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The Nordic countries and multinational enterprises: Employment effects and foreign direct investment

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Note:
Working papers on themes studied within the ILO
are intended to stimulate discussion and
critical comment.

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SUMMARY

All five Nordic countries, Sweden, Norway, Denmark, Finland and Iceland, are among the world's ten richest countries as measured by per capita GDP. Beyond this commonality, however, there are as many differences as similarities between them. They all have quite different natural resource bases, different industrial structures, different economic strategies and are differentially dependent upon large MNEs. In the Fortune 500 non-United States sample, Sweden has 20 firms and Finland has ten, Norway and Denmark have two each and Iceland has none.

Sweden's large 20 MNEs employ roughly 15 per cent of the Swedish workforce within Sweden and another amount equal to 6 per cent outside Sweden. Thus these 20 companies are about one-fifth as large as Sweden, in manpower terms.

In contrast only 3.3 per cent of Sweden's workforce works for foreign multinationals which are established in Sweden. In general, all Nordic countries have strong domestic control of their own industrial sectors and are not dominated by foreign multinationals.

As well as being wealth generators, the large MNEs in Sweden are also employment generators. Stopford et al. pointed out that between 1977 and 1982 the 15 largest Swedish MNEs created 22 per cent of the increased jobs in Sweden.

The growth of Swedish MNEs however has been much more rapid outside Sweden than within Sweden, both as measured by turnover and employment creation.

The pattern in Finland is similar, and it appears that the Finnish MNE system is evolving parallel to the Swedish with about a ten- to 12-year time lag. (Finland had no MNEs in Stopford's 1978 sample and Sweden had 12. Sweden has 20 and Finland ten in the Fortune 500 sample.)

Sweden's large MNEs apparently work in large co-operative family arrangements similar to the Japanese Zaibatsu groups. As in Japan, the connections are mediated by overlapping directorships and common banking facilities. The Wellenberg group is one example. As well as co-operating with each other, there is also strong co-operation between Swedish industry and the Swedish Government, especially as regards the promotion and export of Swedish products.

Many large Swedish companies are also actively seeking global expansion in the form of merger partners, acquisitions or joint-venture partners with non-Scandinavian firms. Scandinavian Airlines, Volvo and Asea Brown Boveri are examples.

There are also many active mergers and joint ventures between Swedish and Finnish companies, both in industry and in banking.

Finland has a strong trading partnership with the Soviet Union and Swedish companies can access this vast export market through co-operation with Finnish companies.

Co-operation with Norway, however, is much less. Norway has only two large MNEs, Norsk Hydro and Statoil. Both the Finnish and Swedish industry structures are energy-intensive.

However, co-operation with Norway in the form of joint ventures and intra-company dependencies have not been strong.

Indeed, it appears that the Nordic countries are becoming more independent of each other, rather than more integrated.

The Nordic union allows free movement of labour within Scandinavia, but geographical labour mobility is low. For example, only 1 or 2 per cent of the population of the Nordic countries are foreigners (meaning other Nordics or other foreigners). In recent years expatriates within the Nordic countries are being repatriated to their Nordic home countries.

Finland in particular is becoming more isolated from the other Nordic countries.

In general, the Nordic economies are considered successful. Unemployment rates are well below OECD European means, and intensive subsidies and retraining programmes reduce lay-offs and general unemployment rates.

Nordic countries are highly dependent upon trade and the MNEs are seen as major vehicles for the export of Nordic products.

Sweden exports 40 per cent of its industrial production and accounts for 45 per cent of total Nordic exports.

Although intra-Nordic trade has increased (69 per cent in the past ten years), external trade is growing at a higher rate.

For example, Norway is becoming less dependent on Sweden as a trading partner as it opens new markets in other parts of Europe and the Americas.

Foreign direct investment (FDI), especially by Swedish operations, is high, but the vast majority of Swedish foreign operations are not far from home. About 50 per cent of subsidiaries of the large Swedish MNEs are in Europe and only about 4 per cent are in developing countries.

The trend in FDI is away from the distant cheap-labour countries and closer to the large markets of Europe.

As 1992 approaches it is anticipated that more and more Nordic firms will develop large highly automated and nationalised factories in European countries that are close to the final markets and have good infrastructure bases.

Transnational types of operations began in Scandinavia with the Viking period.

Nordic economies have been based on the manufacture and trade of high-quality material items. The banking sector is quite small and underdeveloped by world standards.

As the Nordic countries are quite different from each other in forms of government, neutrality, relationships with the EEC, industry structure and dependence upon MNEs, it is rather difficult to make general statements about MNEs in Nordic countries. Perhaps the most salient point is that in terms of large MNEs Sweden is much further developed than the others, although Finland is rising fast. On a world scale, Norway and Denmark have a few multinational giants.

GENERAL BACKGROUND

History of MNEs

In Scandinavia transnational-type operations predate the Viking expansion and have played a significant role in the development of Northern European economies, parliamentary systems and even the development of the feudal period in countries from Ireland to Turkey. They are an integral part of the entire pattern of expansion in Nordic history. The process of colonisation and of goods from beyond the local territory has a continuous history in trade patterns, for example, the Swedish Vikings in Russia, the Norse in Britain and Iceland and the Hanseatic League.

In the nineteenth century the rise of nationalism and the Industrial Revolution set the conditions for the emergence of the modern concept of the transnational corporation. As national boundaries crystallised, so did the concept of transnationalism. This process was accelerated in the twentieth century by the cyclical tightening of national tax and regulatory constraints and by advances in communications, computers and transport technology which have facilitated the sustained control of business systems over a vastly increased geographic range.

Global economic environment

Since 1980 there has been a global slow-down in economic growth. The general climate is characterised by greater economic instability, growing protectionism, a wave of mergers, acquisitions, non-equity forms of activity such as joint ventures and subcontracting and a strong emphasis on technological upgrading. In general, the trend is to mergers and acquisitions rather than greenfields sites. MNEs from Europe and Japan have risen in importance and those from the United States have declined.

The global stock of foreign direct investment has shrunk despite liberalisation of investment policies. Greater instability of the developing world economies has contributed to this.

In general, Scandinavian MNEs have reflected this trend, reducing their exposure to commercial and political risks and investing closer to home and European markets rather than in the developing countries. Low-cost labour is offset by inadequate infrastructure, poor communications and shortages of skilled workers as well as political conflicts.

Ohmse (1985) in "Triad power" describes the world as comprising mature stagnant economies, escalating social costs, ageing populations, lack of jobs for skilled workers and dramatic technological developments despite escalating costs of R & D achievements and modern automated production facilities.

DESCRIPTION OF THE NORDIC COUNTRIES

All Nordic countries are in the world's top ten as measured by GDP per capita. All emerged from the 1981-83 slump with low rates of unemployment. Nordic co-operation has existed in many periods throughout modern European history.

Table 1: Description of the Nordic countries

	Sweden	Finland	Norway	Denmark	Total
Population (million)	8.3	4.9	4.2	5.1	22.6
GDP (\$ billion)	96	51.6	54.8	55.1	257.5 ¹
GDP % of Nordic total	37	20	21	21	100 ²
Per capita GDP (\$'000s) (1986)	15.7	14.4	16.4	16.1	
World rank per capita GDP	6	9	3	5	
Workforce ('000s)	4 269	2 431	2 071	2 662	11 433
Volume of external trade (\$ per capita)	7 059	5 465	8 555	6 874	27 800
Number of companies in Fortune 500 sample ³ (non-United States companies)	20	10	2	12	34
Tax income as % of GDP (1984)	50.5	36.0	46.4	48	

¹ Billions of US dollars (1985).

² Including Iceland = 1%.

³ See section on Fortune 500 sample.

Source: Statistisk Arbok, 1987; The Economist, 21 Nov. 1987; OECD, Aug. 1985.

In modern times informal government co-operation started in the 1920s and 1930s. In the early 1950s a parliamentary surrogate - the Nordic Council - was established. It first met in 1953.

In 1962 the Helsinki Treaty came into force. Under this Treaty, the Nordic countries attempt to maintain and further develop co-operation in the fields of legislation, culture, social and economic policies - and in matters of transport and communications.

In 1971 the Nordic Council of Ministers was established. Additional agreements have been concluded in special areas. Nordic countries are represented on the Council through elected members.

Labour market

Since 1954 the Nordic countries have had a common free labour movement policy.

During the 1970s, as Sweden grew rapidly and Finland did not, there was a large migration of workers to Sweden which unbalanced the labour market. This has been partly corrected now by the growth of the Finnish economy.

Fluctuations of employment and unemployment have been higher in Denmark and Finland than in Norway and Sweden due to differences in economic growth and external economic relations.

All four countries have increasing rates of female labour force participation and expanding public sectors.

Danish statistics on unemployment are somewhat different due to EEC regulations.

Nordic countries are different from each other

Each Nordic country is an independent land which shares some elements of common culture with the others - but only some. Each industrialised late and each arrived recently near the top of the world's per capita GDP list. Each has a different industrial structure and different dependencies. Sweden and Finland have large multinationals. Denmark and Norway have few but Norway has oil and Denmark is a member of the EEC.

Governments

Sweden, Norway and Denmark are constitutional monarchies each having a labour government. Finland is a Republic, having a President and currently governed by a grand coalition headed by a conservative Prime Minister.

All four Nordic countries have low rates of foreign ownership (see figure 1).

In the past, however, foreign political and economic control in the Nordic countries has been strong. Denmark controlled the southern part of Sweden for several hundred years. Sweden controlled Finland for 600 years during the Middle Ages. Denmark controlled Norway until 1814 and later Sweden controlled Norway till 1914.

MNE evolutionary cycles

Sweden, Finland, Norway and Denmark are in different phases of their industrial life cycles (see table 4). Sweden is advanced, has traditionally been externally oriented and is now retracting. Finland is still in the process of internationalising. Norway and Denmark have not yet developed many large multinationals and may not get the chance as global competition increases and the world's economy becomes more closed and more structured.

Fortress Europe

As Europe approaches 1992, the common market is tending to implode. Inner borders are falling and there is pressure to raise external defences reinforcing the "Fortress Europe" phenomenon. These tariff and trade barriers erected by the governments constitute a relatively low hurdle over which the multinationals have leaped long ago.

Japan

Japan once being a closed country itself is aware of possibility being excluded from Europe if the external barriers go up by 1992. It is expected that Japan will make significant inroads into Europe and Scandinavia in the form of mergers, take-overs, joint ventures and new factors, etc., before 1992.

Essentially, they are worried about EEC protectionism. Japan has so far contributed little to the European economies. They prefer to import rather than set up manufacturing operations, however they wish to become self-sufficient in Europe.

In their own words - they want to be "insiders", i.e. European manufacturing companies. Japanese companies are expected to rationalise production in European plants, boost local R & D activities and move more decision power to Europe.

Memberships

Within Scandinavia, loose partially overlapping affiliations exist through a matrix of club memberships. Norway, Sweden and Finland belong to EFTA. Denmark is in the EEC. Denmark and Norway are in NATO, whereas Sweden and Finland are neutral. Denmark, Norway, Sweden and Iceland consider themselves Scandinavian having common linguistic, genetic and cultural backgrounds. All five are in the Nordic union, the OECD and the United Nations.

	Sweden	Finland	Norway	Denmark	Iceland
Nordic union	X	X	X	X	X
EEC	-	-	-	X	-
NATO	-	-	X	X	X
EFTA	X	X	X	-	X
OECD	X	X	X	X	X
UN	X	X	X	X	X

EFTA

In 1959 Denmark, Norway and Sweden joined the EFTA. Finland joined with associate membership in 1961 and converted to full membership in 1986. Iceland joined in 1976. In 1967 tariff barriers on industrial products were abolished within the EFTA.

EEC

In 1972 Denmark joined the EEC and later Finland signed a co-operation treaty with the Council for Mutual Economic Assistance (COMECON). Sweden and Norway signed partial agreements with the EEC; however, Sweden and Finland have neutrality policies which are incompatible with full membership in the EEC. At present the EEC trades more with Sweden than Japan, more with Norway than Canada and more with Finland than China. In recent years tariff barriers between the EFTA and EEC have been largely abolished.

North American analogy

The United States and Canada have a similar relationship to the one between the EEC and EFTA. The relative populations are 10:1. There is relatively free movement of industrial goods between the two areas but labour movement is restricted.

In North America a free trade agreement was adopted in 1988. All tariffs between the two countries will be phased out over a ten-year period starting in 1989. At the moment the United States represents 80 per cent of Canada's export market. A similar relationship exists between the EFTA and EEC.

Thus the pattern is similar on both sides of the Atlantic. Within the Nordic union, however, important differences exist.

The Nordic Council was set up in the early 1950s. Since 1954 there has been a free labour market in Scandinavia, but as the figures in table 2 show, despite the open borders, there is relatively little intra-Nordic migration. The vast majority of inhabitants are locals. There is also a Nordic domestic market allowing free trade between the countries. As well, there is a common industrial policy in the EFTA. Legally and formally this is a different situation from North America which involves a relatively free flow of goods but not labour.

Table 2: Nordic countries population

	Sweden	Finland	Norway	Denmark	Total
Population 1986 ('000s)	8381	4925	4174	5124	22604
of which % are locals	95.3% Swedes	99.65% Finns	97.17% Norwegians	95.5% Danes	
of which % are Nordics	97.6	99.77	98.38	97.96	
% Other foreigners	2.4	0.23	1.62	2.04	

Source: Nordisk Statistisk Arbok, 1986.

In the 1970s, when Finland had high unemployment, Finns migrated to Sweden to work, but eventually the numbers became too great. The Swedish Government circumvented the Nordic co-operation and stemmed the flow.

Table 3 shows relatively low rates of unemployment for all Nordic countries. Denmark's 8.1 per cent reflects EEC ranges, but is still well below the OECD and EEC means. Note that unemployment rates have fallen in all four Nordic countries since 1983.

Table 3: Nordic labour and employment

	1983	1986	1987	
LABOUR FORCE ('000s)				
Sweden	4375	4272	4337	
Finland	2546	2431	2423	
Norway	2024	2070	2126	
Denmark	2719	2590	2631	
EMPLOYMENT ('000s)				
Sweden	4224	4445	4421	
Finland	2390	2572	2554	
Norway	1957	2111	2171	
Denmark	2434	2810	2853	
UNEMPLOYMENT (%)		<u>1985</u>		
Sweden	3.5	2.8	2.7	1.9
Finland	6.3	5.0	5.5	5.1
Norway	3.8	3.5	1.8	1.5
Denmark	10.5	9.1	8.1	8.2

Source: Nordisk ministerrad Reports NAUT
Arbeidsmarked, og Arbeidsmarkedspolitik i Norden 1983, 1986, 1987.

Between 1976 and 1985 Sweden showed the highest rate of inflation (9.8 per cent) and the lowest change in total productivity (1.5 per cent) (table 4). This suggests that Sweden's industrial structure is maturing, while the others, principally Norway and Finland, are growing rapidly.

Table 4: Comparison of growth scales in Nordic countries, 1976-85

	Yearly change in % total production	Average inflation
Sweden	1.5	9.8
Finland	3.0	9.7
Norway	3.7	8.7
Denmark	2.3	9.2

Growth rate in GNP

	Yearly average %	
	1977-81	1982-86
Sweden	1.1	2.1
Finland	3.3	3.2
Norway	3.6	4.0
Denmark	1.0	3.3

Source: UN: OECD statistics.

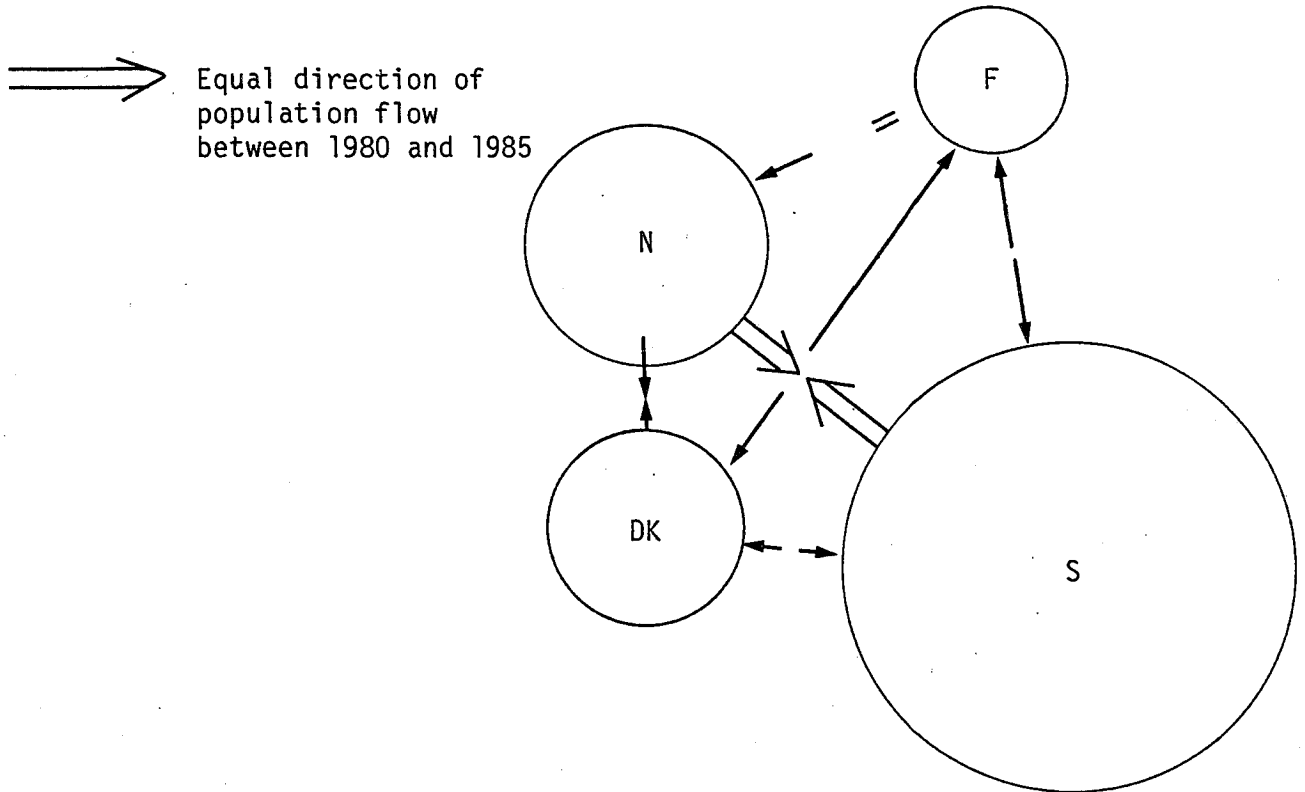
Table 5 shows broad changes and intra-country differences in GNP, investments and exports for the Nordic countries between 1983 and 1987. Note the reduction in export changes for all three EFTA countries and the concurrent increase for Denmark.

Table 5: Economic development in the Nordic countries

	1983	1986	1987
GNP % CHANGE			
Sweden	1.9	1.3	2.8
Finland	3.3	2.0	3.2
Norway	3.3 (1.7)*	3.8	1.3
Denmark	2.3	3.3	- 1.0
		* excluding oil industry	
GROSS INVESTMENTS % CHANGE			
Sweden	- 3.2	- 0.8	7.5
Finland	4.5	1.0	4.3
Norway	0.8	15.6	- 3.7
Denmark	1.5	16.4	- 3.2
EXPORT % CHANGE			
Sweden	10.1	2.1	4.8
Finland	4.0	2.0	2.0
Norway	7.6	1.0	4.1
Denmark	4.5	1.0	4.9

Migration within Nordic countries

Chart A shows changes in inter-Scandinavian migration patterns between 1980 and 1985.



