3	4.5	1.5	0.0
Construction	4.4	4.1	1.6	1.9	2.1	1.6	2.5	2.0	0.0
Private services	3.0	2.8	0.9	0.9	0.2	0.5	2.1	2.6	0.4
Business sector	3.1	3.2	1.4	1.9	1.1	1.0	1.2	2.1	0.3
Business sector[1]	3.1	3.2	1.4	1.2	0.5	0.7	1.9	2.7	0.6
Public authorities	0.7	1.5	1.6	0.7	0.2	0.1	0.0	1.3	1.5
Total[1]	**2.5**	**2.8**	**1.4**	**1.1**	**0.5**	**0.5**	**1.4**	**2.3**	**0.9**

[1] Incl. the residual item for production and the statistical discrepancy for employment
[2] Estimates
Source: Swedish National Institute of Economic Research

Figure VI:20. Unemployment and vacancies.
Seasonally-adjusted monthly data.



Source: National Labor Market Board and the Swedish National Institute of Economic Research

potentially allow some recruitment to the manufacturing sector. The public sector productivity has been low and decreasing, although, admittedly, there are statistical problems in assessing the figures.

A third solution would be to try to influence the different elements in the labor supply:

* size of the labor force
* employment rate
* rate of absenteeism
* number of hours worked per week by persons employed

What policies might increase labor supply? The **labor force** can be increased by importing labor, which requires taking away some regulations on immigration. As was mentioned previously, measures have already been suggested by the government to facilitate the incorporation of refugees and legal immigrants in the labor force. Those recently retired can be induced to return to work. However, the supply of labor of persons over 65 years has almost disappeared and drastic changes in incentives would probably be required to bring them back. The supply of persons between 60 and 64 can be expected to further decrease as a result of the recent increase (July 1987) in the compensation these persons get when they reduce their working time from full to half time.

The second alternative is to improve **the rate of employment**. Since open unemployment is virtually nil it is a matter of bringing persons covered by the hidden unemployment figures into the market. One way of doing this is to lower the compensation scheme that keeps them away from the market. Recent OECD estimates of replacement ratios (ratio of after-tax benefits to after-tax average wages) for skilled industrial workers unemployed for three months in the Nordic countries show Sweden to be at the top with 94 percent (Finland 88 %, Norway 91 % and Denmark 92 %). These figures are extremely high as compared to replacement ratios in the range of 65–70 % for comparable continental European countries (France, Germany, Netherlands) and about 50–55 % for the UK. There are, however, differences in scope between the countries which explain a large part of the gap. Sweden (contrary to many of the other countries) applies the principle of paying a relatively high amount of cash to the unemployed during an initial period. After that period the cash replacement is cut and the unemployed put into a labor market program.

Another way is to try to make it more attractive for women to apply for jobs. The work propensity of women has increased since 1963, and will probably continue to do so. The supply among women between 45–54 years and 55–64 years has increased substantially and is higher as a proportion of the labor force than in any other major industrial country.

Another measure to improve the rate of employment would be to increase the qualification period for maximum retirement allowances (ATP). A person who starts working at the age of 20 will (under current rules) qualify for full ATP at an age of 50 years. Extending the qualification period to 35 or 40 years might in the long run contribute to ease the labor shortage.

A third alternative is to influence **the extent to which employees are actually working**. During the 1960s and 1970s there was a steady decrease (of about 10 percentage points) in hours worked due to longer vacations, and other forms of paid absence. Here, too, it is a matter of changing incentives by reducing some of the social benefits that the Swedish economy of today cannot afford. Considering this, the timing of a proposal from the government about guarantees for an extra week of vacation (guaranteeing sex weeks to everybody) seems bad. On the contrary, minor changes in the social benefit system is called for which may lead to a situation where the worker is no longer indifferent from an economic point of going to work or not. For example, a minor modification that would have a significant effect would be to pay no compensation for the first day of a period of illness.

Finally, **the number of hours worked** can be influenced. Here, there has already been a break in the downward trend and with the support of future lower marginal tax rates this development might continue.

The more or less unchanged real after-tax income for the average industrial worker since the beginning of the 1970s is often claimed to have made workers less prone to put in additional working hours. This is easy to understand considering that real GDP has grown 40 percent, value added in manufacturing has grown by 30 percent and hourly earnings by 430 percent during the period, while the value contributed by labor has been more or less entirely absorbed by the public sector. We will return to the income situation in the next paragraph.

5.7. Is Swedish Competitiveness Threatened?

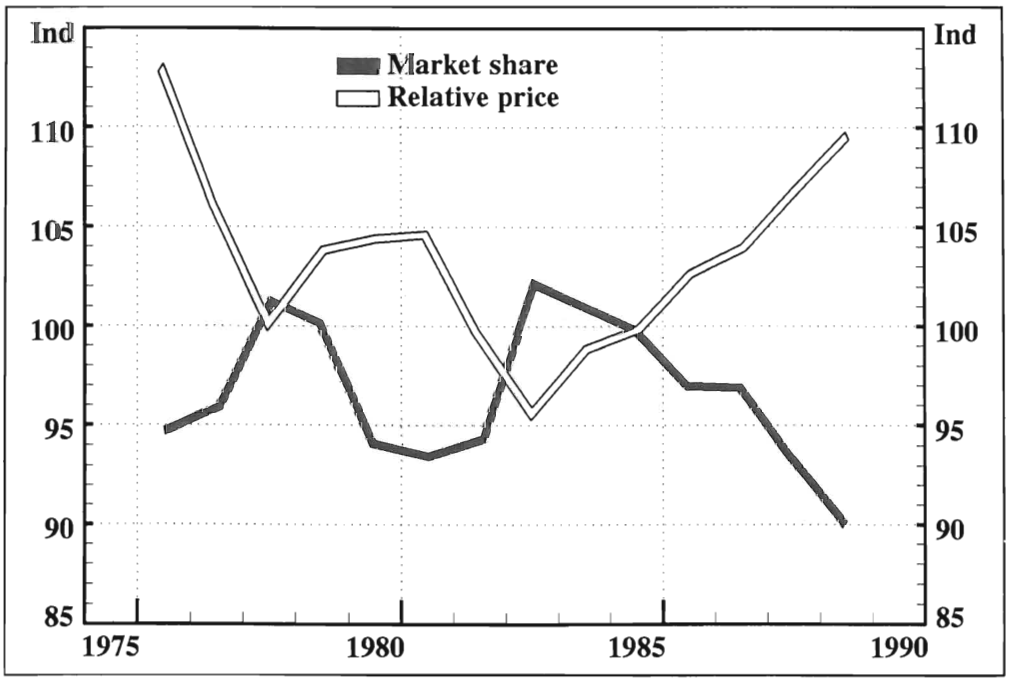
As there is a long-term budget constraint, Sweden cannot borrow forever without paying back. The transition into reindustrialization involves two key issues: the need to invest in a larger-sized manufacturing sector and gaining competitiveness. The former requires increased national savings, the latter calls for either sharply higher productivity and quality performance or else acceptance of a reduced standard of living by devaluations. To achieve both will, as has been stressed, require very different policies from those currently pursued.

The Swedish share of the world market has fallen since mid-1970s. According to GATT, Sweden was ranked at number 11 as an exporting nation in 1972 with a share of world trade of 2.1 percent. After a considerable loss during the second half of the 1970s it regained shares during the first half of the 1980s. In 1984 it was ranked at number 13 with 1.5 percent. The loss of market shares over the total period does not, however, necessarily mean problems for the Swedish economy considering a growing world market. But in order to be able to fulfill our international commitments (debt and aid transfers) Sweden has to export more. As Swedish private consumption has hit the bottom of an OECD ranking, Swedish consumers cannot be expected to sacrifice more in a long-term perspective. Thus, new manufacturing capacity has to be added. For this to happen investment prospects must be favorable. Swedish production must be competitive relative to the rest of the world. This, in turn, would require improved competitiveness in developing

new products, superior quality or putting in new marketing efforts for existing goods in order to attract an increased range of customers in world markets. Alternatively, it could be achieved by improved cost competitiveness, e.g. like having a superior productivity performance which allows lower export prices without cutting wages. A third and harder alternative is to reduce wages relative to those of competitors. A continuation of the Swedish devaluation policy is then the most effective way of doing so, but the negative effects of such a policy have already been seen in a reduction of the Swedish standard of living. Also, earlier devaluations have only achieved temporary improvements in competitiveness. In the longer run firms learn to incorporate devaluations in their expectations such that no improvement in competitiveness occurs, only inflation.