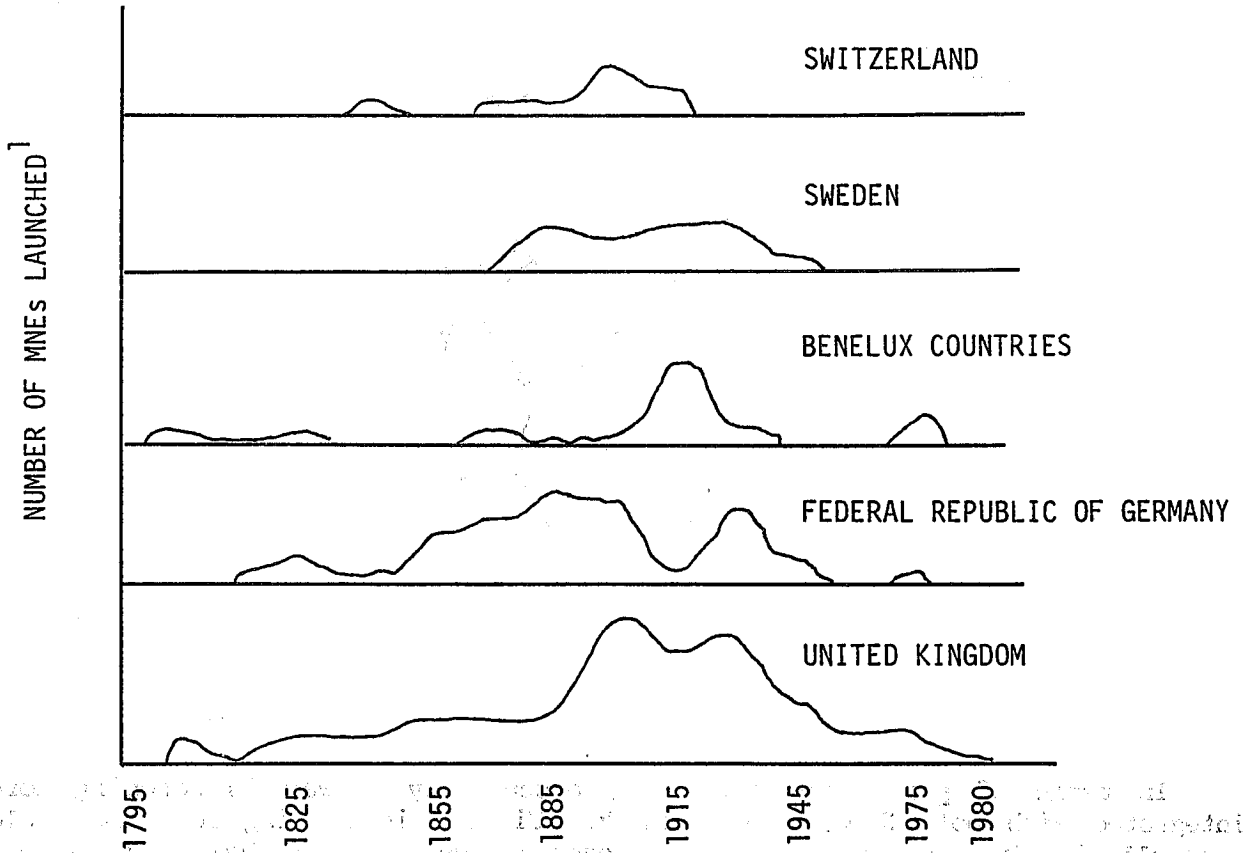
In terms of population movements, essentially Norway is becoming more integrated with both Sweden and Denmark. Finland is getting more isolated from all the three other countries. Sweden and Denmark are also becoming more isolated from each other. The rates of migration represented here are rather low as shown in table 2 (about 1 per cent of the local population). Table 6 shows general emigration from the Nordic countries to have reduced during the same period, with the exception of Norway which increased 24 per cent.

Table 6: Emigration from Nordic countries

	1980	1985	% Change
Sweden	15133	11833	Down 22%
Finland	12880	5392	Down 58%
Norway	4636	5754	Up 24%
Denmark	5812	5584	Down 4%

In general, Scandinavia industrialised later than the other European countries, which is reflected in the launch dates of large companies. Figure 1 shows the relatively late emergence of large Swedish multinationals reflecting the later industrialisation of Sweden than other European countries.

Figure 1: Industrialisation time lags for MNE launches, Europe



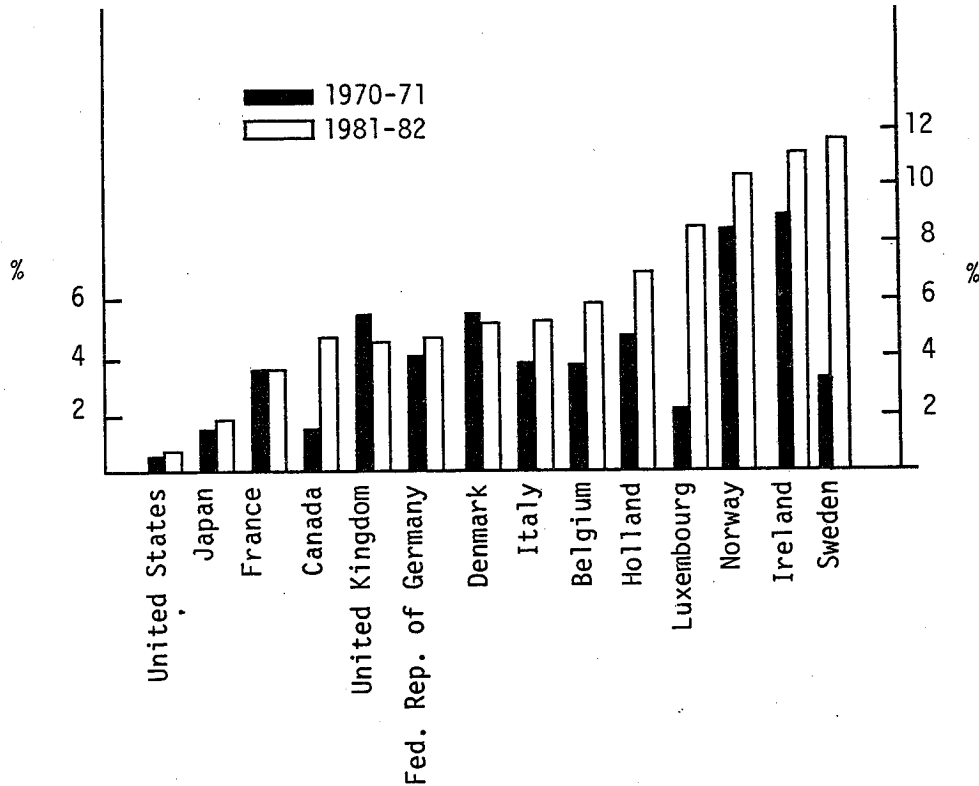
¹ Stopford and Dunning sample, 1978.

Source: MacDonald, 1981.

Subsidies

Subsidies are high and rising in the Scandinavian countries, as shown in figure 2.

Figure 2: National subsidies as a percentage of domestic income



Source: Kiel Institute, in The Economist, 30 Jan. 1988.

The relationship between the Nordic countries and South Africa

The Nordic countries organised a programme of action against apartheid in 1978.

In October 1985 the Nordic Foreign Ministers extended and strengthened this programme, agreeing to implement unilaterally several mandatory sanctions including the following:

- prohibition of new investments in South Africa;
- prohibition of import of Krugerrands;
- prohibition of government trade with South Africa;
- prohibition of loans to South Africa;
- prohibition of leasing to enterprises in South Africa, as well as transfer of patents and manufacturing licences to South Africa;
- prohibition of commercial air links with South Africa;

- in military areas, prohibition of imports of arms, ammunitions, nuclear contracts, computer equipment.

These measures have been legislated by the Nordic Parliaments. At present there is a total ban on trade and new investments with South Africa. It extends to loading, unloading, storage, transportation, etc.

METHODOLOGY

The treatment of Scandinavia as a homogeneous area as regards multinationals is not possible. The four countries have quite different industrial structures and strategies, and the scope and size of their big multinational operations vary enormously. Also methods of data collection vary somewhat between the countries.

For example, in the Fortune 500 sample of non-United States companies, Sweden has 20 and Finland ten, but Norway and Denmark have only two each.

Thus the study of multinationals per se is treated individually by country with a major focus on Sweden which has the most MNE activity and a minor focus on Finland.

Baselines for comparison of economic statistics, demographic structures and employment patterns between the four Nordic countries have been made possible through the efforts of the Nordisk Ministerråd in Copenhagen, which standardises and harmonises data from the various countries.

The methods of the present study are largely descriptive. Detailed cross-sectional comparisons, for example, between firms within the Swedish domain or within the Finnish domain, are permitted. Broader comparisons between countries are also made, but sampling validity limits specific generalisations. Some longitudinal comparisons, however, have been made possible by sampling from Stopford's World Directory of Multinational Enterprises (1980 and 1982 editions).

Sources of information

The present study draws on a variety of sources of information including the following:

- Norwegian Labour Organisation, Oslo
- Nordic Ministerium, Copenhagen
- ILO, Geneva
- Fortune 500 List
- Annual Reports of selected Fortune 500 companies
- Stopford and Dunning Directories, United Kingdom
- Nordic Council Sources, Sweden
- Scandinavian Statistical Yearbooks
- Norwegian State Information, Oslo

THE FORTUNE 500 SAMPLE OF NON-UNITED STATES ENTERPRISES

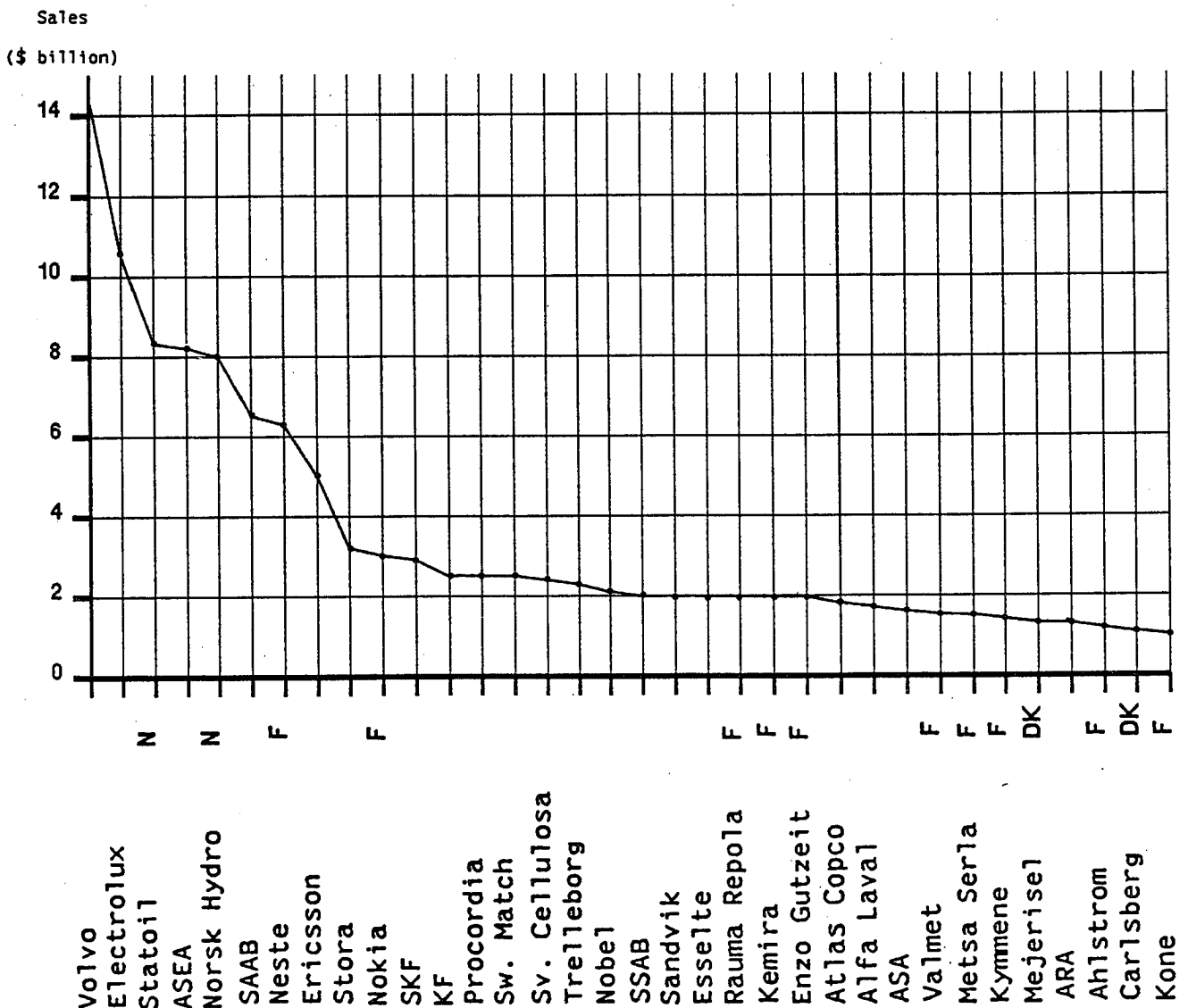
Thirty-four Scandinavian firms were among the Fortune 500 (1988) largest non-American firms (see Appendix I).

From 1986 to 1987, 24 of these gained ranks averaging an advancement of 42 rank positions each. Nine lost position averaging 17.2 rank positions each. One stayed in the same rank. The net result was that the same number prevailed and the Scandinavian firms are getting larger, relative to those from other countries.

In 1987 three new Scandinavian firms entered the list (Trelleborg, Metsa Serla and Kone). Four were deleted, one (Boliden) through acquisition and one (Norcem) by the creation of a new company.

The 34 Scandinavian firms are listed in figure 3, which shows the strong concentration of the large Scandinavian firms by sales. Note that Swedish firms make up the top of the list and Finnish firms are generally smaller.

Figure 3: Concentration of Scandinavian firms in the 1988 Fortune 500 non-United States sample



Within the Fortune 500 group, two Scandinavian firms were amongst the ten having the largest increases in sales over the previous year.

		1988 sales rank	% increase
No. 2 by sales increase	Trelleborg	290	435.4
No. 9 by sales increase	KF Industri	267	116.4

Table 7 shows Scandinavian firms employ 953,920 people and produce \$120,752 million sales. The sales per employee of the Scandinavian firms is 7 per cent lower than the average for the Fortune 500 firms (\$126.59 ('000s) versus \$136.33 ('000s)).

Table 7: Comparison of sales and employees, Scandinavian sample with Fortune for sample

	A Sales (\$ million)	B Employees	A/B
Scandinavian 34	120 752	953 920	126.59 (\$'000s)
Total 500 non-United States	2 522 265	18 501 156	136.33 (\$'000s)
% Scandinavian	4.787	5.156	
Total 500 United States	1 879 506	13 100 000	143.47 (\$'000s) Mean
Total 1,000	4 401 771	31 601 156	124.4 (\$'000s) Median
% Scandinavian	2.74	3.018	139.29 (\$'000s)

Note however that the Scandinavian firms produce 3.018 per cent of the top 1,000 firms' sales, but use 2.74 per cent of the top 1,000 firms' employees to achieve this, which constitutes one parameter of efficiency.

The Scandinavian countries' total population is approximately 3.1 per cent of the total sampled population.

Table 8 shows 20 of the 34 sample firms to be Swedish and ten to be Finnish. In general, the biggest Nordic firms are Swedish and Norwegian, whereas the smaller ones are Finnish (see also figure 3).

Table 8: Ranking of Scandinavian companies in Fortune 500 list of non-United States enterprises

	Sweden	Finland	Norway	Denmark	Total
Top 100	4	0	2	0	6
Top 200	1	1	0	0	2
Top 300	7	1	0	0	8
Top 400	7	4	0	0	11
Top 500	1	4	0	2	7
Total	20	10	2	2	34

Table 9 shows that the average sales per employee for the Scandinavian Fortune 500 companies is \$127,000. There is a positive correlation with the size of the company. In general, the larger the company the higher the sales per employee (\$145,000 for those in the top 100 v. \$116,000 for those in the bottom 150).

Table 9: Sales per employee of Scandinavian firms by size of firm

	Sales (\$ million)	Employees	Sales per employee (\$'000s)
Total (n = 34)	120 752	953 920	127
Top 100	56 377	388 847	145
No. 100-250	20 958	178 388	118
No. 250-350	24 775	225 833	110
No. 350-500	18 612	160 852	116

Source: Scandinavian sample of 1988 Fortune 500 list of non-United States enterprises.

TRADE

It is estimated by Wheelwright (1981) that 40 per cent of all world trade goes through the multinationals. World trade imbalances are due to the advanced stage of transnationalisation of United States firms relative to Japanese and Western European firms. As these areas catch up, the trade imbalance will correct itself.

Multinational companies account for more than 75 per cent of home trade flows. Intra-firm transactions are between 30 and 40 per cent of these home countries' trade. Foreign direct investment does not always replace trade, although it does tend to generate exports from home countries - and helps to present jobs which otherwise could be eliminated by foreign competition.

Exports from the Nordic countries are concentrated. More than 40 per cent of Swedish industrial production is exported. Finland exports 80 per cent of its timber industry and in Norway oil and gas provide 40 per cent of the countries' exports.

From 1975 to 1985 Denmark and Sweden have shown reductions in relative world trade share from between 5 and 25 per cent, but Norway and Finland have increased to between 5 and 50 per cent. Thus the volumes of trade in Scandinavia have been volatile.

Table 10 shows a wide variation in the level of per capita trading in the Scandinavian countries, but in general the Nordic countries (population 22 million) trade 67 per cent more per capita than do the EEC countries (population 320 million) (table 11).

Table 10: 1988 trade in US\$ per person, various OECD countries

	US\$ per capita
Sweden	7059
Finland	5465
Norway	8555
Denmark	6874
Benelux	11036
Ireland	3700
France	5700
Germany, Fed. Rep.	5589
Canada	6400
New Zealand	3600

Table 11: Nordic external trade (1986)

	Nordic countries	EEC
Imports (US\$ million)	92065	779923
(per capita)	4034	2416
Exports (US\$ million)	93955	790498
(per capita)	4117	2449
Exports as % of GDP	17.8%	16,4%

Between 1970 and 1984, Nordic imports and exports have grown, relative to GNP in all Nordic countries, as shown in table 12. The exception for Norwegian imports is an artifact of a time-dependent series (see Appendix II). Of the four Nordic countries investigated in this research, Norway is the most dependent on foreign trade (table 12).