The development of price competitiveness in terms of deviations from purchasing power parity has already been illustrated in Figure VI:12. We found it to be continuously deteriorating. The other side of the coin is the cost competitiveness, which we will discuss here. An overvalued currency requires superior manufacturing cost competitiveness or profit margins will be squeezed.

Figure VI:21. Market shares (volume) and relative export prices* for Swedish manufactured goods (versus OECD-14)
Index 1985 = 100.

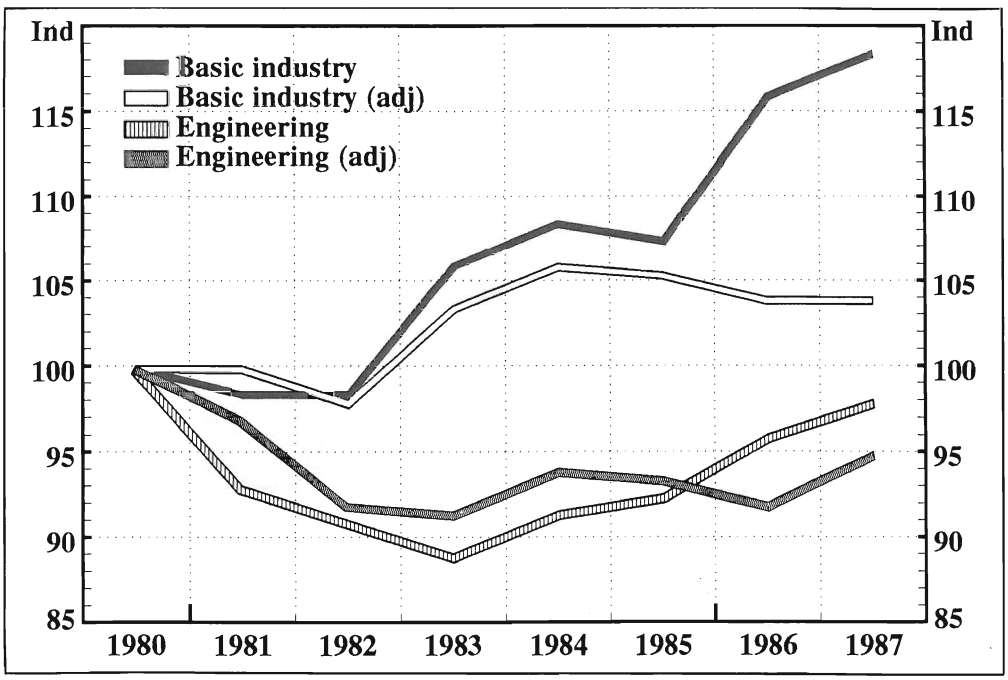


* Relative export price defined as the ratio between the Swedish export price for manufactured goods and the world market price expressed in SEK.
Source: Swedish National Institute of Economic Research

The effects of price competitiveness of Swedish export versus 14 OECD countries are illustrated in Figure VI:21, which shows that Swedish manufactured products are losing market shares. The reason for this is that the relative price of Swedish exports of manufactured products has increased considerably since 1982, which is seen in the same figure. But, why this picture? One explanation is that the firms have sought to consolidate. However, this is decreasing in importance which is illustrated in Figure VI:17. Another is a decreased export propensity due to capacity constraints.

The competitive edge of Swedish manufacturing depends both on real microeconomic factors and macroeconomic factors like the real exchange rates, subsidized interest rates, etc, which make it possible to lower prices without the need to cut wages. Looking at the – in an international comparison – high R & D expenditures of Swedish industry and the emergence of successful, giant Swedish multinationals, conditions for successful performance at the microeconomic level are strong. On the other hand, since 1982 Sweden has been gaining market shares in its natural resource-based industries (paper and pulp, steel) to a larger extent, as is seen in Figure VI:22, than in engineering with research intensive subindustries like high-tech sectors and telecommunications.

Figure VI:22. Export market shares of different industries.



Note: Oil has been excluded from base industries as Sweden is not competing with this product. Ships are excluded from machinery.
Sources: SINDOM, OECD

When standardized for markets and products, as is also done in Figure VI:22, the development can be claimed to better reflect the basic competitive edge. Such a standardization shows that the improvement in market shares is nonexisting for basic industries and very weak for the engineering industries. One explanation for this might be that a large part of the R & D expenditures has been supporting foreign production of Swedish multinationals (Swedenborg et al., 1988). An additional explanation is capacity constraints in Sweden (Lundberg, 1988).

A more basic explanation, however, is lost competitiveness of production for export from Sweden. Recalling Figure VI:4 helps us to sort out some of the crucial sources of an unfavorable development of price and cost competitiveness. The way to improve the competitiveness of products already on the market is by increasing the cost competitiveness. Looking at relative unit labor cost (RULC) we find in Figure VI:4 that devaluations temporarily improved the cost situation after 1976–77 and after the 1982 devaluation. In 1988, RULC is back at its 1982 level, but still below its 1970 level. Hence, the Swedish economy is back in a precautious cost situation. And all indications point to the fact that misallocations of investment and resources due to a distorted price system is the reason.

The less painful way to restore cost competitiveness is to increase productivity. However, productivity growth is to a large extent the by-product of high rates of investment and investments require savings.

Table VI:9. Wage costs 1980–88 and labor costs for all employees and for industrial workers.
Annual change, percent.

	All employees[1]			Industrial workers				
	Negotiated (1)	Wage-drift (2)	Hourly earnings (3)=(1+2)	Negotiated (4)	Wage-drift (5)	Hourly earnings (6)=(4+5)	Social costs (7)	Hourly costs[2] (8)
1980	7.4	1.8	9.2	6.1	3.2	9.3	0.8	10.2
1981	6.2	2.7	8.9	5.9	4.2	10.1	0.5	10.7
1982	4.6	1.7	6.3	4.1	3.5	7.6	0.2	7.8
1983	4.7	1.7	6.4	3.8	2.9	6.7	2.4	9.3
1984	5.7	2.2	7.9	6.2	4.1	10.3	−0.1	10.2
1985	4.2	3.3	7.5	3.8	3.7	7.5	0.2	7.7
1986	6.1	2.5	8.6	3.9	3.5	7.4	0.0	7.4
1987	3.6	2.8	6.4	–	–	6.4[3]	0.6	7.0
1988	4.2	2.9	7.1	3.4	5.0	8.4	0.0	8.4

[1] Columns 1–3 are based on wage-bill statistics, while the data on industrial workers (columns 4–8) are derived from earnings statistics, supplemented with any additional non-recurrent sums
[2] Hourly earnings multiplied by social costs, both in index form
[3] The construction of the contract for 1987 makes a split between negotiated wage and wage drift meaningless
Sources: SCB, Swedish National Institute of Economic Research

Table VI:10. Hourly compensation in manufacturing.
1988 Wage in U.S. $ 13.90, Index U.S. = 100.

United States	100	Korea	18
West Germany	130	Taiwan	19
Italy	93	Hong Kong	17
Japan	95	Singapore	19
France	93	Mexico*	12
Great Britain	76	Brazil*	11
Spain	63	**Sweden**	**121**

* 1987
Source: US Bureau of Labor Statistics

Swedish domestic investment in the manufacturing sector has been fairly high during 1988 in comparison with our competitors, which means that we can expect some relative gains in productivity. However, the rate of savings is worrysome even in a medium-term perspective. Figure VI:4 shows that relative productivity has been fairly unchanged up to 1987. Thus, the decline in RULC emanates from the development of relative wages or exchange rates.