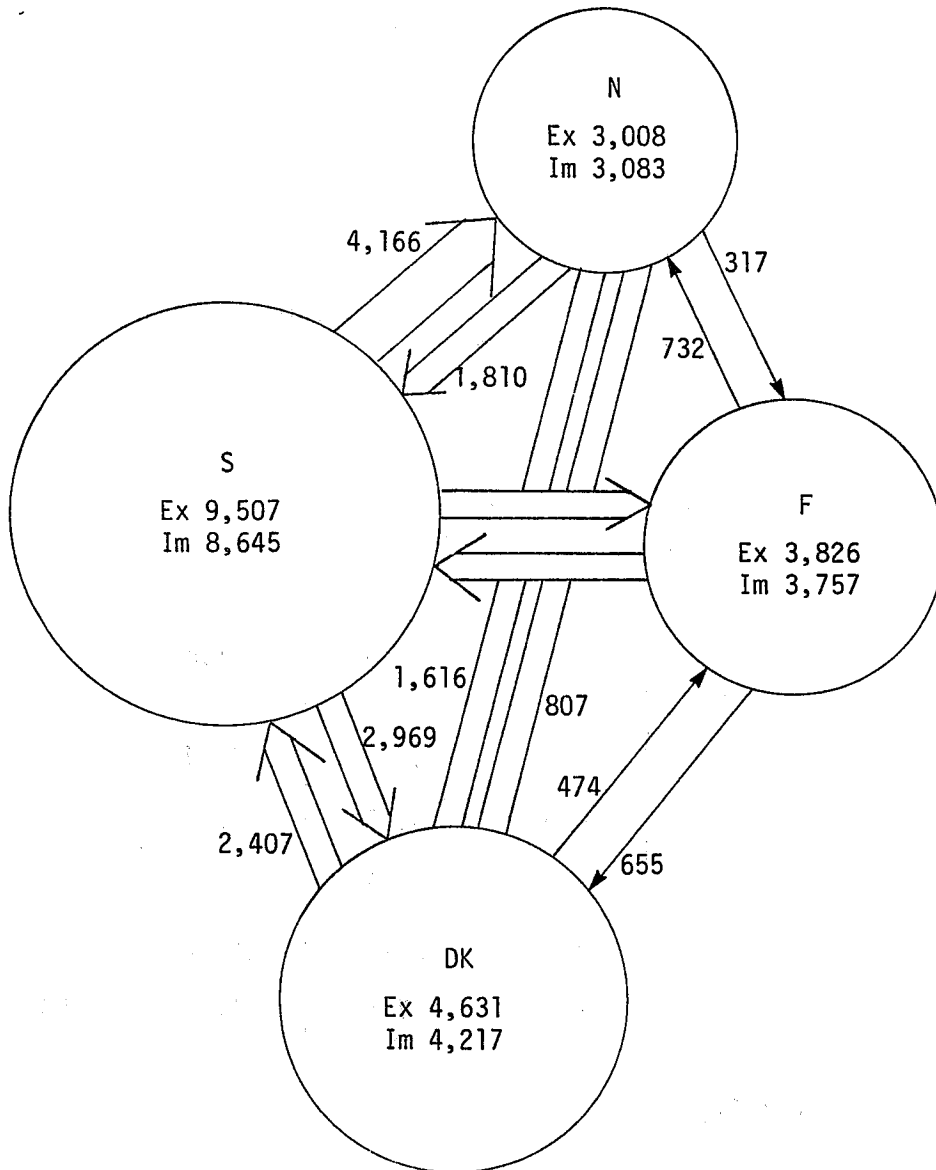
Table 12: Foreign trade as a percentage of gross national product, 1970 and 1984

	Share of export		Share of import	
	1970	1984	1970	1984
Sweden	24.1	36.0	24.7	32.4
Finland	26.2	31.5	27.4	29.0
Norway	41.8	48.2	43.1	38.5
Denmark	27.9	36.9	30.9	35.8
Iceland	47.7	47.4	45.1	53.1

Source: Nasjonalregnskap.

Chart B shows the value of Intra-Nordic exports in 1986 in relation to total exports and imports for each Nordic country.

Chart B: Intra-Nordic trade - Value of exports, 1986
(US\$ million)



Note: Sweden exports: 45 per cent of Scandinavian total
Sweden has: 37 per cent of Scandinavian population

Finland exports: 63 per cent of intra-Nordic exports to Sweden
17 per cent of intra-Nordic exports to Denmark
19 per cent of intra-Nordic exports to Norway

Imports US\$ 92 066 million
Exports US\$ 93 949 million
As a percentage of GDP

The strength of Nordic interdependence
in trade

It is clear that the Nordic countries are important export markets for each other, whereas they carry rather a small weight as recipients of exports from most other countries. Sweden is most dependent on the other Nordic countries for exports and Sweden is also a particularly important market for the other three countries.

Most economic-political measures adopted by one Nordic country will have repercussions on the others.

Nordic exports account for 17.8 per cent of the GDP and intra-Nordic exports (\$21,090) for 22.45 per cent of the total Nordic exports.

Table 13 shows that between 1977 and 1986 intra-Nordic exports have risen 13.5 per cent faster than imports.

Table 13: Growth of intra-Nordic trade

	US\$ million	
	Imports	Exports
1977	11721	11814
1978	12032	12109
1979	15438	15563
1980	17526	17692
1981	18816	16024
1982	15301	15175
1983	14811	15227
1984	15318	15864
1985	16266	16914
1986	19827	21090
% Change	+ 69.16%	+ 78.52%

Table 14 shows broad changes in trade and interactions between Nordic countries in 1970 and 1984.

Note that in general exports to Sweden reduce in percentage and imports from Sweden increased between 1970 and 1984.

The other three countries are heavily dependent upon Sweden for trade. Sweden represents 60-70 per cent of intra-Nordic export and import markets for Norway, Finland and Denmark.

Table 14: Pattern of intra-Nordic trade between 1970 and 1984

NORDIC EXPORT %						
to						
Export from	Sweden	Finland	Norway	Denmark	Iceland	
Sweden		24.5 (23.3)	39.3 (40.0)	35.3 (36.3)	0.9 (0.4)	100 (100)
Finland	58.5 (65.4)		21.5 (16.0)	19.4 (17.7)	0.6 (0.9)	100 (100)
Norway	64.7 (61.5)	9.7 (9.5)		23.6 (27.4)	1.9 (1.5)	100 (100)
Denmark	56.1 (62.8)	9.6 (8.6)	31.4 (26.4)		2.8 (2.2)	100 (100)
Iceland	19.1 (39.6)	25.6 (10.7)	16.9 (9.5)	38.4 (40.2)		100 (100)

NORDIC IMPORT %						
from						
Import to	Sweden	Finland	Norway	Denmark	Iceland	
Sweden		30.8 (27.1)	37.4 (30.9)	31.9 (41.5)	0.2 (0.5)	100 (100)
Finland	72.6 (74.6)		12.3 (11.1)	14.4 (13.4)	0.8 (0.9)	100 (100)
Norway	60.4 (69.8)	17.0 (8.3)		22.4 (21.5)	0.2 (0.3)	100 (100)
Denmark	64.2 (68.8)	16.1 (13.0)	19.0 (17.3)		0.6 (0.9)	100 (100)
Iceland	32.3 (19.0)	9.0 (10.1)	23.6 (20.9)	35.0 (50.0)		100 (100)

Source: Utenrikshandelsstatistikk.

FOREIGN DIRECT INVESTMENT

Foreign direct investment (FDI) represents that part of capital formation of the foreign affiliates of MNEs which is financed from outside their host countries. Together with stocks FDI form the most comprehensive data available on the activities of MNEs.

The total reported flow of FDI increased by about 15 per cent per annum in current United States dollar terms during the 1970s. It more than trebled between 1970 and 1980, and growth corresponded closely to the GNP growth rate of the world's market economies. It was, however, significantly lower than the growth rate for world trade during the same period.

Stopford and Dunning (1985), using United Nations data, estimate the total world stock of FDI to have been US\$512 billion in 1980. This figure was 89 per cent larger than the corresponding figure in 1975.

The total global flow of FDI has fallen in the 1980s and has been focused on the United States and Western Europe. Nordic movements in FDI reflect these patterns closely.

During the 1970s, FDI grew more rapidly in the developing countries than the developed countries, but this trend has reversed in the 1980s.

MNEs have reacted to the changing world economy by developing global strategies to strengthen their positions in home markets and placed emphasis on technological upgrading.

Despite the liberalisation of investment policies in developing countries, their instability and the worsening economic climate in the developed world has resulted in a reduction of FDI and in an increase in the preference for non-equity arrangements and reduced exposure to commercial and political risks.

Global FDI growth peaked in 1981 and inflows have fallen in succeeding years. Western Europe was the largest source of FDI and the United States accounted for 40 per cent of the inflows during the first part of the 1980s. In general, flows from Europe to the developing countries, especially Africa and Latin America, have decreased in recent years.

FDI and Scandinavia

Table 15 shows the average annual flows of FDI between 1974 and 1983 for four Nordic countries. Note the strong development in outward flow for all four countries, especially Finland. Note also the reductions in inward flow into Finland and Norway.

Table 15: Average annual flows of FDI, Nordic countries, 1974-83
(US\$ million)

	Inward investment		Outward investment	
	Av. 74-78	Av. 78-83	Av. 74-78	Av. 78-83
Sweden	78	160	523	847
Finland	50	14.9	42.7	178
Norway	437	369	139	228
Denmark	99	101.6	89	148

Table 16 shows the geographic distribution of Nordic FDI both inside and outside the Nordic trading area in the 1970s. Note the emerging interdependence between Sweden and Finland.

Table 16: Leading source and recipient areas, foreign direct capital stock

	Inward investment (%)				Outward investment (%)			
	Sweden	Finland	Norway	Denmark	Sweden	Finland	Norway	Denmark
Developed areas	97.5	90.1	97.5	95.6	84.5	90.0	85.0	70.5
Europe	64.5	67.3	71.3	72.4	56.9	59.2	62.9	56.2
EEC	48.1	9.9	38.5	38.8	39.6	37.9	31.0	41.0
Sweden	-	44.6	18.0	20.7	-	18.6	6.2	7.1
Finland	5.0	-	-	2.1	3.1	-	-	n.a.
Norway	6.0	-	-	5.2	9.2	2.6	-	4.1
Denmark	5.4	3.5	6.4	-	4.2	2.7	5.2	-
Total Nordic	16.4	48.1	29.4	28.0	16.5	25.9	11.4	11.2
Switzerland	4.9	12.7	12.9	5.6	2.7	-	-	3.9
Developing areas	0.4	9.4	2.5	4.4	15.2	7.8	15.0	29.4
North America	27.4	21.1	26.4	23.2	24.9	22.4	15.1	14.2
Total %	100	100	100	100	100	100	100	100
Total								
local currency	4 881	1 649	4 029	17 109	19 922	7 575	8 711	13 861
Inward as % of outward	24.5	21.8	46.4	123.4				

Data dates: Sweden 1976-81; Norway 1971-81; Finland 1973-84; Denmark 1974-83.

Source: Dunning and Cantwell, Table A.7 derivation.

Table 17 shows the strong positioning of Nordic FDI in developed countries already in 1982.

Table 17: Geographical distribution of FDI capital stock, 1982 (US\$ million)

	Inward investment			Outward investment		
	Developed countries	Developing countries	Total	Developed countries	Developing countries	Total
Denmark	1 638	75.4	1 713	731	305	1 035
Finland	382	40	422	821	71	892
Norway	3 405	87	3 492	1 146	202	1 348
Sweden	1 492	38.5	1 531	5 350	981	6 331

Table 18 shows the leading origin country MNEs for each of the four host countries. The United States and United Kingdom provide most of them, except for Denmark which is an EEC member and hosts many companies from the Federal Republic of Germany.

Table 18: Leading foreign multinational companies
by country of origin, 1983

From	Sweden	Finland	Norway	Denmark
United States	13	9	10	5
United Kingdom	11	7	4	7
West Germany		1	2	6
Sweden		5	3	3
Norway				2
Netherlands		1	1	1
Switzerland		2	1	2
France			3	
Italy			1	
Japan	1			

Source: Dunning and Cantwell.

Nordic FDI by country and sector

Sweden

The United States is the major source of Swedish inward investment. The United Kingdom is second and the Federal Republic of Germany third. In recent years the share of European countries has been rising vis-à-vis that of the United States.

Sweden's outward FDI is strongly oriented towards Europe - and especially the EEC countries with the Federal Republic of Germany being the largest recipient. In recent years, however, Swedish outward FDI is growing in the United States: it is concentrated in particular industrial sectors, such as metals, engineering machinery, electronics and wood-derived products.

Tables 19 and 20 show the background of the distribution of Swedish FDI over geographic areas and by sector.

Table 19: Sweden's outward FDI distributed
by manufacturing sector, 1975

Manufacturing sector	%
Chemicals, etc.	8
Mechanical/instrument engineering	32
Electrical engineering	22
Transportation equipment	7
Food, drink, tobacco	1
Textiles, clothing	1
Paper, printing, publishing	10
Primary and fabricated metals	13
Other manufacturing industries	6
Total manufacturing	100% (\$6 527 million)

Table 20: Book value of Swedish direct investment for different areas¹
(in millions of Swedish kroner)

	1965	1970	% change
<u>Developed countries</u>	2 960	4 964	67
% of total	89	86.5	
EEC	1 521	2 633	73
% of total	45.8	45.9	
EFTA	594	1 009	70
of which Nordic countries	174	368	111
Nordic as % of total	5.2	6.4	
North America	682	1 060	55
Other industrialised lands	163	262	
<u>Less developed countries</u>	355	772	117
% of total	11.0	13.5	
of which Latin America	228	639	180
% Latin America of LDCs	64.0	83.0	
Total	3 317	5 735	73

¹ Swedish direct investment is the book value of the Swedish parent share in foreign affiliates equity plus affiliate long-term debts to Swedish parent (long term = more than one year).

Source: Swedenborg, 1979.

Finland

Finnish FDI increased substantially between 1973 and 1984. The major export markets have been Western Europe and North America. The major host country for Finnish companies abroad is Sweden, which is also the most important investor country for Finland.

FDI has fluctuated between 1971 and 1975, but has fallen substantially since the mid-1970s. The activities of foreign firms in Finland are increasingly financed from Finnish sources, thus contributing to the decline in the inflow of investment.

Inward investment has been concentrated in the manufacturing sector, notably chemicals and non-metallic minerals, and in the services sector, especially distribution.

Outward FDI has been large in chemical and metal engineering industries, and finance and property in the services sector.

Norway

The Norges Bank announced a dramatic decline in Norwegian FDI abroad from N.Kr.5.6 billion in 1986 to N.Kr.4.2 billion in 1987. Reductions in Norwegian FDI in Sweden and Denmark were especially strong, but there was a strong increase in FDI in the rest of Europe, Canada and Australia.

The major objective of Norwegian policy on inward direct investment has been to restore and maintain domestic control of the natural resources sectors. Inward FDI peaked in 1976 and again in 1981. Norway's main sources of inward FDI have been Western Europe, especially Sweden and the United States. Outward FDI to Asia has grown rapidly in recent years.

Denmark

Table 21 shows the patterns of FDI for Denmark.

Table 21: FDI Denmark

	Inward investment	Outward investment
Number of Foreign affiliates in and Danish affiliates out (end 1984)	647	823
Total FDI capital stock % of GDP (1983), at factor cost	1.54	1.55
Flow of FDI (1983) (D.Kr. million)	4 204	5 095

Table 22 shows the sectoral distribution of foreign direct capital stock for the Nordic countries in millions of US dollars.

Table 22: Sectoral distribution of FDI capital stock, 1982
(US\$ million)

	Inward investment			Outward investment		
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary
Sweden	187	803	541	957	2 825	2 550
Finland	0.3	104	318	11.7	406	475
Norway	272	1 340	1 880	reg.	533	815
Denmark	60	1 027	626	-	n.a.	-

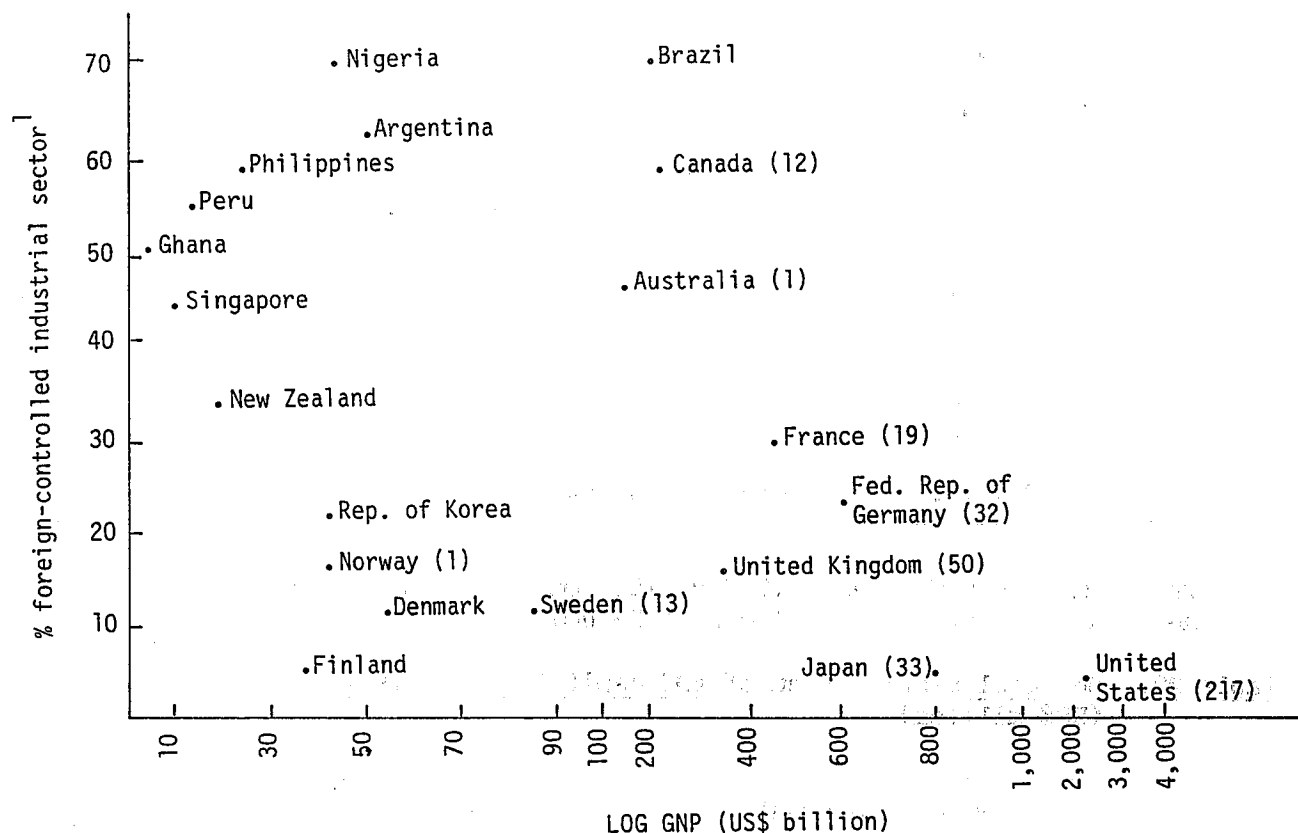
Note the relatively stronger investment in the tertiary sector by Finland and Norway than by Denmark and Sweden. This also reflects phasing differences in their economic growth.

FOREIGN MULTINATIONALS IN SCANDINAVIA

Figure 4 shows the Scandinavian countries to have a relatively high degree of control of their own manufacturing sectors when compared with other countries, especially developing countries. The numbers in parentheses indicate the number of large MNEs launched by the country, as taken from the 1978 sample of Stopford and Dunning. Note that the countries which launch the most MNEs are also those which have the most control of their own industrial sectors. It appears that those which are most expansionistic are also most

protective. This idea is supported by the patterns of intra-Nordic trade between Sweden and the other three Nordic countries (see Chart B and table 14).

Figure 4: Foreign control of industrial sectors correlated with log GNP for various countries



¹ Source: MacDonal, 1981.

The following section describes studies of foreign firms in Norway and Denmark.

Table 23 shows two estimates of employment by foreign multinationals in the Nordic countries. Heum's (1982) estimate shows the highest penetration to be in Denmark (7 per cent) versus 5 per cent in Norway, 4.4 per cent in Sweden and 2.4 per cent in Finland. The ILO/UN data from 1988 show a similar order with lower percentages (perhaps because the samples include only the larger enterprises).

Table 23: Employment by foreign multinationals in the Nordic countries

Employment in foreign MNEs						
	Estimate One - Per Heum ¹ (1982)			Estimate Two - ILO/UNCTC ² (1988)		
		(%)	('000s)		(%)	('000s)
Sweden	1980	4.4	180	1983	3	131
Finland	1980	2.4	55	1980	2	42
Norway	1981	5	93	1983	5	80
Denmark	1976	7	161	1984	3	87
Total			489			340

¹ Per Heum - Multinational forretningsdrift i 4 nordisk land (Nordiska Ministerrådets Sekretariat, Bergen, 1982).

² ILO estimates in table A.8, p. 529, in UNCTC: Transnational corporations in world development: Trends and prospects (New York, 1988).