In Figure VI:4 we find that the major reason for the decline in cost competitiveness is the rise in relative wages after 1982. The different components of labor costs are shown in Table VI:9. We find that even if the rate of change in hourly earnings has decreased since 1985, it continues to be in the area of 6–8 percent which is high in relation to the weighted annual change of about 4 percent in the OECD countries. In absolute terms, labor cost per hour in manufacturing is still lower in Sweden than in West Germany but considerable higher than in the USA and Japan (Table VI:10).

The upward trend in hourly earnings is too rapid and hard to break in a medium-term perspective. Commitments exist for the coming years, which make it impossible to reach the rate of change in competitor nations. But, in a long-term perspective, the wage formation process in Sweden has to be reformed, and some kind of productivity-related wage-increase must be found. For the forecasting period we foresee an annual increase of relative wages of 3.5 percent (Sweden 7.0 percent and OECD 3.5 percent) and an annual change in relative productivity of 2.0 percent (Swedish export sectors 2.0 percent and OECD 4.0 percent).

This means that Swedish relative unit labor costs expressed in domestic currency will worsen by about 5.5 percent a year during the forecast period, exercising a tremendous pressure on the Swedish krona during that period. We forecast that the Swedish inflation rate, measured as producer price increases, will be around 2–2.5 percentage points above the inflation rate in competitor nations. Based on relative producer price increases the Swedish krona was already slightly overvalued from a purchasing power parity point of view in mid-1989 (Figure VI:12). Thus, the scenario presented above will, with unchanged policy, lead to a devalu

ation pressure at the end of the forecasting period of about 12–15 percent. Our analysis (in Section I), however, strongly argues that devalu ations should be avoided. Our projections are based on a scenario assuming that the adjustments will be absorbed in a more desirable way from a long-term perspective. That would require that the policy steps, which we stressed at the beginning of this section, be taken as soon as possible.

6. The Swedish Economy – An Outlook Towards 1993

Our forecasts, which are based on the international market scenario in Chapter II, yield a Swedish GDP growth considerably below average GDP growth in the OECD, see Table VI:11. The more rapid increases in costs and prices assumed for the Swedish economy mean that competitiveness is being continually eroded. Exports are still an important source of growth in demand. The Swedish export growth (3 %) is, however, less than the assumed growth in world trade (5.5 %) which means that the Swedish export industry will continue to lose market shares up to 1993. The export forecast is based on assumptions about unfavorable changes in relative prices of about 1.5–2 percent per annum and with a price elasticity of export demand of −1.5.

The increase in private consumption is high for the first half of the forecast period. The increase is stimulated by the decrease in the marginal tax rate and the relatively easiness for households to borrow and

Table VI:11. Balance of resources and expenditures, 1970–93.

	Bill SEK Current prices 1988	Average annual change in volume, percent				
		1970–75	1975–80	1980–85	1985–88	1988–93
GDP	1 111.8	2.6	1.3	1.8	1.9	1.3
Imports	344.0	2.7	2.1	1.9	5.8	4.3
Total resources	**1 455.8**	**2.6**	**1.5**	**1.8**	**2.9**	**2.0**
Exports	360.0	3.8	3.8	5.0	3.0	3.0
Investments	214.9	1.2	−0.1	1.2	3.6	1.9
Private	94.8	4.6	−2.3	3.7	5.3	2.8
Public	58.8	−0.8	2.2	−1.3	0.0	1.8
Residential	49.8	−2.5	0.3	0.0	5.2	0.8
Discrepancy	11.5	20.7	5.7	3.9	3.6	–
Consumption	880.3	2.6	1.7	1.0	2.7	1.7
Private	587.9	2.4	0.8	0.6	3.6	1.9
Public	292.4	3.1	3.3	1.7	1.3	1.3
Inventory changes	0.6	–	–	–	–	–
Total demand	**1 455.8**	**2.6**	**1.5**	**1.8**	**2.9**	**2.0**

Table VI:11. Cont.

	Bill SEK Current prices 1988	Average annual change, percent				
		1970–75	1975–80	1980–85	1985–88	1988–93
B. Households:						
Disposable income	570.2	2.6	0.8	−0.2	2.0	0.5
Saving ratio %	−5.3	4.0[1]	3.8[1]	1.5[1]	−2.8[2]	−3.1 (1993)
C. Manufacturing and mining:						
Production	240.1	2.7	−0.4	2.1	2.4	2.1
Productivity		4.4	2.4	3.8	2.2	1.6
Investments	43.7	5.2	−4.2	2.4	5.1	3.0
Investments / value added %	16.7	16.6[1]	15.7[1]	13.8[1]	16.2[2]	16.7 (1993)
D. Prices, etc:						
Producer prices		9.9	9.4	9.4	3.8	6.5
Export prices		11.0	8.2	8.9	3.2	5.2
Import prices		12.0	12.4	9.4	−1.6	6.2
Consumer prices		8.0	10.5	9.0	4.7	6.5
	Percent of GDP					
E. External balance						
Trade balance (goods)	2.1	0.7[1]	−0.9[1]	1.1[1]	2.5[2]	−0.2 (1993)
Current account (excl. interest payments and other transfers)	1.2	0.6[1]	−1.7[1]	0.9[1]	1.7[2]	−1.7 (1993)
Interest payments net	−1.9	0.1[1]	−0.4[1]	−2.5[1]	−2.0[2]	−4.8 (1993)
Net foreign liabilities	−22.5	4.8[1]	−3.4[1]	−21.4[2]	−22.1[2]	−37.8 (1993)

[1] Arithmetic mean (5 years)
[2] Arithmetic mean (3 years)

partly explains the relatively high import growth forecasted. The need to expand domestic manufacturing capacity is assumed to explain the high import figures for the second half of the period.

Our GDP and export growth forecasts correspond to an increase in manufacturing production of 2.1 percent. Our forecast of the Swedish inflation, measured in terms of consumer prices, is 6.5 percent, which is considerably higher than the assumed OECD average of 4.5 percent. The investment perspectives are expected to improve at the end of the forecast period as the real rate of interest is assumed to decrease and the EC scenario has become easier to assess for the corporate manager.

Our forecasts are based on an assumed increase in hourly earnings of 7 percent per annum. The yearly increases in productivity are assumed to be 1.6 percent in manufacturing and 2.0 percent in the export sector.

Table VI:12. Public sector, 1960–93.
Percent of GDP at market prices

	1960	1970	1980	1985	1988	Estimates 1993
1 Direct taxes	14.9	20.3	21.7	21.3	24.6	22.7
2 Social security contributions	3.6	7.6	14.2	12.6	14.0	15.5
3 Indirect taxes	10.0	12.6	13.6	16.4	16.7	18.3
4 Total taxes	28.5	40.5	49.5	50.2	55.3	56.5
5 Transfers to households	7.9	11.3	18.7	19.2	20.3	22.2
6 Interest payment	1.7	1.9	4.1	8.4	5.6	5.9
7 Total transfer to private sector	11.4	15.9	28.9	34.4	31.5	34.1
8 Public consumption	15.4	21.4	29.2	27.8	26.3	26.9
9 Public investment	4.4	6.2	4.4	3.1	2.8	2.9
10 Public spending	31.0	43.9	62.3	65.4	60.3	63.6

Sources: National Accounts statistics, Swedish National Institute of Economic Research, IUI estimates

Table VI:13. Gross domestic product by kind of economic activity, 1970–93.