Table 24 shows Sweden to have far more foreign-owned industrial enterprises than the other countries in number. Note, however, that the relative sizes of the firms differ significantly, with Denmark having 31,102 employees for 150 firms v. 16,015 for 184 firms in Finland.

Table 24: Foreign-owned industrial enterprises (1985) in Nordic countries

	Sweden	Finland	Norway	Denmark
Enterprises/establishments	516	184	173	150
Employees	75 745	16 015	24 482	31 102

Source: Nordiska Statistical Yearbook, 1987.

Foreign firms in Norway

Table 25 shows the 25 largest foreign multinational enterprises in Norway. Together they employ 62,000 people, 2.9 per cent of the workforce and have a turnover of N.Kr.90 billion, equal to about 16.3 per cent of Norway's GDP. (If all enterprises with foreign participation were counted, the number employed could well reach 100,000.)

This list includes 11 oil companies which have a turnover of N.Kr.52 billion but employ only 8,000 people.

Table 25: Major foreign firms in Norway

	Sales (N.Kr. million)	Employees	Country of headquarters
EB Group (Asea)	10 000	15 000	Sweden
Esso	9 600	1 200	United States
Elf Aquitaine	7 500	1 350	France
Shell	6 600	1 200	United Kingdom
FINA	6 300	235	Belgium
Phillips Petroleum	6 200	2 600	United States
SAS (Norge) (SAS)	6 000	9 750	Sweden (Scandinavia)
Mobil	4 700	260	United States
STK (Alcatel)	3 500	3 500	France
Total	3 000	135	France
Volvo	3 000	182	Sweden
CONOCO (DuPont)	3 000	160	United States
Ford (United States/DK)	2 800	130	United States
IBM	2 700	1 450	United States
Siemens	2 300	3 300	Germany
AGIP (ENI)	2 100	85	Italy
BP	2 000	600	United Kingdom
GM	2 000	135	United States
Electrolux	1 500	1 000	Sweden
Asea Scandia	1 000	400	Sweden
AMOCO	970	280	United States
Nestlé	900	1 200	Switzerland
ISS Group	540	5 400	Denmark
Securitas	500	2 700	United Kingdom
Manpower	500	10 000	United States
Total	90 000	62 000	
Norway GDP	551 000		
Norway workforce		2 111 000	
% of GDP	16.3		
% of workforce		2.9	

Other key industries that are controlled by foreign companies are electronics and telecommunications. Olivetti has recently acquired 75 per cent of Norway's Scanvest Ring which is both a computer and telecommunications firm. ATT in turn controls 23 per cent of Olivetti and uses it as a marketing arm in Europe.

Swedish investment in Norway

The Swedish investment in Norway is strong. Only the Norwegian State owns more shares in Norwegian industry than do Swedish companies through multinationals and investments.

Ten or 15 years ago the Swedes invested much more in Norwegian industry than today. The cost of living is 10 per cent higher in Norway than Sweden now, and the Swedes find it too expensive to produce in Norway.

Starting in 1984 Norway Invested more in Sweden than vice versa and this figure grew in 1985. Today all Swedish companies taken together have 50,000 employees and N.Kr.50 billion turnover in Norway. Norwegian companies in comparison have only 20,000 employees and N.Kr.20-25 billion turnover in Sweden.

Foreign firms in Denmark

Johannsen and Olsen (1985) studied foreign multinational firms in Denmark. They identified 647 firms which employed 86,685 people, about 3.2 per cent of Denmark's workforce.

Of this sample:

EEC companies represented	32% of the firms and 34% of employees
United States companies represented	25% of the firms and 28% of employees
Swedish companies represented	24% of the firms and 20% of employees
Other Nordic companies represented	8% of the firms and 9% of employees

Split by sector:

Production industry represented	44% of the firms and 63% of employees
Trading companies represented	38% of the firms and 24% of employees
Service sector represented	18% of the firms and 23% of employees

Data for Sweden and Finland are presented in more detailed form under special sections entitled Sweden and Finland.

EMPLOYMENT/UNEMPLOYMENT

Background

The primary goal of the labour market in the Nordic countries is to offer work to all who want it and are capable of working.

The programmes taken in the Nordic countries fall into two groups: those measures which seek to maintain employment and those which seek to increase it.

Programmes exist to soften the impact of cyclical changes on employment and temporary difficulties of companies after the establishment or removal of an enterprise.

There are also programmes to accelerate employment and to increase seasonal and regional employment. General employment policies in Scandinavia also cover:

- sexual equality in the labour market;
- regional equality in the labour market; and
- structural development in the labour market.

The Nordic countries are characterised by the so-called "mixed-economy" type, implying the simultaneous existence of a liberal economic system, operating within a legislated framework. Also, the Nordic countries are

so-called "small open economies", implying that the economic growth is heavily dependent on international trade in manufactures and services.

It is assumed that in the medium term all Nordic countries will face the same general problems and challenges, such as international economic development, the supply of energy and other industrial raw materials, the relationship with developed countries, and challenges imposed by technological development.

In the second half of the 1970s all Nordic countries experienced relatively high unemployment, external balance-of-payment deficits, relatively strong increases in incomes and commodity prices and a decline in international competitiveness. During this time Norway has experienced full employment. The economic situations in Finland, Norway and Sweden have improved somewhat, e.g. by way of a decreasing external balance-of-payment deficit.

All Nordic countries in practice seem to have given top priority to the restoration of the external balance of payments, e.g. by pursuing (some kind of) incomes policy. However, such efforts have not always had adequate success, e.g. in the case of Denmark. The magnitude and variety of selective economic measures introduced play a major role in Norway and Sweden.

Except for Norway, it is predicted that the Nordic countries will experience moderate economic growth in the 1980s. This will lower the possibilities of regenerating full employment, simultaneously impeding necessary adjustments in the labour market. As expected, increases in the supply of labour in all Nordic countries, primarily owing to a rise in the female rate of labour force participation, make the situation even more "delicate".

As regards intervention in terms of subsidies, there are great differences. Norway and Sweden intervene strongly in their domestic manufacturing industries. Denmark is much more free.

Other major differences exist: Norway is oil/gas-driven; Finland has access to Eastern markets; Sweden has large multinationals; and Denmark is in the EEC.

Subsidies have various effects on employment, such as the following:

- producers can become cost-competitive and increase market shares;
- producers can use the subsidies to create stockpiles until the business cycle turns better;
- producers can use subsidies to increase labour hoarding;
- producers can use subsidies to invest in labour training and education.

Global multinational employment abroad

Data limitations preclude accurate estimates of total global MNE employment but the ILO (1988) has come up with a conservative figure that 65 million people or 3 per cent of the world's economically active population are directly employed by MNEs. Of these, an estimated 43 million are in home countries, 22 million (or 34 per cent) are abroad, of which 7 million are in developing countries.

Indirect unemployment estimates suggest that the total employment figure is more than double this 3 per cent figure.

In general, the total world MNE job creation has slowed in the 1980s in both the developing and developed countries due to the introduction of new technology. As flows of FDI likewise decrease, it is expected that MNE employment in the developing countries will likewise decrease in the coming years. Exceptions are EPZs where employment is increasing significantly.

The MNEs' 7 million employees in developing countries account for less than 1 per cent of the economically active population, while the 58 million in developed countries account for 10 per cent of total employment. The world's economically active population is growing at more than 2 per cent per annum. Employment by MNEs in all dimensions is almost marginal and their percentage share of the world's economically active population may even diminish.

In the 1970s there was much talk of the industrialisation of developing countries and the international division of labour. By the late 1970s eight countries or areas exported more than 70 per cent of the total developing countries' exports (Hong Kong, Taiwan (China), Republic of Korea, Yugoslavia, Singapore, Brazil, India, Mexico).

Finland, Sweden and Norway are sensitive to reduced competitiveness in the forestry sector due to increased competition from the developing countries. In response to this the Swedish furniture company IKEA has set up manufacturing operations in various different countries to deal with the problem of relatively high labour costs in Sweden.

Technology and jobs

Since going through the Industrial Revolution at the turn of the century, the Nordic countries have experienced a slightly decreasing trend in the rate of growth of GNP and in the rate of growth of average labour productivity. The increase in total production has had little influence. Most of the growth is explained by the technology factor. Economic growth is less employment-demanding.

In Norway and Sweden a growth rate of 2 per cent is necessary to increase employment, but within the Nordic countries a reduction in population growth is expected for the rest of the century due to falling birth rates. This will result in excess demand for labour for the rest of the century.

Regarding technological unemployment, Norway is in the best position of all the four countries due to the labour-intensive oil industry. Denmark is in the worst position.

Technology choice and employment generation

Nicolas Jéquier (1985) notes that the technology choices made by MNEs have little, if any, connection with local labour costs. The fact that labour costs in developing countries are low by international standards does not seem to encourage MNEs to use more labour-intensive technologies. Technology choices appear to be determined by internal factors like the market strategy, technological competence and corporate culture of the company.

ILO studies also show that the volume of employment within a subsidiary (i.e. direct employment) depends largely on the success of the subsidiary in the local market.

Technology choice is an important factor reflecting the level of direct and indirect employment by MNEs. Other factors being equal, enterprises will not choose more labour-intensive technologies even when cost of labour is very low by international standards.

Stability of employment

In the industrialised world there is a tendency for MNEs to be more sensitive than national firms to the changing economic climate and they tend to make manpower adjustments more quickly in times of economic slow-down. However, employment security in MNEs does not differ materially from the pattern found in national firms, probably since MNEs are widely integrated into the local labour law and industrial relations settings.

Wage, production and investment subsidies have been used in the Nordic countries in varying degrees during the last few decades. Nordic countries share a common employment policy objective: they seek to provide employment opportunities for everyone who wishes to work. The labour market policy has become a very important instrument of economic policy. Wage subsidies in order to maintain employment during an economic contraction have been used for quite some time in the Nordic countries.

Support to enterprise to avoid lay-offs and dismissals have been tried in Finland, Norway and Sweden in somewhat different forms. In Norway and Sweden the subsidies have been linked to contributions on the part of the enterprise also in the form of training. Industry evaluations estimate that 50-70 per cent of dismissals and lay-offs could be avoided.

Table 26 shows the growth in employment in Nordic countries between 1976 and 1986.

Table 26: Total number employed in the four Nordic countries (in thousands)

	1976	1983	1986
Denmark	2337	2420	2662
Finland	2278	2389	2431
Norway	1789	1957	2071
Sweden	4088	4244	4269
TOTAL	10492	11010	11433

Source: Yearbook of Nordic Statistics, 1987 and 1981.

Table 27 shows an even more profound shift from primary to tertiary sector employment from 1950 to 1980. Sweden reduced from 21 to 6 per cent in the primary sector, and tertiary sector employment increased from 40 to 60 per cent during the same period. Similar changes were recorded for the other Nordic countries.

Table 28 shows Sweden to have 30 per cent of the 950,000 workers in MNEs to be employed abroad. The percentages for other countries vary widely from 20 to 78 per cent.

Table 27: Industry development

	1950	1960	1970	1980
Sweden				
Primary sector	21	14	8	6
Secondary sector	39	40	40	34
Tertiary sector	40	46	52	60
	<hr/>	<hr/>	<hr/>	<hr/>
	100	100	100	100
Finland				
Primary sector	46	36	20	13
Secondary sector	27	30	33	34
Tertiary sector	27	34	47	53
	<hr/>	<hr/>	<hr/>	<hr/>
	100	100	100	100
Norway				
Primary sector	27	20	12	7
Secondary sector	35	35	37	33
Tertiary sector	38	45	51	60
	<hr/>	<hr/>	<hr/>	<hr/>
	100	100	100	100
Denmark				
Primary sector	23	18	11	8
Secondary sector	32	35	37	33
Tertiary sector	45	47	52	59
	<hr/>	<hr/>	<hr/>	<hr/>
	100	100	100	100

Source: Nordic Statistical Yearbook.

Table 28: Estimates of direct employment by MNEs in home and host countries of operations by country of origin of enterprise

	'000s of workers	% abroad		'000s of workers	% abroad
Australia	400	25	Japan	4 630	20
Belgium	345	52	Netherlands	1 454	74
Canada	1 764	40	Sweden	950	30
France	3 930	20	Switzerland	744	78
Germany, Fed. Rep.	9 632	25	United Kingdom	5 250	40
Italy	1 000	25	United States	24 560	26

Source: ILO: Starnberg Institute.

EFTA

Swedenborg (1979) pointed out that employment in Swedish foreign affiliates grew faster in the EFTA countries than in EEC countries between 1965 and 1974 and especially faster in the Swiss and Austrian affiliates of Swedish companies (table 29).

Table 29: Swedish foreign affiliates and employment

	Affiliates		% change	Employment		% change
	1965	1974		1965	1974	
Industrialised countries	513	1 112	116	20 899	47 257	126
Developing countries	70	114	62	3 927	8 480	116
Total	583	1 226		24 826	55 737	
% industrialised	88	90		84	85	

Source: Swedenborg, 1979.

Table 30 shows foreign employment of Swedish-owned MNEs to have grown significantly during the 1970s. During the 1980s foreign employment reduced.

Table 30: Employment in foreign subsidiaries of Swedish-owned multinationals

	1965	1970	1974	1978	% change 65/78
Employment in industry	147800	182650	219620	227825	+ 54
Total employment	171030	222445	284805	301210	+ 76

Five of the six largest Scandinavian employers of labour abroad are Swedish, as shown in table 31.

During the rapid expansion phase of Swedish industry overseas (1960-74) we find the following: employment in Sweden grew by 4 per cent during this period, but employment of the subsidiaries outside Sweden grew by a phenomenal 107 per cent, almost 27 times as fast as domestic growth (table 32). Note also the wide variation in growth rates between branches. The techno-industries exploded outside Sweden but reduced significantly within Sweden. This pattern was similar for the timber and paper industries.

The Fortune 500 sample contains 34 Nordic companies, 20 Swedish, ten Finnish, two Norwegian and two Danish.

Table 31: Nordic MNEs having the largest employment outside the home country, 1981

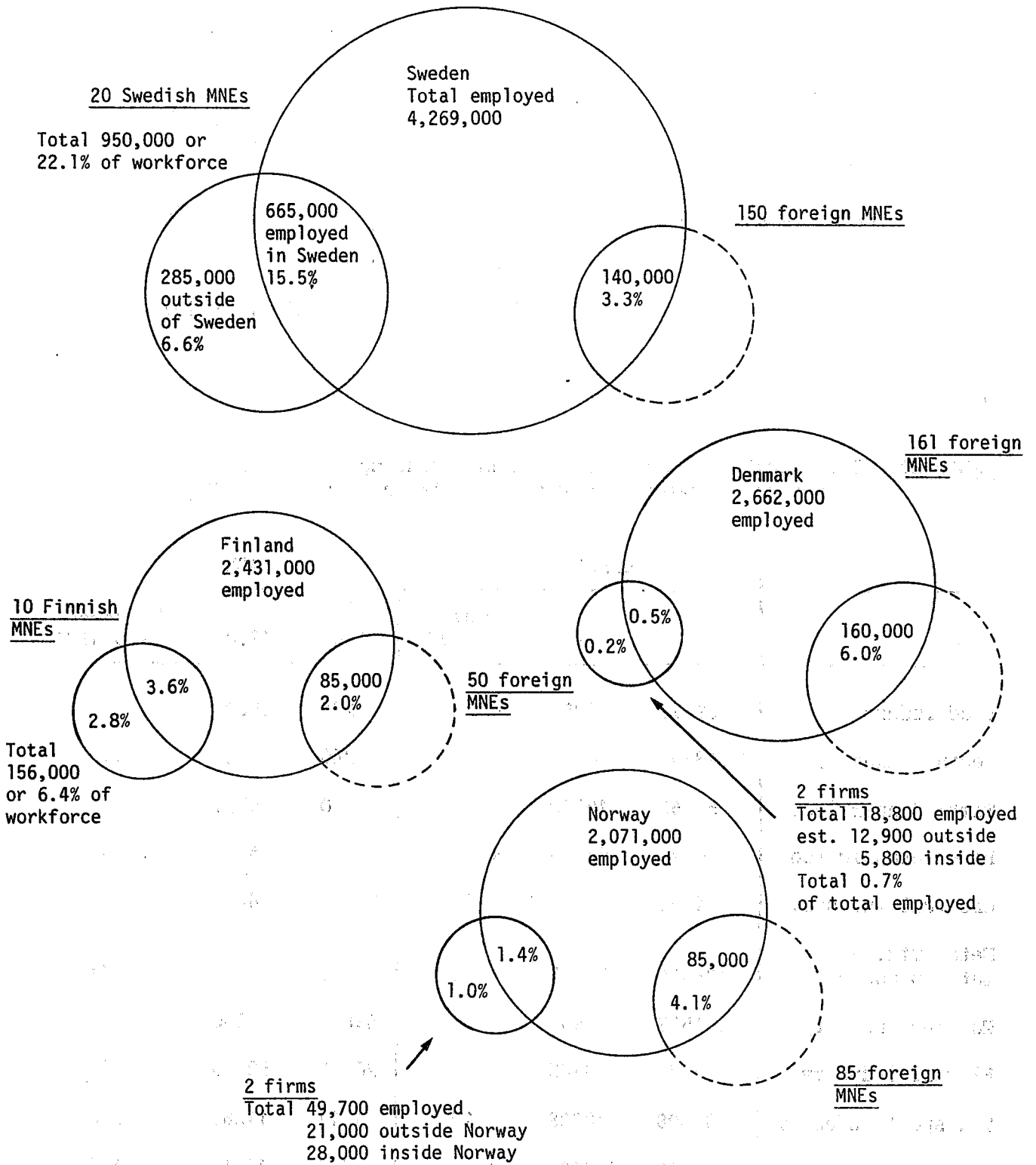
Firm	Country	Number employed	
		Foreign	Total
Electrolux	Sweden	62 400	101 700
SKF	Sweden	40 783	50 452
LM Ericsson	Sweden	39 670	69 240
Int. Service Systems, ISS	Denmark	37 000	49 000
Volvo	Sweden	19 520	76 085
Asea	Sweden	19 505	56 107

Source: Veckans Affärer, 1982:27.

Table 32: Total number of employees in manufacturing subsidiaries abroad and in Swedish industry, split on trade (1960-74)

Trade	SWEDEN			ABROAD		
	1960	1974	% change 1960-1974	1960	1974	% change 1960-1974
Food-industry	69190	70897	+ 2.4	205	1562	661
Techno-industry	113391	60619	- 47	240	5844	2300
Timber/paper ind.	54950	49310	- 9	0	5797	
Paper/graphic ind.	50442	54148	+ 8	111	6438	5700
Chemical industry	51846	68411	+ 33	21908	24245	9
Metal mfg. and metal products	135459	155307	+ 14.8	7133	25781	271
Machine industry	131582	130996	0	49843	73080	49
Electro industry	58179	78745	+ 36	20150	52339	160
Transport industry	97008	118338	+ 22	1117	11267	900
Others	116677	128184	+ 10	4804	13348	160
Total	878724	914955	+ 4	105511	219701	107

Figure 5: Relative sizes of Nordic workforces vis-à-vis MNEs



Sources: ILO, Starnberg Institute data bank, and Fortune 500.

Figure 5 shows the relative sizes of the sample MNEs by employment compared with the workforces of the Nordic countries. The 20 Swedish MNEs are, for example, 22.1 per cent of the size of Sweden as measured by employees. However, only 15.5 per cent of these work in Sweden. A further 3.3 per cent of the countries' workforce are employed by foreign multinationals. Thus, about 19 per cent of Sweden's workforce is employed by multinationals, but 82 per cent of these work for Swedish companies in Sweden. The figures for the other three countries are correspondingly smaller.

Denmark appears to be the most foreign-controlled having 161 foreign firms represented accounting for 6 per cent of the Danish workforce.

Table 33 shows other estimates of foreign participation in the Nordic countries. Note that estimates vary somewhat.

Table 33: Percentage employed in enterprises or establishments with foreign participation: Countries by order of rank in the manufacturing industry

International Standard Industrial Classification (ISIC)	Sweden ¹ (1975)		Finland ² (1976)		Norway ² (1976)	
	a	b	a	b	a	b
Major Division 2. Mining and quarrying	2.6	...	0.4	...	)	)
					7.2	5.2
Major Division 3. Manufacturing	5.7	2.6	3.2	1.0))
31. Manufacture of food, beverages and tobacco	10.1	3.9	1.7	2.2	2.8	0.2
32. Textile, wearing apparel and leather industries	3.8	1.1	6.6	0.3	...	...
33. Manufacture of wood and wood products, including furniture	0.5	0.3	0.2	0.0	...	...
34. Manufacture of paper and paper products, printing and publishing	2.2	2.2	0.5	0.0	2.2	0.7
35. Manufacture of chemicals and chemical, petroleum, coal, rubber and plastic products	14.5	5.5	6.5	0.8	11.1	22.9
36. Manufacture of non-metallic mineral products, except products of petroleum and coal	3.6	3.2	0.9	0.5	4.0	3.1
37. Basic metal industries	3.0	6.3	1.1	3.5	19.3	24.4
38. Manufacture of fabricated metal products, machinery and equipment	6.3	2.2	4.1	1.6	10.7	3.2
39. Other manufacturing industries	8.8	1.5	9.8	...	...	...
Major Division 6. Wholesale and retail trade, restaurants and hotels	8.5	1.0	...	...	...	...

¹ Enterprise data.

² Data based on establishments of enterprises.

a = Foreign participation exceeding 50%.

b = Foreign participation 20-50%.

... = not available.

Source: ILO: Employment effects of multinational enterprises in industrial countries (Geneva, 1981), based on OECD data.

An analysis of Stopford's 1983 sample of 15 Swedish MNEs (table 34) shows that 11 of the 15 MNEs grew, creating 77,000 additional jobs of which 45 per cent were generated in Sweden. Four of the 15, however, contracted between 1977 and 1982 (Granges, SAAB, SKF and Swedish Match) eliminating 19,000 jobs, 10,000 of which were lost in Sweden.

Table 34: Employment in Stopford's 1983 sample of 15 Swedish MNEs (in thousands)

	Employment		Increase	Percentage change
	1977	1982		
In Sweden	294 632	319 000	24 368	+ 8.27
Abroad	236 868	271 137	34 269	+14.46
% in Sweden	55.4	54.05		
Total employment	531 500	590 137	58 637	+11.03

Source: Stopford, 1983.

The net result is that 24,368 more jobs were created in Sweden (and 34,269 outside Sweden) by the 15 MNEs between 1977 and 1982. Thus the 15 large MNEs employ 7.2 per cent of Sweden's workforce but account for 21.87 per cent of the increased jobs in Sweden. Therefore, they were important job generators for the Swedish economy between 1977 and 1982.

This shows growth rate of about 1.65 in employment per year (4,874 jobs per year) compared with the total for Sweden as a whole which was 0.54 or 22,285 more jobs per year.

MNEs tend to adapt to their wage levels to the countries where they operate. They often rank better than the local enterprises.

In 1966 United States-based affiliates paid higher than local companies in Scandinavian countries (table 35).

Table 35: Average wage levels of domestic and foreign firms (in US\$)

	All firms	US-based affiliates	Difference (percentage)
Sweden	3 940	4 646	+17.9
Norway	2 879	3 251	+12.9
Denmark	3 372	3 905	+16.8

Source: ILO: Wages and working conditions in multinational enterprises (Geneva, 1976), based on data in UN Statistic Yearbook, 1971 (New York, 1972).

However, comparable data are not available for more recent years, nor was data separately available for domestic or other MNEs at the time. The inclusion of all firms, including smaller ones, can lower the average, while the presence of large United States MNEs in high-tech, capital-intensive sectors can raise the average for these enterprises.

Growth of women's wages

Tables 36 and 37 show that women's wages grew more quickly than men's between 1977 and 1986 in Sweden, Norway and Finland, but not in Denmark. Women's wage levels were, however, higher in Denmark (relative to men's wages) by 1986 (89.6 per cent v. 84.9 per cent in Sweden).

Table 36: Wages in manufacturing: All industries

		Sweden	Finland	Norway	Denmark
Males	1977	26.93	16.00	33.77	41.84
	1981	37.27	24.17	45.14	60.66
	1986	53.98	36.57	69.69	81.51
% change	1977-86	100.4	128.5	106.8	94.8
Females	1977	23.52	11.88	26.96	36.18
	1981	33.35	18.43	37.29	52.02
	1986	48.37	28.29	58.40	69.22
% change	1977-86	105.6	138.1	116.6	91.3

Source: Nordisk Statistikk, 1987.

Table 37: Women's wages as a percentage of men's wages

	Sweden	Finland	Norway	Denmark
1977	86.4	74.2	79.8	87.3
1986	84.9	77.3	83.7	89.6

In general, in the last years wage levels in industry have grown faster in the Nordic countries than in the OECD as shown in figure 6.

Figure 6: Average hourly earnings in manufacturing industry per change

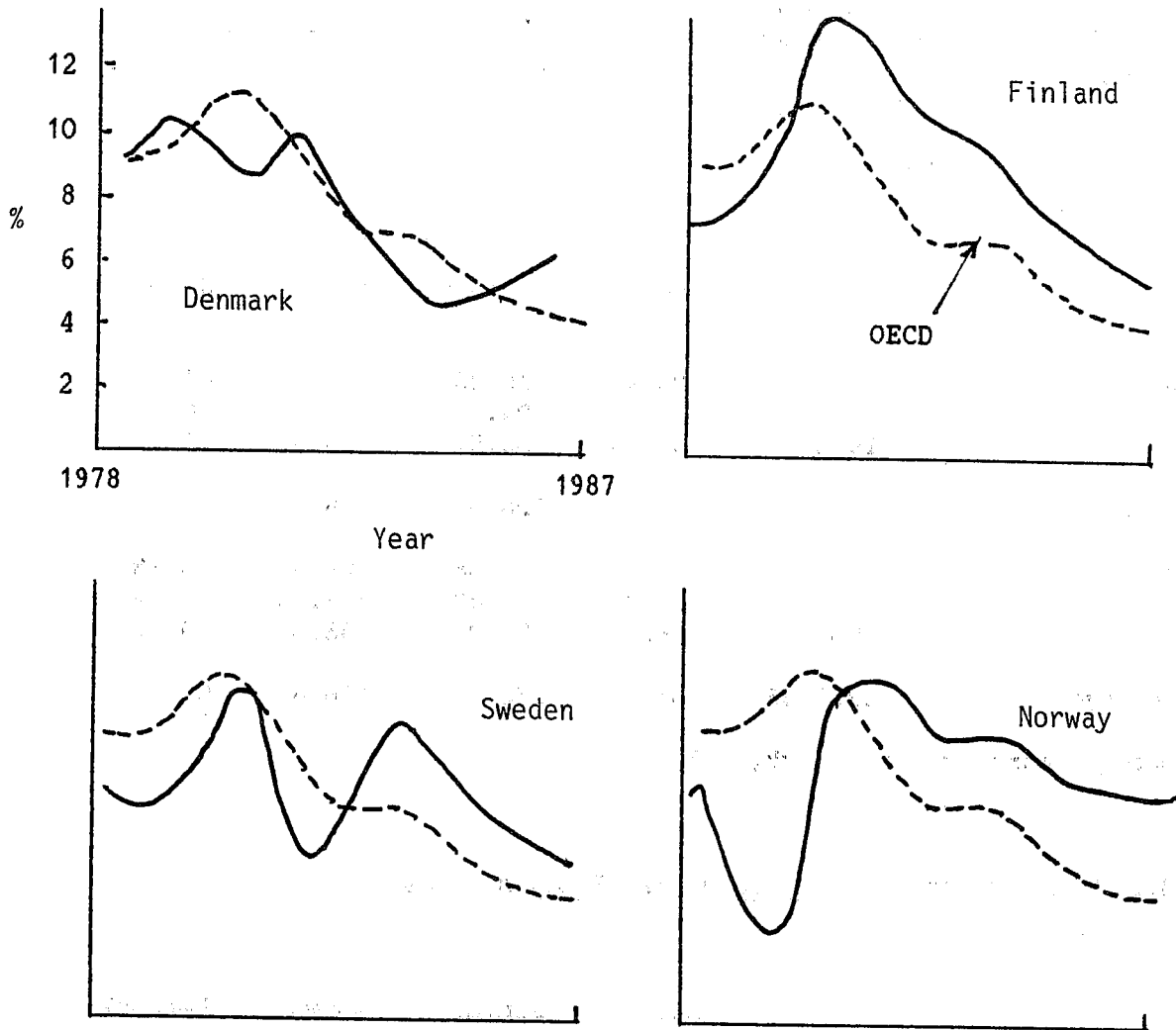
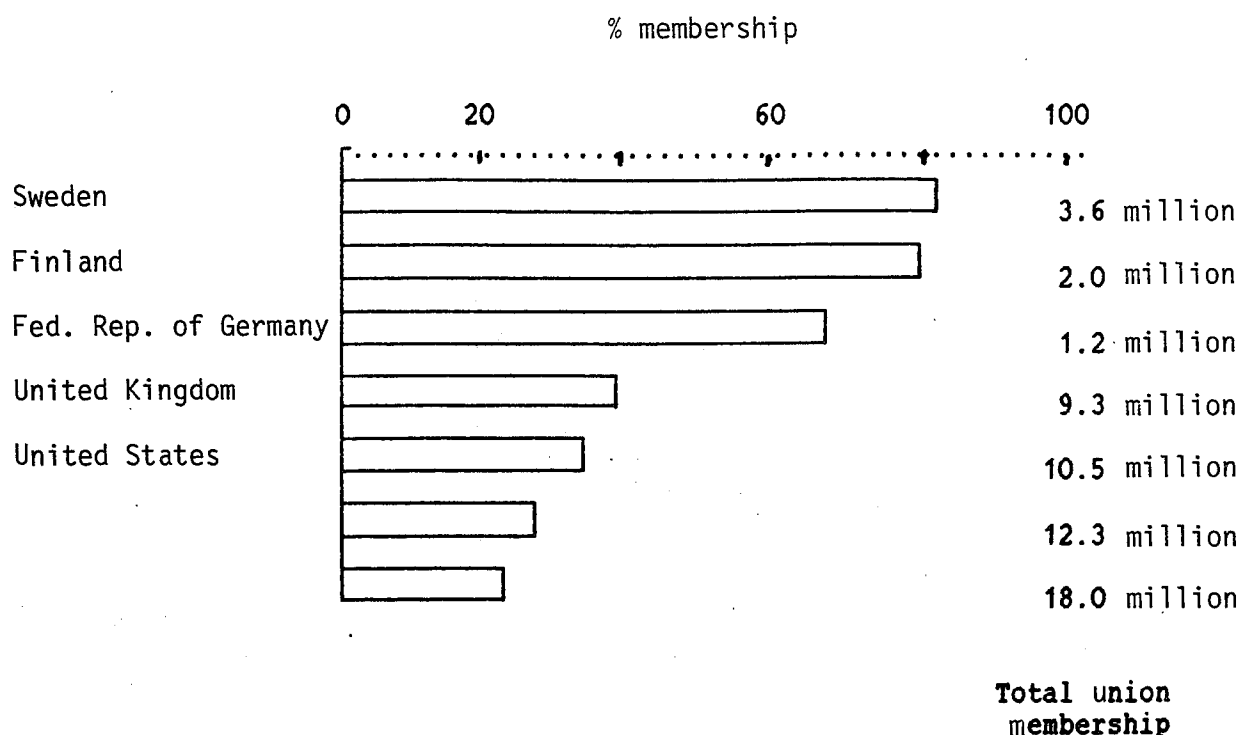


Figure 7 shows the relatively high rates of union membership in the Nordic countries, compared with other industrialised nations.

Since the mid-1970s Swedish unions have the right to appoint two regular members who can vote as well as two deputies who cannot to the board of directors of all companies with 25 or more employees.

Figure 7: Trade union membership, 1985-86, as a % of the labour force



Source: European Trade Union Institute National Statistics, in The Economist, 21 Nov. 1987.

Unemployment

By OECD standards the Nordic countries have very low unemployment rates. The European OECD countries average 11 per cent, which ranges from 20 per cent (for Spain) through 14 per cent (for Greece and Italy) to the Nordic countries (3.5 per cent).

By Nordic standards this 3.5 per cent is high. It has been significantly lower during the last ten years. Denmark is the only one of the four Nordic countries which has unemployment resembling more the OECD and EEC means. Unemployment in Denmark is presently near 8 per cent (see table 38 and figure 8).

One of the factors in the low rates for the Nordic countries is the strong government subsidies and comprehensive government retraining schemes which keep people in jobs rather than laying them off. Pehr Gyllenhammar, the head of Volvo, believes there are good economic grounds as well as humanistic grounds for companies to not lay off people during the down periods.

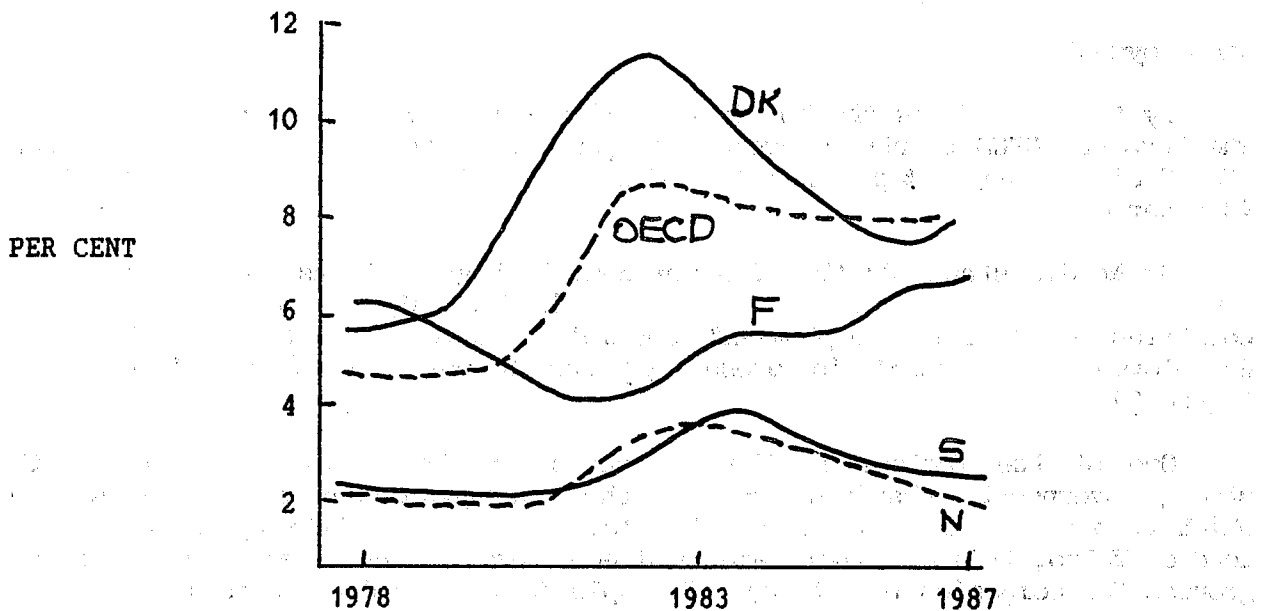
The low unemployment may however be a thing of the past. There is a general consensus of economists and other experts, particularly in Norway, that unemployment may double in the near future. In Norway the rate may rise from 2 per cent to over 4 per cent by the end of the present winter.

Table 38: Unemployment in Nordic countries
(in thousands)

	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Sweden n	33	34	46	45	44	59	80	92	92	85	84	78
%							3.2	3.5	3.1	2.8	2.7	1.9
Finland n	90	137	172	143	114	127	149	156	158	163	181	130
%							-	5.4	5.2	5.0	5.4	5.1
Norway n	20	16	20	24	22	28	41	64	67	51	36	33
%							2.0	3.1	3.2	2.5	1.8	1.6
Denmark n	133	164	191	162	184	243	263	283	275	252	212	216
%							9.3	10.1	9.9	8.7	7.6	7.7
Total number unemployed												457

Source: Arbejdsdirektoratet Arbeidsmarkedsstatistikk, nr. 6/88, Nordisk Ministerråd.

Figure 8: Unemployment as a percentage of labour force



Norway and Sweden have very low rates of unemployment.

Female employment

It is estimated in the world that MNEs employ more than 1 million women in developing countries. This accounts for less than 1 per cent of the female labour force in these countries and about 3 per cent of MNE employment world-wide.

Employment of women in MNEs is concentrated in certain sectors and certain countries. Largely it involves manual secretarial work and lower functionary positions. Few of them rise to higher positions in the companies.

Since the Second World War women in the Nordic countries have joined the workforce in increasing numbers. Norway and Sweden have been the slowest Nordic countries to bring women into the labour force. Women are employed in different sectors than men and have more part-time employment than men.

In the Nordic countries women have made considerable progress towards achieving equal wages, but they have not yet achieved equality or equality of opportunity.

Table 39 shows the growing percentage of women in the Nordic workforces.

Table 39: Percentage of women in the workforce

	Sweden	Finland	Norway	Denmark
1950	26	41	24	34
1960	30	39	23	31
1970	35	42	28	37
1980	45	47	41	-
1981	46	47	41	44

Source: Nordic Statistical Yearbook.

In Norway, in 1986, men's wage rises were 24 per cent faster than women's and the OECD ranks Norway as one of the most sex-segregated countries. In Norway men and women tend to keep their traditional roles more than in other Scandinavian countries; however, there has been a rapid rise in female tertiary students in recent years.

In Norway few women are directors or leading big companies, but in general women are well represented in the public sector and especially in Parliament.

Technological unemployment

As the economies of Scandinavia deteriorate, decline in employment in the service sectors will differentially affect women. In Norway, for example, this winter there will be an increase in female unemployment in the finance, advertising and travel industries. The female unemployment situation will be worsened by anticipated rapid advances in data technology which will threaten traditional female-dominated sectors.

In the Third World typical patterns of employment by MNEs favour female workers, since for labour-intensive areas they are regarded as more efficient and stable than male workers. Often they are regarded as having a higher tolerance for repetitive tasks and greater manual dexterity than men. In general, their wages are lower, which is partly a function of their younger age. Older ones tend to leave the workforce to marry or raise children (ICTFU, 1988; ESCAP, 1984).

In general, Scandinavian MNEs follow employment policies in the Third World which reflect a balance between local practices and the social democratic practices of the Scandinavian countries. This view has been expressed about Scandinavian MNEs, for example, in South Africa by Hamilton and others.

SWEDEN

Sweden industrialised at the turn of the century when many industrial inventions and refinements, such as ball bearings, the adjustable spanner, cream separators, the primus stove and safety matches helped to launch companies.

There are many overlapping directorships in Swedish industry, for example, in the Wellenberg group. Also top industrial leaders like Pehr Gyllenhammar of Volvo act as top advisers to the Swedish Government.

Sweden has had a social democratic Government for all but six of the past 55 years, but - ironically - when they were out of office between 1976 and 1982, the Government over-intervened in the economy. Huge subsidies poured into heavy industry, especially shipbuilding and steel making. Only 8 per cent of the industry is publicly owned and Sweden has little time for nationalisation.

Swedish multinationals

The question emerges: Do multinationals help their host countries by creating wealth and employment, or do they replace people with machines and then depart to set up factories in cheap-labour countries? Let us look at the Swedish situation.

Within the Stopford sample there are 15 Swedish companies. These companies, Asea, Electrolux, Ericsson, Volvo, etc., had sales in 1977 that amounted to 30 per cent of Sweden's GNP. However, 80 per cent of their sales were outside Sweden. They employed about 590,000 people, 45 per cent of whom work outside Sweden.