	1988 Bill SEK	1988 % shares in 1985 prices	Average annual change in volume %				
			1970–75	1975–80	1980–85	1985–88	1988–93
Manufacturing and mining	240.1	21.9	2.7	−0.4	2.1	2.4	2.1
Agriculture and forestry	36.3	2.9	−0.3	−0.4	2.4	−1.4	0.2
Construction	68.4	5.9	0.4	1.3	0.5	2.9	0.8
All private services	370.0	32.8	3.5	1.7	1.5	3.2	1.3
Public services	217.9	19.7	3.8	3.4	1.7	1.0	1.1
Electricity, gas, water indirect taxes and statistical discrepancy	179.1	16.8					1.1
GDP	1 111.8	100.0	2.6	1.3	1.8	1.9	1.3

Sources: National Accounts statistics, IUI estimates

Table VI:14. Balance of manpower resources, 1970–93.

	1000 persons			Change, percent per annum				
	1970	1980	1988	1970–75	1975–80	1980–85	1985–88	1988–93
Population	8,081	8,318	8,459	0.3	0.3	0.1	0.4	0.4
Population of working age (16–74 years)[1]	5,864	6,040	5,322	0.2	0.4	0.3	0.2	0.3
Labor force[2]	3,913	4,318	4,471	1.1	0.9	0.5	0.8	0.8
Employment								
Manufacturing	1,055	981	908	−0.1	−1.3	−1.5	0.4	0.5
Private service	1,328	1,390	1,529	0.8	0.2	0.8	1.8	1.0
Public sector	806	1,300	1,364	5.3	4.5	1.7	−1.2	0.5
Other[3]	665	561	598	−2.4	−1.0	−0.9	3.7	0.0
Total employment	3,854	4,232	4,399	1.1	0.8	0.3	1.2	0.6
Unemployment[4]	59	86	72	2.6	5.1	7.8	−16.2	6.8
Employed in labor market programs	64	120	156	6.0	6.8	7.6	−3.4	2.8
Labor force participation rate %	66.7	71.5	84.0					

[1] From 1986 working age 16–64
[2] New method from 1987
[3] Residual
[4] The rate of unemployment is expected to increase from 1.6 percent 1988 to 2.1 percent 1993
Sources: SCB, IUI estimates

We foresee a rise in real disposable income of about 2.3 percent per annum. The forecasted increase in private consumption implies an improvement in the savings ratio, but still a negative one.

The assumed increase in the Swedish population corresponds to an increase in the number of persons aged 16–64 years of about 94 000. Together with the tax package starting in 1990 this development is assumed to increase the number of employed by 138 000 persons. The decreased competitiveness of the Swedish export industry due to an overvalued Swedish krona leads to a gradually increasing unemployment and increased number of participants in labor market programs. The rate of unemployment is assumed to increase from 1.6 percent in 1988 to 2.1 percent in 1993, while the rate of participation in labor market programs in percent of the labor force will increase from 3.5 percent in 1988 to 3.8 percent in 1993.

In conclusion, small progress will be made to correct internal balances, while the external imbalances will rise to alarming proportions. Thus, we foresee a substantial drop in the Swedish trade balance and a deficit in the current account amounting to 6.5 percent of GDP in 1993.

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PRESENTATION OF THE INSTITUTES

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Address: NØI, Breiviken 2, 5035 Bergen-Sandviken, Norway.
Tel: 47-5-950 660.
Telefax: 47-5-950 667.

GROWTH AND INTEGRATION IN A NORDIC PERSPECTIVE

This book is an outcome of a joint project by The Nordic Perspective Group, formed by four Nordic research institutions: ETLA in Helsinki, IFF in Copenhagen, IUI in Stockholm and NØI in Bergen.

The Nordic economies are small in size but among the most prosperous in relative terms by most international standards. They form an area exhibiting close-knit economic relations, similar welfare levels, and a common cultural and social background. Alongside the similarities there are important differences across the Nordic economies: in the company and industry structures, in the recent growth performance, and in the economic and industrial policies. Hence, the economic prospects for these countries exhibit divergent patterns.

The book has two main themes—growth and integration. Growth performance and prospects are dealt with in detailed country surveys. Forecasts up to 1993 are presented. The challenges and opportunities posed by the 1992 European integration process for the Nordic economies are studied from several points of view: labor and capital markets, trade, firm behavior and fiscal harmonization. The basic question is: how are the Nordic countries affected by the integration process given the similarities and differences in their economic structure and performance?