About half of their foreign operations - sales, employees, subsidiaries, etc. - are in Europe. Most of the rest are in North America, Japan and the Pacific rim. Only about 5 per cent of the Swedish foreign operations are in developing countries.

Within Sweden these 15 firms accounted for about 7.2 per cent of the employment and 6.14 per cent of the Swedish GDP (as measured by their total sales).

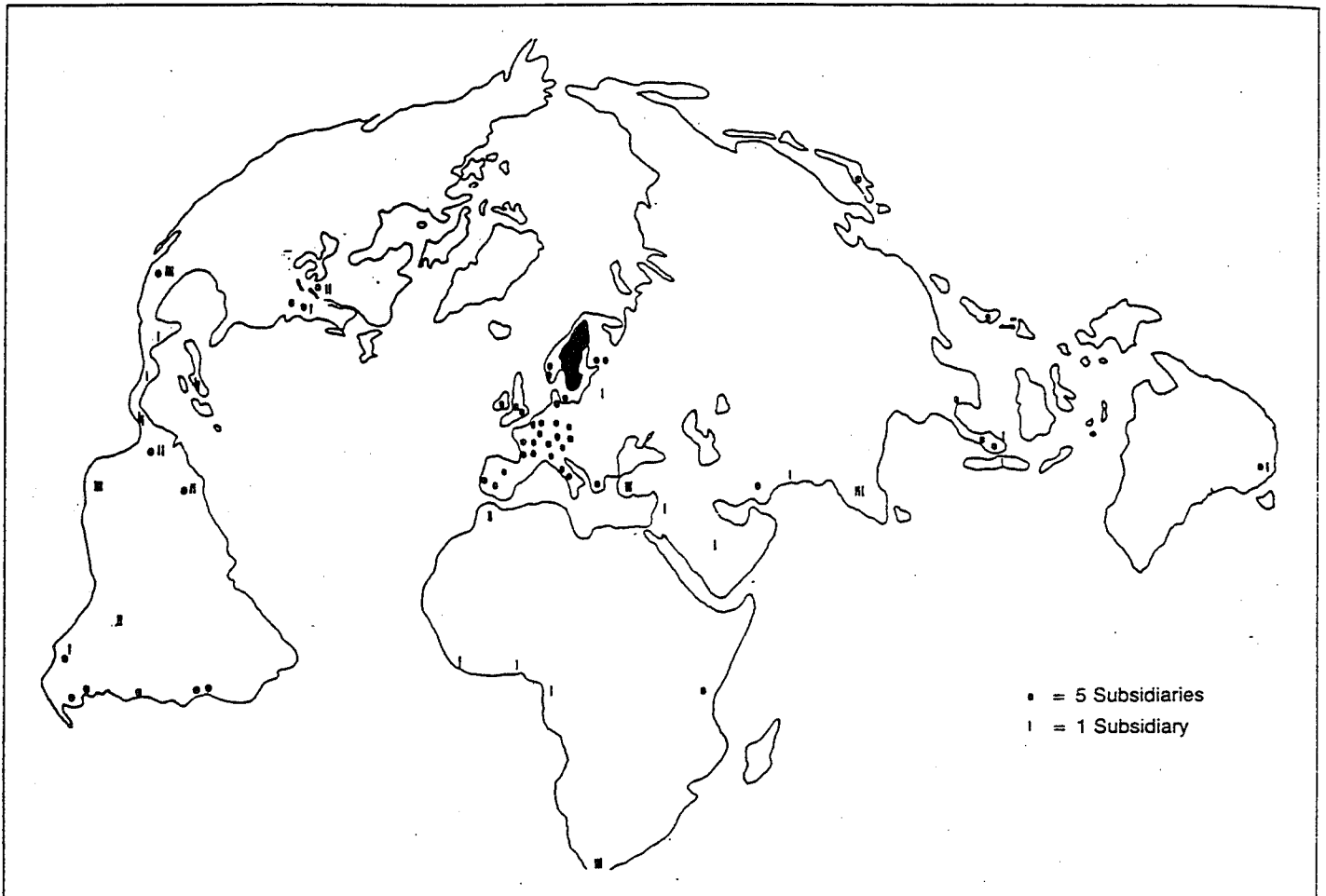
During the 1960s and 1970s they showed rapid growth, but by the turn of the 1980s their rate of growth in capital investment as a percentage of sales was close to zero.

During the period 1977 to 1982 employment abroad in these firms grew almost twice as fast as employment in Sweden (14.46 v. 8.27 per cent). During the same period sales grew faster in Sweden than abroad (146 v. 91 per cent). By 1982 foreign sales had reduced from 80 to 73 per cent.

Swedenborg (1979) found no correlation between the capital-labour ratio and the propensity for Swedish multinationals to produce abroad. Despite the cheap labour in the Third World, most Swedish companies produced close to home. A period of consolidation was emerging and Swedish companies were beginning to come home.

Figure 9 shows the geographical distribution of subsidiaries of large Swedish multinationals. Note that about half the subsidiaries are located close to Sweden in Europe.

Figure 9: Geographic distribution of subsidiaries of 12 Swedish MNEs



Source: MacDonald, 1981.

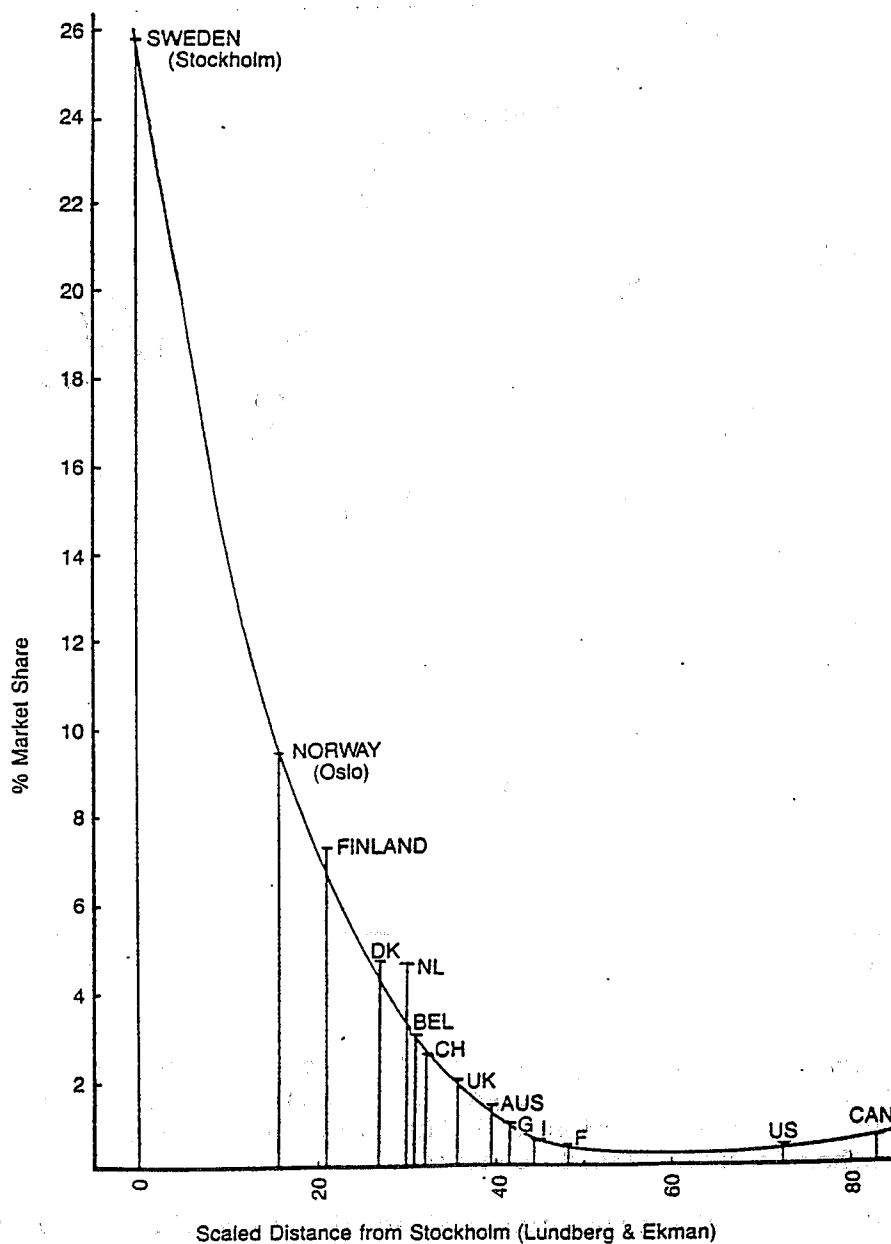
The scope of multinational participation in the Third World is often misconstrued. Over 90 per cent of the foreign operations of large Swedish multinationals, including the subsidiaries and the stock of foreign direct invested capital is in other industrialised countries.

In fact, this trend is strongly increasing and accelerating the "Fortress Europe" phenomenon as companies develop larger-scale automated factories close to the target consumer markets in preference to cheap labour operations distant from the final markets.

Figure 10 shows a strong positive correlation between Volvo's market share in various countries and the scaled geographic/cultural distance of these countries from Sweden. Trade-off scales between physical distance,

cultural distance and perceived/subjective distance have been generated by Lundberg and Ekman (1971). For example, although Holland and Belgium are equidistant from Sweden, Holland is perceived to be closer both culturally and physically. When the market share data are fitted to these scales, the correlation between market share and scaled distance is very high. Apparently, the general rule of expansion is not to go into poor countries or distant countries. However, distant rich countries are preferable to proximal poor countries. When the stock of rich countries is depleted, MNEs enter the richer Third World countries, those on the take-off point of industrialisation. Penetration into poorer Third, Fourth and Fifth World countries is low.

Figure 10: Volvo's market share as a function of proximity of country



Source: MacDonald, 1981.

Within Europe Volvo's market share decreases rapidly in countries that are geographically or culturally distant from Sweden.

Figure 11 shows a positive correlation between the age of Swedish MNEs and the number of foreign countries they have subsidiaries in.

Figure 11: Size and age of Swedish MNEs

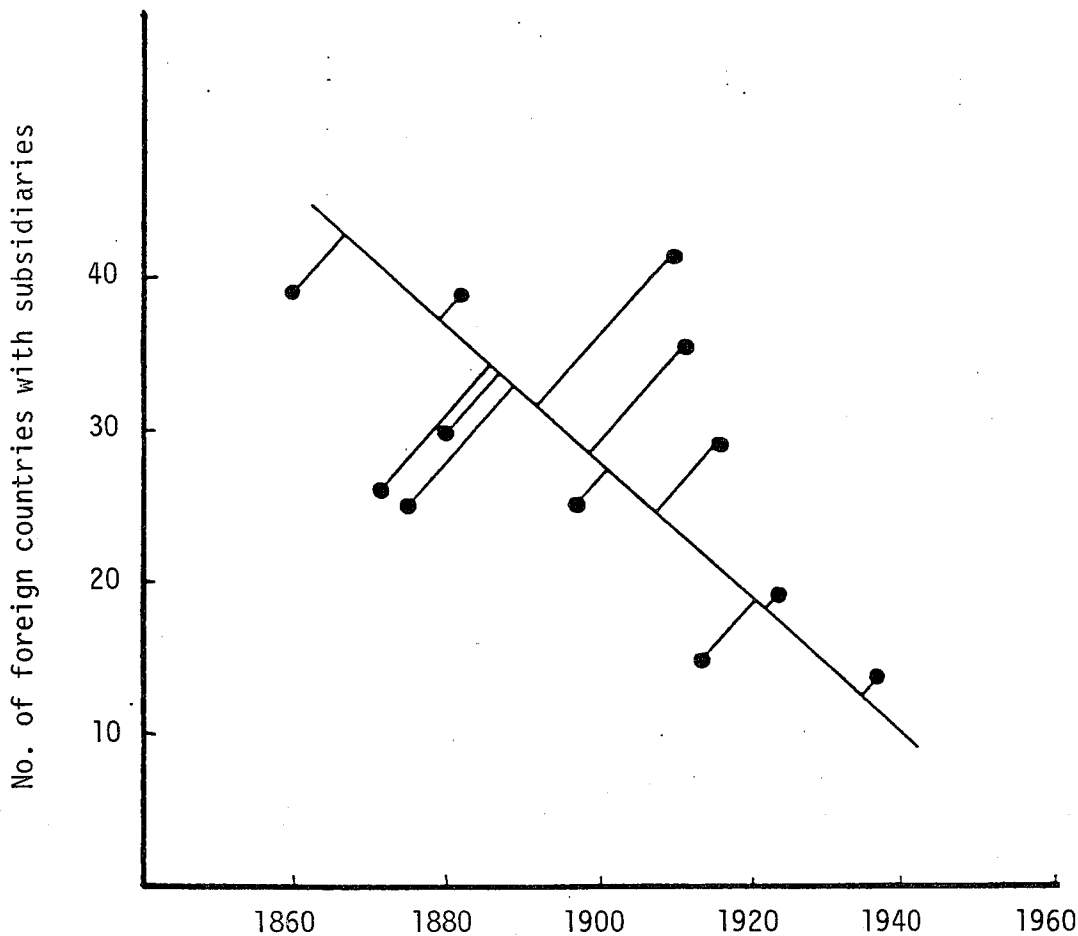


Table 40 shows that Stopford's sample of Sweden's largest 15 MNEs employed 7.21 per cent of Sweden's workforce. Sales in Sweden corresponded to 6.14 per cent of GDP; however, as a total global force, these 15 are about 30 per cent the size of the Swedish GDP, employing 531,000 people world-wide and making 80 per cent of their sales outside Sweden in 1976. This figure reduces to about 74 per cent sales outside Sweden by 1981 (see table 42).

Table 40: Size of the 15 largest Swedish MNEs relative to the size of the Swedish economy, 1976 (in millions of Swedish kroner)

	In Sweden	Total, Sweden and abroad	% in Sweden
Sales of 15 MNEs	20 787	99 684	20.85
Swedish GDP	338 593	338 593	
% sales of MNEs	6.14	29.44	
Employment of MNEs ('000s)	294.6	531.5	55.42
Swedish workforce	4 088	4 088	
% employment of MNEs (1976 figures)	7.21	13.00	

Sources: Stopford, 1983; Yearbook of Nordic Statistics, 1981.

Table 41 shows a slight decline in the rate of capital investment and R & D amongst Sweden's largest MNEs between 1976 and 1981. During this period sales grew by 97 per cent, capital investment by 93 per cent and R & D by 85 per cent. R & D expenditure stood in 1981 at 1.23 per cent of sales volume.

Table 41: Capital investment and R & D expenditure of Stopford sample of Swedish MNEs, 1976-81

	1976	1981	% change
Capital investment (15 MNEs) (S.Kr. million)	6891	13323	93.33
R + D (6 MNEs) (S.Kr. million)	1309	2419	84.79
Total sales (15 MNEs) (S.Kr. million)	99684	196145	97
Capital investment as a % of sales	6.9	6.79	
R + D as a % of sales	1.31	1.23	

Sources: Stopford, 1983; Yearbook of Nordic Statistics, 1981.

Table 42 shows that the sales of large Swedish MNEs grew at a faster rate in Sweden than abroad between 1976 and 1981; however, two-thirds of the total sales growth was still outside Sweden.

Table 42: Summary of sales of Sweden's 15 largest MNEs (in millions of Swedish kroner)

	1977	1982	% change	Change in amount
Sales in Sweden	20787	51435	146	30648
% Sales in Sweden	20.8	26.22		
Sales abroad	75897	144710	90.7	68813
% Sales abroad	79.2	73.78		
Total sales	99684	196145	97	96461

Source: Stopford, 1983.

Swedenborg (1979) showed that, for 93 Swedish firms producing abroad, on average amounts equivalent to 45 per cent of Swedish parent sales were exported and 32 per cent were sold by affiliates abroad in 1970. These percentages grew with the size of the operation by number of employees in Sweden. She showed a correlation for Swedish firms between exports and the domestic size of the

firm, but found no correlation between the propensity to produce abroad and the capital-labour ratio for the 1960s investors amongst Swedish companies. Despite the low labour costs available in many developing countries, Swedish companies do not produce much there.

Swedenborg also found that between 1965 and 1974 foreign sales affiliates of Swedish firms grew faster in both number of employees and number of affiliates than did foreign manufacturing subsidiaries (table 43).

Table 43: Foreign affiliates of Swedish manufacturing firms, 1965-74

	1965	1974	Percentage increase
Number of firms			
Manufacturing subsidiaries	329	481	+ 46
Sales affiliates	583	1 227	+110
% sales of total	64	72	
Employment ('000s)			
Manufacturing subsidiaries	147.8	219.6	+ 49
Sales affiliates	24.8	55.7	+129
% sales of total	14	20	

Source: Swedenborg, 1979.

Table 43 shows that Swedish foreign sales affiliates and employees grew about 2 1/2 times as fast as foreign manufacturing affiliates and employees between 1965 and 1974. Note that the proportion of sales employees affiliates (20 per cent) grew much faster since 1965 (43 per cent) than the proportion of sales affiliates (72 per cent) which grew only 12.5 per cent.

Swedenborg (1979) showed the growth of Swedish firms with domestic and foreign production facilities. Foreign operations increased significantly between 1965 and 1974 and there was a correlation between age of Swedish firms and the propensity to produce abroad. However, there was no tendency to export and R & D intensity for Swedish firms.

Table 44: Swedish summary

		1983	1987	% change
Sales	n = 17	308727	467500	+ 51.42
	n = 18	344416	522456	+ 51.69
SEK M ¹	n = 19	351572	531969	+ 51.31
	n = 20 incl.			
Sales in Sweden				
SEK M	n = 17	72281	129281	+ 78.8
% sales in Sweden of total		23.41%	27.65%	
Total employment				
	n = 17	533850	675122	+ 26.46
	n = 19	576279	716694	+ 24.37
Employment in Sweden				
	n = 17	274311	312502	+ 13.92
% employment in Sweden		51.38%	46.28%	
Salaries	n = 10	39353	64377	+ 63.58
Salaries as % of sales	n = 10/			
.....	n = 10/			
SEK	n = 10			
Investment	n = 18 excl.	21546	40322	+ 57.1
As % of sales	n = 18	6.25%	7.7%	
SEK M				

¹ millions of Swedish kroner.

Table 45: Swedish study: Employment in Sweden

	Total employment		Employment in Sweden			
	1983	1987	1983	1987		
Sandvik	25687	26256	11500	10421		
Procordia	25719	24840	22000	21001		
Asea	56660	72868	30600	36069		
Stora	est. 8900	21530	7200	17397		
Alfa Laval	15984	16051	5632	5539		
SAAB	32199	39631	25260	29666		
Volvo	76206	75340	57247	55436		
Ericsson	70783	70893	34543	37386		
Sw. Match	18350	34200	5800	7200		
Atlas Copco	16974	18777	4243	4199		
SSAB ¹	14711	14352	14000	13661		
SKF	38847	43693	4763	5401		
Esselte	15400	19026	6138	6138		
SCA	15250	17020	10100	10552		
Trelleborg	4680	21945	3785	18222		
Electrolux	86300	140500	29500	29456		
Nobel	11200	18200	2100	4758		
Total sales (S.Kr. m) n = 17 (exc. Arla + KF)	533850	675122	+26.46%	274311	312502	+13.92%

¹ SSAB = Swedish steel.

Table 46: Swedish study: Investment

Mix of investment plus
capital expenditure
(in millions of Swedish kroner)

	1983	1987
Sandvik	295	675
Arla	287	236
Procordia	458	595
Asea	1077	2097
(Stora)		(8963)
Alfa Laval	5528	7814
SAAB	1250	3090
Volvo	2397	3864
Ericsson	1645	1592
Sw. Match	4072	7376
Atlas Copco	175	422
SSAB	316	565
SKF	683	1126
Esselte	320	580
SCA	695	1149
KF	590	1120
Trelleborg	8	3466
Electrolux	1350	3506
Nobel	200	1050
	n=18 21546	40322 + 87.1%
	excl. Stora	
	n=17	

Table 47: Swedish study: Salaries
(in millions of Swedish kroner)

	1983	1987
SAAB	4958	8404
Volvo	10348	13846
Sw. Match	1550	3050
SSAB	2000	2693
SKF	6010	8106
Esselte	2127	3162
SCA	1453	2245
Trelleborg	602	4066
Electrolux	6852	14428
Procordia	3453	4377
Total n = 10	39353	64377 + 63.58

FINLAND

Finland industrialised late and farmers outnumbered industrial workers until well after the Winter War of 1939-40. Today there is continued pressure for adaptation, modernising and nationalising processes.

The Finnish Government is directly involved with industry controlling Neste (oil), Enzo Gutzeit (paper), Outokumpu (metal) and Rautaruukki (steel). Finnair is also state-owned. They are all run on profit-making lines and ready to restructure.

There is stagnation in the labour force and some skills are in short supply. The policy is to increase the mobility of labour, through expansion and improvement of adult education and retraining. The Finnish Government is holding prices and wages down in 1988 and has told the unions there is no hope of wage rises at the present time.

The Government will also reduce the oligopolistic market power, by increasing competition amongst domestic suppliers. It is also important to reduce inflationary pressures. The Government is active in stimulating R & D and tax reform. The introduction of VAT might also be considered.

Inflation is in line with the rest of Europe. Finland's public debt is low and serious, external imbalances have been avoided. There are high interest rates which will slow down the growth of capital stock.

The special trading pact with the Eastern block is expected to fuel the growth of Finland's economy and also act as a catalyst for Swedish joint ventures with Finnish enterprises.

Exports to Western markets rose during the second half of 1986. There has been a slow-down in the growth of the OECD countries following the stock market crash of 1987.

Forest products are 36 per cent of Finnish exports and declining. GDP growth has been better than OECD average. Unemployment is stable at 5 per cent and well below OECD and European averages. The Finnish economy is energy-intensive and Finland is still highly dependent upon energy imports.

Table 48 shows Finland's strong growth in trade with the EFTA and corresponding reduction in trade with the EEC since 1960.

Table 48: The distribution of Finnish trade by geographical area

	1960		1970		1980		1985	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
EEC	56	50	46	43	39	33	36	37
EFTA	7	15	22	23	24	18	20	18
Soviet Union	14	14	12	13	18	21	22	21
Sweden	4	10	15	16	17	12	13	12
United Kingdom	24	13	17	13	11	9	11	7
Fed. Rep. of Germany	12	19	11	16	11	13	9	15
Japan	-	0	-	2	-	3	-	5
Norway	1	-	4	-	4	-	4	-
Italy	-	2	-	2	-	2	-	3
Denmark	3	-	4	-	3	-	4	-
France	5	6	4	3	5	3	4	3
United States	5	6	5	5	3	6	6	5
Other	32	28	28	29	28	30	27	29
Total	100		100		100		100	
of which OECD	64	66	75	75	69	62	67	68

Finnish trade has also grown strongly with the Soviet Union during this period. Note that the growth in exports to Sweden rose from 4 to 13 per cent; while the exports to Denmark only rose from 3 to 4 per cent during the same period.

Table 49 shows Finland's economy to have grown between 1975 and 1985 significantly faster than the OECD European average on four basic parameters.

Table 49: Comparison of growth in Finland with OECD (Europe), 1975-85 (in percentages)

	Finland	OECD (Europe)
GDP	+33	+24
Industrial production	+48	+22
Energy consumption	+24	+13
Number of road vehicles	+53	+24

Table 50 shows summary growth data for the sample of Finnish MNEs.

Table 50: Summary of large Finnish multinationals¹

	1983	1987	Percentage increase
Employees	143 823	156 616	8.89 (n = 10)
Sales in Finnish mark	66 955	92 383	37.9 (n = 9)
Capital investment	4 063	15 804	288.9 (n = 9)
Wages	6 146	9 559	55.5 (n = 5)
Total world-wide sales as a % of GDP	27.19	25.8	
MNEs' sales (%) in Finland	12.15	8.76	

¹ Including: Kone, Neste, Rauma Repola, Kymmene, Kemira, Valmet, Ahlstrøm, Metsa Serla, Nokia, Enzo Gutzeit.

The ten sample Finnish MNEs account for:

25.8 per cent of Finnish GDP in world-wide sales (and falling)
but only 8.76 per cent of Finnish GDP in sales in Finland (and falling).

They also account for:

6.44 per cent of jobs total (rising) and
3.94 per cent of jobs in total Finnish workforce.

Between 1983 and 1987:

Ten MNEs grew 37.9 per cent v. 45.1 per cent for the Finnish economy.
Employees grew 8.89 per cent v. 2.09 per cent for the Finnish economy.

The MNEs created 12,793 jobs v. 53,000 total jobs created by the Finnish economy between 1983 and 1987, but a large percentage of the MNE jobs were created outside Finland. On average 61 per cent of their jobs were in Finland, but these are unequally distributed over industries.

Finnish companies: Geographical distribution

By 1987 eight of the ten Finnish MNEs provided an average of 61.2 per cent of their jobs in Finland. These companies had foreign operations in an average of 21.5 foreign countries, 11.66 of which are in Europe. The distribution of foreign countries varied widely from ten to 38 foreign countries (table 51). Table 52 summarises the geographic distribution of Finnish MNE activities.

Table 51: Distribution of subsidiaries of Finnish MNEs

	Scandinavia	EFTA	EEC	North America	South America	Asia	Middle East	Total countries
Kone	4	10	2	2	4	7	5	34
Kemira	3	7	2	1	2	2	3	18
RR	4	11	1	2	0	4	0	22
Kymmene	3	8	0	1	0	3	0	15
Neste	4	11	1	2	0	2	3	23
MS	4	6	0	0	0	0	0	10
Nokia	4	9	1	2	0	9	3	27
Ahsltrøm	3	5	1	2	1	4	0	16
Enzo Gutzeit	4	14	1	2	5	6	6	38
Penetration	9	9	6	8	4	8	5	203/9

Average 22.55 countries, of which 12.66 are in Europe.

Table 52: Geographic distribution of Finnish MNE activities

	% company subsidiaries/ operating companies	% sales
In Finland	41	35
In Scandinavia (4 countries)	54	47
In Western Europe	81	79
of which: in EFTA ¹	57	n.a.
in EEC	24	n.a.

¹ 57% in EFTA includes 3% in Switzerland and Austria.

In general, the Finnish companies locate in the rich countries and/or stay close to home. A full 41 per cent of the subsidiaries are in Finland, 54 per cent in Scandinavia and altogether 81 per cent in Western Europe.

Half of the 19 per cent outside Europe are in the rich countries like United States, Canada, Japan, Austria or in Pacific Rim like Hong Kong and Singapore.

This closely approximates the Swedish distribution of 1978, 96 per cent in the top 35 countries by per capita GDP.

Including Finland 460 are in the EFTA versus 206 in the EEC, thus Finland is less dependent on the EEC, for example, than is Sweden.

Table 53 shows that most of the sales growth is outside Finland.

Table 53: Growth in foreign sales
(n = 8)

	1983	1987	% change
Sales	62 505	81 944	31.09
Domestic sales	27 988	27 785	-0.8
	44.7%	33.9%	

NORWAY

Norway was a great trading nation from the time of the Vikings in the tenth and eleventh centuries. From the middle of the fourteenth century until 1814 Norway was in the union with Denmark, and from the same period great trading cities like Bergen arose as part of the Hanseatic League.

In 1814 Sweden forced Denmark to cede Norway which then came under Swedish rule until 1905, when Norway became independent.

In 1972 Norway held a referendum about membership in the EEC which was opposed by 54 per cent of the voters. Today Norway remains outside the market, but almost 70 per cent of Norwegian exports go to EEC countries making it, for example, more dependent on the EEC than even Denmark (which is a member).

By 1986 oil comprised 20 per cent of Norway's GDP, and when the price of oil halved Norway's GDP reduced correspondingly by about 9 per cent in total. Since 1986 Norway has been slow to recover from the oil shock and will have to deal with even more hostile foreign competition in the future.

At present Norway gives heavy subsidies to various sunset industries - shipping, steel production, agriculture. By the early 1980s agriculture was subsidised to 40 per cent of the gross value added which is more than the common market countries have done.

Recent situation

Low unemployment and high wages have eroded Norwegian competitiveness. In this decade both oil and shipping industries have declined and the Norwegian balance of payments is worse now than before the first oil was discovered in 1969.

In percentage terms Norwegian foreign trade amounts to 26.9 per cent of GDP. The kroner is fluctuating widely as is the international price of oil. Deregulation in the finance centre could mobilise tremendous economic resources, but the Government has been slow to act due to some international trading problems with one of Norway's largest banks, DnC.

It is expected that unemployment will rise sharply in Norway this winter, especially in the service sector.

Norwegian companies have a tremendous debt burden which rose by 19 per cent in 1987 to \$17 billion from \$14 billion in 1986. Norsk Hydro alone has a debt of \$7.4 billion which equals 74 per cent of its total assets.

Norway was in the European stake from May 1972 until December 1978. Now the value of the kroner is determined by a trade-weighted basket of countries. There are few new MNEs in Norway. It appears that the country is becoming more dependent upon both oil and the common market.

Esso has sold off its service station operations in Denmark and Sweden to Norwegian Statoil. Both large Norwegian MNEs Norsk Hydro and Statoil are state-owned.

As we approach 1992, it is anticipated that Norway will become more dependent upon both oil and the EEC. Economic and political structures may fluctuate. The financial industry will deregulate and a wave of mergers and acquisitions is expected. Several service industries will contract and unemployment, especially female unemployment, will rise. Norway's position vis-à-vis the EEC and deeper co-operation with Sweden is not clear.

The following tables give a description of Norway's workforce, exports and large MNE activities.

	1986 (in thousands)
Population	4 167
Workforce	2 031
Employed	1 970
LO member	785

Source: Statistisk Arbok, 1987.

Imports/Exports

	Imports 1986	Exports 1986
Total	150 052	133 847
Europe	115 843	107 224

Table 54 shows that Norway's exports declined by 13 per cent from 1984 to 1986, due mostly to the reduced world prices of oil in 1986. The effect restructured Norwegian trade dependencies significantly.

Table 54(a): Norway's major export destinations, 1986

Export destination	% of total exports
United Kingdom	28
Germany, Federal Republic of	19
Sweden	10
	57

(b): Norway's major import sources, 1986

Import source	% of total imports
Sweden	18
Germany, Federal Republic of	17
United Kingdom	8.6
Denmark	7.1
	50.7

Exports to Britain dropped by 34 per cent, but only 5.6 per cent to West Germany.

Trade to the EFTA declined by 11 per cent, while trade to the EEC declined by 19 per cent.

Within the EFTA group exports to Denmark, Finland, Iceland and Switzerland actually grew, but to Sweden reduced significantly (13 per cent).

Norwegian trade, 1984-86

From 1984 to 1986 Norwegian trade patterns shifted significantly.

Table 55 shows the relative geographical distribution of Norwegian imports and exports.

Table 55: Geographical distribution of imports and exports
(in millions of Norwegian kroner)

	Imports from		% change	Exports to		% change
	1981	1986		1984	1986	
Sweden	19 414	26 950	+39	15 022	13 377	(-13)
Finland	5 472	5 995	+ 9.5	2 248	2 343	+ 4
Denmark	7 214	10 704	+49	5 498	5 969	+ 8.5

Source: Norwegian Statistical Yearbook, 1987.

Table 56: Description of Norsk Hydro
(in millions of Norwegian kroner)

	1983	1987
Operating revenue	33350	54503
Investment (plant, equip.)	4480	9780
Export sales	15493	16086
Employees total	18000	39900
Employees in Norway	10000	20000
Employees outside Norway	8000	19900

GEOGRAPHICAL DISTRIBUTION OF REVENUE

	1987	1986
Europe Norway	7274	6964
UK	8054	8908
Germany	6888	6109
Denmark	6644	6782
France	6602	7032
Sweden	5111	4921
Other Europe	7337	5906
Out of Europe North America	2746	2432
South America	721	652
Asia	2301	1648
Africa	503	844
Australia	322	162
	54503	52360
Export sales	15493	16086

Norsk Hydro

Affiliates

Norway	34
Sweden	11
Denmark	7
Finland	1
UK	6
Netherland	4
US	4
Germany	2
France	1
Switzerland	1
Belgium	1
Spain	1
Canada	1
Singapore	1
Hong Kong	1
Thailand	1
Qatar	1
Brasil	1

Table 57: Description of Statoil
(in millions of Norwegian kroner)

	1983	1984	1985	1987
Investment/acquisitions	9700	14400	7650	11685
Income	25000		51420	60822
Personnel	est. 3500		7055	10627

Affiliates

Norway	12 + 3
Foreign	14
Sweden	3
UK	2
Germany	2
Denmark	2
Netherlands	1
Finland	1
France	1
China	1
US	1

Table 58: Export oil and gas

	Crude oil		Natural gas	
	Quantity 1000 tons	Value N NOK	Quantity SM ³ Mill.	Value M NOK
1977	13557	7286	2658	825
1978	16685	8796	14282	4802
1979	18711	14698	20797	7295
1980	23197	28500	25119	12899
1981	20453	31047	25197	17040
1982	20666	31879	24457	21593
1983	25623	40653	24528	23191
1984	30064	51712	26240	26617
1985	32602	56077	25429	29303
1986	35376	28526	25653	24551

Source: Nordisk Statistisk Arbok, 1987.

	1982	1983	1984	1985	1986	1987
GDP	362270	402197	452512	501816	516022	559
Imports	99747	98407	113102	132563	150052	
Export	113236 <u>31.2%</u>	131397	154034	170732	133847	US\$ 21.4% <u>25.9%</u>
Exports excl. gas/oil/ships	52275	59593	69395	74018	69370	
Total salaries	183355	198235	216350	239904	272985	

At the end of 1987 Norway had 14.8 billion barrels of proven oil reserves which constituted 1.7 per cent of the world total and provided Norway with 37 years of known reserves. It is interesting to note that Norway has 74 per cent of Europe's proven reserves (excluding the Soviet Union). However, Europe, i.e. the United Kingdom and Norway, has only 2.3 per cent of the world's proven reserve, whereas OPEC has 74.8 per cent.

Table 59: Trade union membership (LO) in Norway
(size in members representing about 30 unions)

Source: Statistisk Arbok, 1987.

Another source says 65 per cent of Norway's 1.8 million wage earners are members of trade unions.

Table 60: Oil industry - Share of total, 1984

	% of Total Employment	% GDP
Shipping/Oil Drilling	2.5%	4.0%
Oil Production Pipeline/Transport	0.6%	18.8%

DENMARK

Denmark is a country having few natural resources and a strong agricultural basis from which much of its downstream industries and hi-tech developments have differentiated.

The country has few large multinationals and only two Carlsberg (United Breweries) and Mejeriselskabet are listed in the Fortune 500 non-United States sample.

Denmark has no heavy industry but developed engineering, electronics, chemical, pharmaceutical and furniture industries.

In recent history, four major changes have occurred in Denmark:

1. Public sector growth has exceeded the general growth of the economy.
2. Women have entered the labour market en masse.
3. North Sea oil and gas have provided Denmark with a measure of energy independence.
4. Modern industries have developed.

About half of all jobs in industry are in companies having fewer than 200 workers. The principal export markets are Germany, Sweden, the United Kingdom, Norway, the United States and Italy.

Sweden, the United Kingdom and the Federal Republic of Germany provide Denmark's major import sources.

In 1960, 42 per cent of women worked, but this figure moved rapidly to 65 per cent by 1964 (versus 78 per cent for men).

Figure 12 shows the distribution of the Danish workforce and the number of companies by size of company. Most firms are small (less than 100 employees), but more workers work for big firms having more than 200 employees.

Figure 12: Employment in manufacturing, 1984

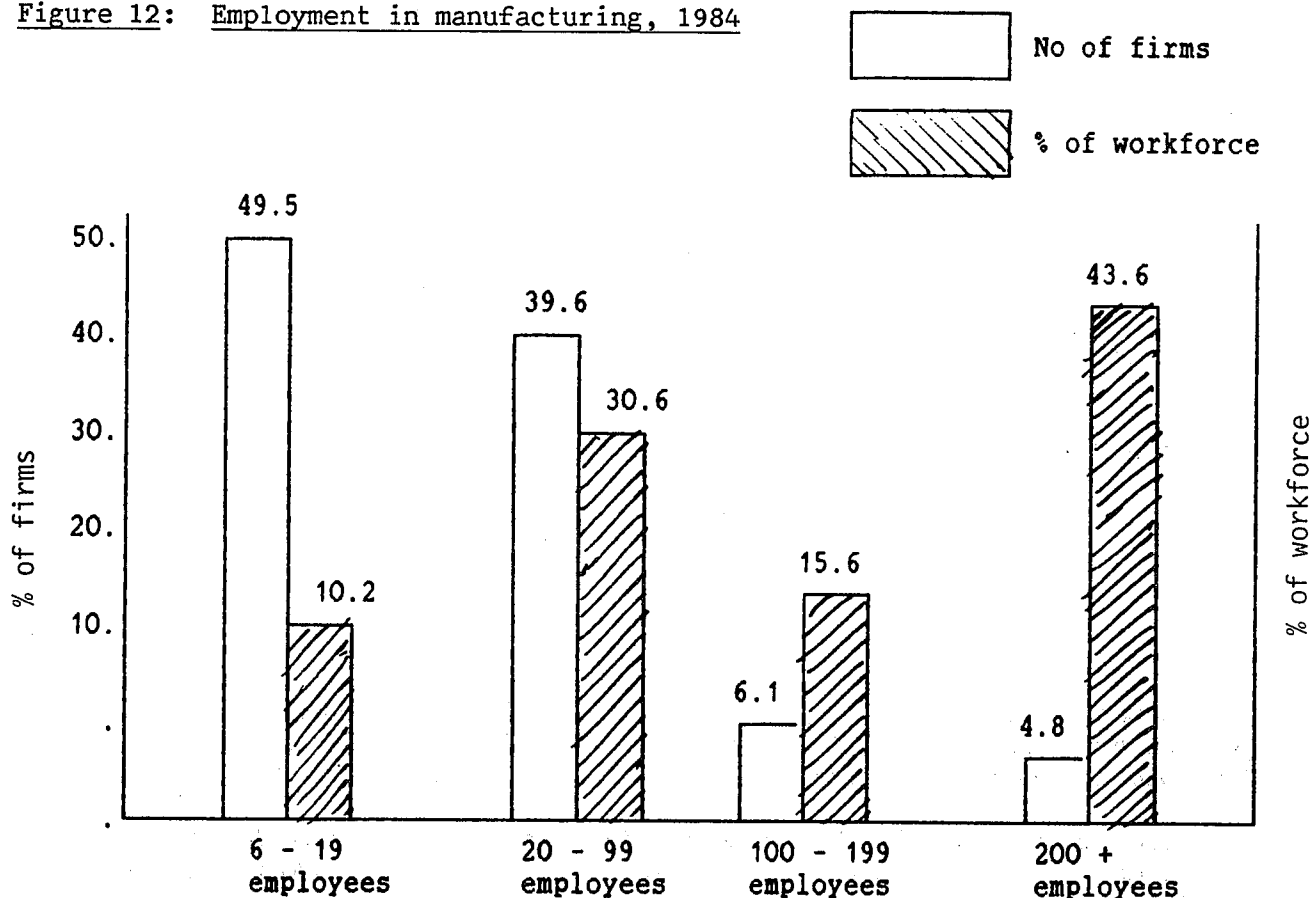


Table 61 gives a summary description of the growth of Carlsberg (United Breweries), between 1983 and 1987.

Table 61: Description of Carlsberg (United Breweries)
(in millions of Danish kroner)

	1983	1987
Sales net of VAT	10324	12960
Investment	573	602
Employees	12688	14141
Sales in DK	5253	4840
Sales out of DK	8407	11158
Total sales	13660	15998
Wages, social costs		1123 (parent co.)

- Exports to 130 countries.
- Carlsberg is brewed in 46 breweries and sold in 26 additional countries.
- 80 per cent of international sales go to Europe.
- Carlsberg and Tuborg are one company and therefore have a virtual monopoly in Denmark.
- R & D Carlsberg foundation.

SWEDEN-NORWAY COMPARISON

The industrial structures of Norway and Sweden are quite different. Whereas Sweden has many large multinationals, Norway has only two large state-owned multinationals, Norsk Hydro and Statoil. Furthermore, proportionally twice as many Swedes as Norwegians work in large companies (having more than 500 employees).

Norway employment 311.000		Sweden employment 768.000	
> 500	21%	> 500	39%
100 - 499	33%	100 - 499	32%
20 - 99	32%	20 - 99	22%
5 - 19	14%	5 - 19	7%

Source: Nordisk Industristatistikk, 1985.

Table 62 suggests that Sweden's industry is relatively more labour efficient than Norway's, since Sweden uses 20.6 per cent of the workforce to create 20.4 per cent of GNP v. 18.1 and 14.9 for Norway. Note, however, that in the oil sector only 0.8 per cent of Norway's workforce produce 10.1 per cent of the GNP. The fall from 19.7 per cent in 1985 to 10.1 per cent reflects the 1986 drop in the world price of oil.

Table 62: Comparison: Norway and Sweden

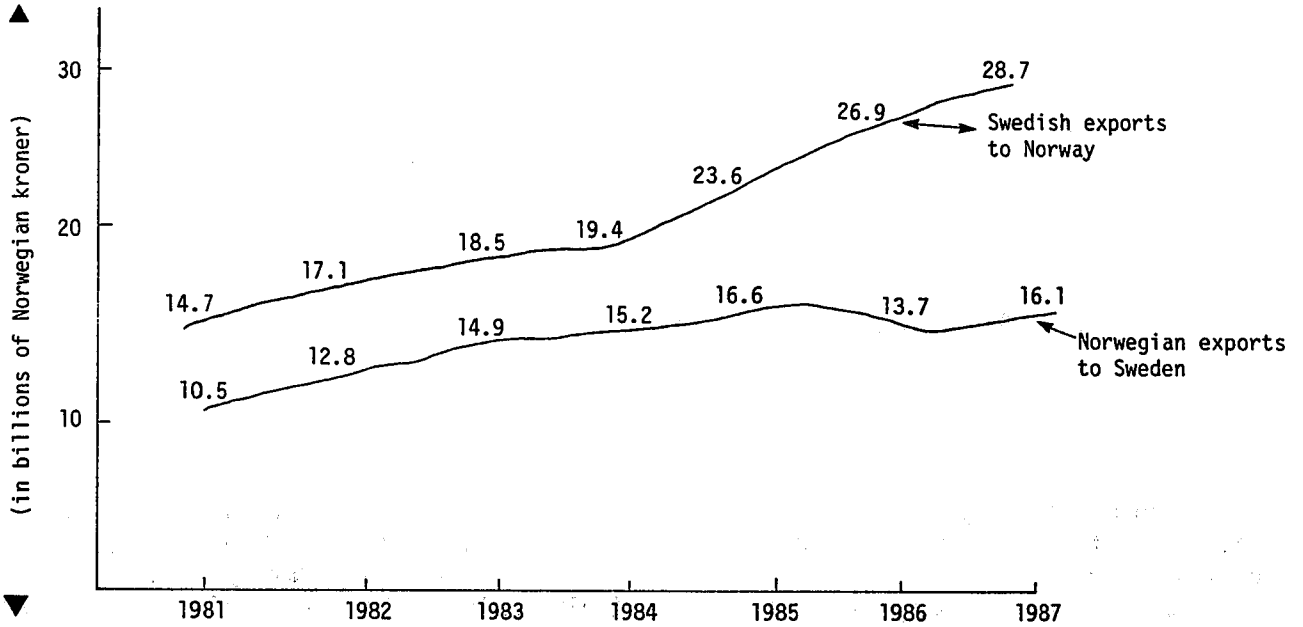
	Sweden		Norway	
	1985	1987	1985	1987
GNP (S.Kr. billion)	863	1 009	498	524
Per capita GNP (S.Kr. '000s)	103	120	120	125
Industry - value of production (S.Kr. billion)	184	206	67	78
% of GNP	21.3	20.4	13.5	14.9
% of workforce	20.3	20.6	16.2	18.1
Oil/gas - value of production (S.Kr. billion)	-	-	98	53
% of GNP	-	-	19.7	10.1
% of workforce	-	-	0.7	0.8
Export value (S.Kr. billion)	261	279	171	137
of which oil/gas			86	50
Employment in foreign subsidiaries		40 000		45 000

Source: Norges/Sveriges Industriforbund.

NORWAY-SWEDEN: RECIPROCAL INVESTMENT

There appears to be a strong two-year cycle of shifting investments between Norway and Sweden. Figure 13 shows heavy investment by Sweden in Norway in 1983, followed by heavy Norwegian investment in 1985 and Swedish investment again in 1987.

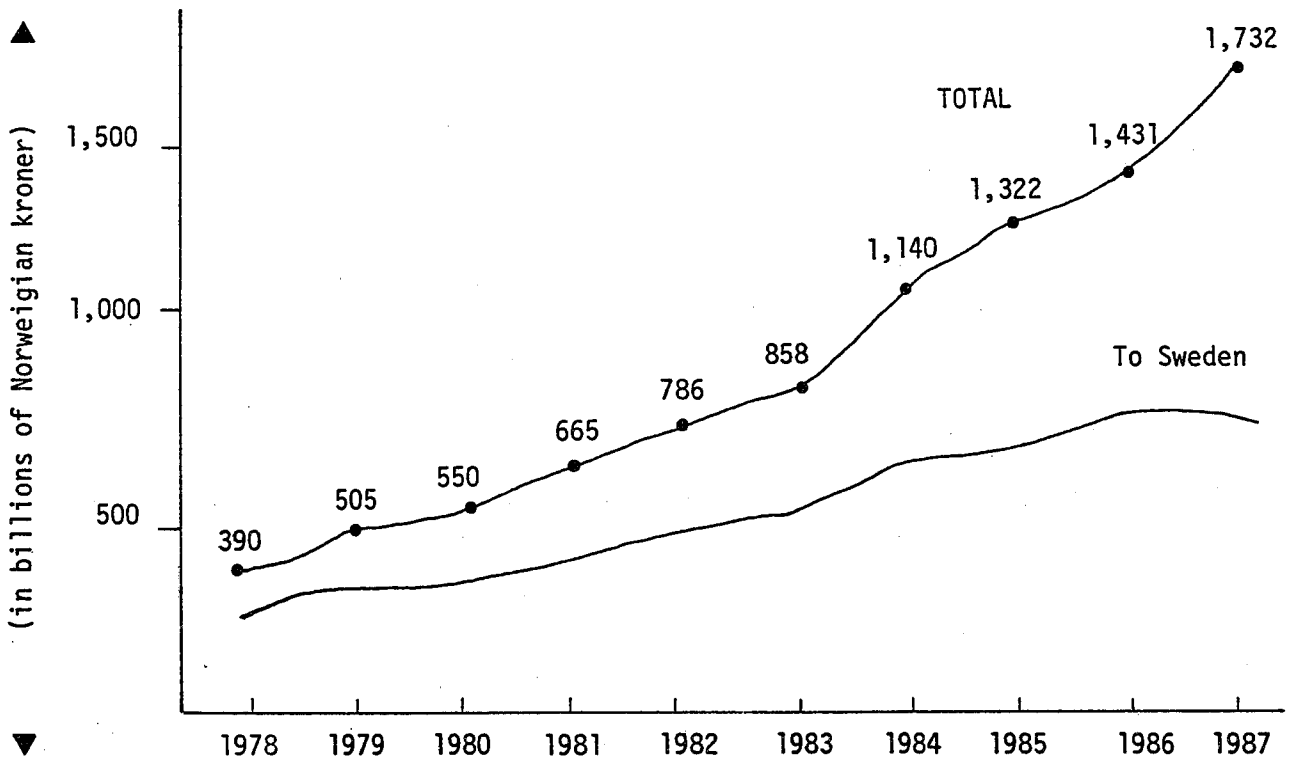
Figure 13: Swedish-Norwegian trade



Source: Norges Exportråd, Norges Exportforbund, Svensk Norsk Industrifond.

Figure 14 shows the unbalanced growth of Swedish exports to Norway since 1981.

Figure 14: Norwegian export growth, 1978-87



Source: Statistisk Sentralbyrå/IØI, Svensk Norsk Industrifond.

In fact, as Sweden increases exports to Norway, Norway increases exports to countries other than Sweden and in 1987 actually reduced exports to Sweden (see figure 14).

Table 63 shows the relative concentration of exports in Norway's two largest state-controlled firms, Norsk Hydro and Statoil. Note the more balanced distribution of exports in the Swedish industry.

Table 64 shows that Swedish and Finnish large industry structures are largely similar, suggesting that horizontal combination may reduce competition and increase scale economies by eliminating duplications in processing and facilitate reciprocal geographical advantages.

As Finland trades significantly with the Soviet Union (22 per cent of exports and 21 per cent of imports), Sweden might gain access to these markets through co-operation with Finnish industry. Industries where this might be pursued involve electronics (Nokia, Electrolux, Ericsson), industrial and farm equipment (Asea, Atlas Copco, Alfa Laval, Kone, Valmet), chemicals (Kemira, Nobel, AGA) and forest products (Stora, Svenska Cellulosa, Rauma Repola, Enzo Gutzeit, Metsa Serla, Kymmene, Ahlstrøm).

Swedish exports to Norway grew about double the rate of Norwegian exports to Sweden during this decade: 95 per cent versus 53 per cent. It appears Sweden is becoming more dependent on Norway for trade than vice versa.

Figure 14 substantiates this, showing total Norwegian exports to grow significantly, reducing Norway's dependence upon Sweden as an export trading partner.

**Table 63: Industry distribution of the large
Nordic multinational enterprises
(non-United States Fortune 500 sample)**

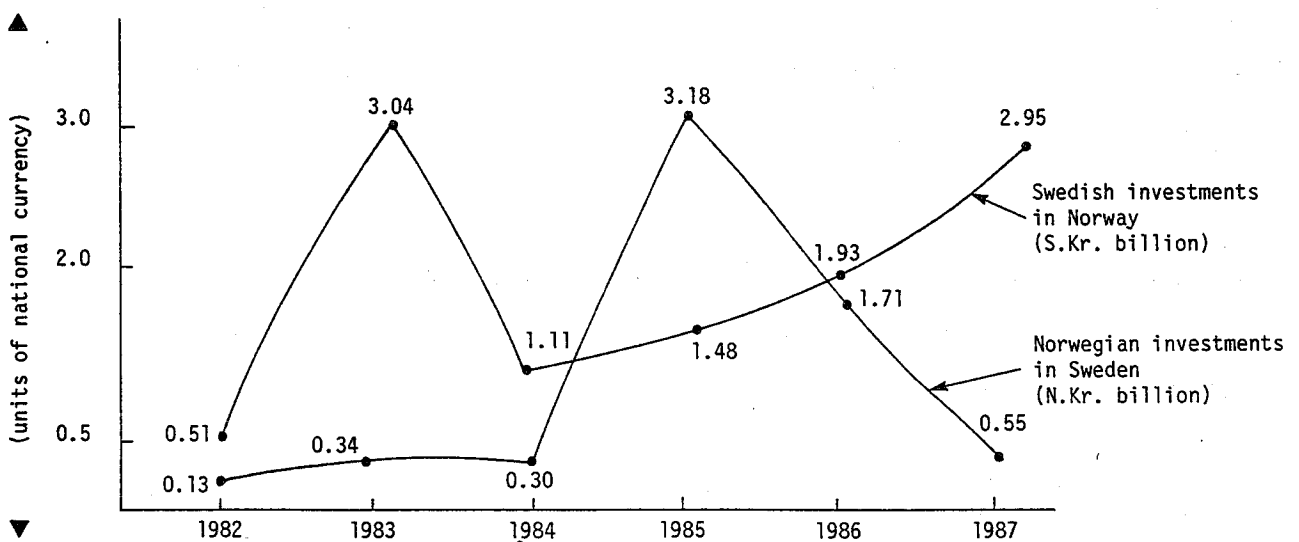
Industry	Sweden	Finland	Denmark	Norway
Motor vehicles	Volvo SAAB			
Electronics	Electrolux Ericsson	Nokia		
Oil/refining		Neste		Statoil
Industry and farm equipment	Asea Alfa Copco Alfa Laval	Kone Valmet		
Chemicals	Nobel AGA	Kemira		Norsk Hydro
Forest products	Stora Sv. Cellulosa	Rauma Repola Enso Gutzeit Metsa Serla Kymmene Ahlstrom		
Metal products	Sandvik SKF			
Food	Arla KF		Mejeri- selskabet	
Tobacco Pharmaceuticals	Procordia			
Office Equipment	Esselte			
Beverages			Unied Breweries (Carlsberg)	

Table 64: Growth of R & D activities in Nordic countries as a % of GDP and manpower

	Denmark		Finland		Norway		Sweden	
	% of GDP	% of manpower	% of GDP	% of manpower	% of GDP	% of manpower	% of GDP	% of manpower
1973	0.97	4.9	0.90	5.3	1.25	6.9	1.59	8.2
1975	1.03	5.0	0.94	5.9	1.26	7.4	1.71	8.5
1977	0.99	5.4	1.02	6.3	1.42	7.5	1.85	8.7
1979	0.97	5.8	1.08	7.0	1.38	7.8	1.88	8.5
1981	1.10	6.1	1.19	7.3	1.28	7.7	2.34	10.4
1983	1.19	6.6	1.32	7.9	1.42	7.9	2.58	10.9
1985	1.25	7.2	1.51	8.1	1.62	9.3	2.90	11.3
% change 1973/85	28.8	46.9	67.7	52.8	29.6	34.7	82.3	37.8

Figure 15 shows a rapid reciprocation in the balance of direct investment between Sweden and Norway. The cycle has a two-year periodicity.

Figure 15: Direct investment: Norway and Sweden



Source: Sveriges Industriforbund, Riksbanken, Svensk Norsk Industrifond.

RESEARCH AND DEVELOPMENT

There are structural and institutional differences between the Nordic countries and in order to improve comparability of results between the countries the Nordic co-operative organisation for applied research, Nordforsk, has since 1967 co-ordinated exchanges and standardisation of information between the Nordic countries.

In 1987 the Nordiska Industrifonden (Nordic Fund for Technology) took over this function. The aims of the system is to develop methodology and keep informed on R & D statistical work at the OECD and UNESCO.

The purposes of R & D statistics is to estimate the resources devoted to R & D within all fields of science and industry.

Table 64 shows the relative growth of R & D activities in all four Nordic countries. Note that since 1973 Finland and Sweden have raised R & D expenditure faster than R & D manpower, while the reverse has happened for Denmark and Norway.

Note also the large variance of R & D growth between countries, ranging from 28.8 per cent in Denmark to 82.3 per cent in Sweden. The range for R & D manpower growth is much lower (34.7 to 52.8 per cent).

Note the general rise in R & D expenditure within industry in the three EFTA countries (table 65).

Table 65: R & D activities within the business sector

	Denmark		Finland		Norway		Sweden	
	1983	1985	1983	1985	1983	1985	1983	1985
Total R + D within business enterprise sector (millions of national currency units)	3252	4250	2060	3052	3189	5081	11733	17001
Total R + D expenditure in industry as a % of the business enterprise spend	81	76	86	93	58	59	84	87

Source: Nordisk Statistisk.

Table 66 shows that the business sectors account for the largest (and growing) proportions of R & D expenditure in the Nordic countries. In all four countries R & D monies in government and educational sectors are shrinking as business sector R & D grows. Note that Sweden reports very high business expenditure and very low government expenditure. It is difficult to separate out some of the functions as Swedish industry and government interact significantly.

Table 66: Distribution of R & D activities by sector

	% Business sector		% Government sector		% Higher education	
	1983	1985	1983	1985	1983	1985
Denmark	53.3	55.3	21.0	19.5	25.0	24.4
Finland	56.8	60.9	21.1	19.5	21.4	19.1
Norway	56.0	62.7	17.4	14.4	25.9	22.2
Sweden	64.5	68.0	5.1	4.4	30.2	27.2

Table 67 shows wide country variations in both quantity of R & D related to GDP and manpower. In general, most of the R & D activities are in the business sector and funded by the business sector; however, this sector draws some funds from the government sources as well.

Table 67: Research and experimental development activities, 1985¹

	Denmark	Finland	Norway	Sweden
R + D as a % of GDP at market prices	1.25	1.51	1.62	2.90
R + D man years as a % of total manpower	7.2	9.1	9.3	11.3
% of R + D in business sector	55.3	60.9	62.7	68.0
% of R + D funded by business sector	48.9	59.6 ¹	50.2	60.9

¹ Estimated from Nordisk Statistikk correlations of 1983 data.

BANKS

Scandinavian banks are relatively small by world standards. Of the top 100 non-United States banks ranked by sales, Sweden has 4:

	<u>Rank in top 100</u>
Skandinaviska Enskilda Banken	84
Svenska Handelsbanken	91
Sparebankarnas Banken	95
Post och Kreditbanken	98

Amin Rajan (1987) studied employment in a sample of the world's largest 100 multinational banks. Only one Scandinavian bank was included in the

sample, Sweden's Skandinaviska Enskilda Banken which ranked number 100 by 1984 sales rank.

Skandinaviska Enskilda employed 6,800 people in 1981 and 7,800 in 1984, showing an annual average growth of 5.0 per cent over the period. This growth rate was twice as fast as the average for the 100 banks which was 2.5 per cent between 1981 and 1984. To give an idea of the relative size of Skandinaviska Enskilda, it accounted for only 0.003 per cent of the total employment of these top 100 banks in 1984.

In-house banking-type operations have been set up by Volvo and Ericsson. MNE mini-banks do foreign exchange, investing surplus cash and borrowing. They also mediate the emergence of new financial instruments.

In general, the EFTA countries are more restrictive than Denmark in granting foreign banking practices. In the same study Rajan found no special restrictions on foreign banks operating in Denmark. The same was not true for the other countries.

Finland, for example, allows no foreign controlling interests in indigenous commercial banks.

Norway allows only representative offices and no foreign commercial banking, no foreign commercial branches, no equity interest in indigenous commercial banks and no controlling interest in indigenous commercial banks.

The same situation has been generally true in Sweden (table 68).

Table 68: Scandinavian countries' restrictions on foreign banks

	Restrictions not found	No foreign commercial banking except representative offices	No foreign commercial branches	No equity interest in indigenous commercial banks	No controlling interest in indigenous commercial banks
Sweden		X	X	X	X
Finland			X		X
Norway		X	X	X	X
Denmark	X				

Things are changing however. The process of deregulation of the finance industries has begun in Scandinavia. Soon the Swedish Parliament should pass legislation permitting direct foreign participation in Swedish banks. Two of Scandinavia's largest banks, Kansallis-Osake Pankki (KOP), Finland's leading bank and Sweden's Gotabanken recently announced plans to create a major new Nordic banking group. There will be cross-ownership between them via a holding company. They have agreed to co-operate in retail, corporate and investment banking and in data processing.

The two banks have a complementary international network, KOP being in New York, Moscow, Tokyo and Singapore, and Gotabanken in Peking, Shanghai and Bangkok. Both banks have offices in London and Luxembourg. The Swedish/Finnish project will involve the Swedish investment group, Proventus, which has a 44 per cent stake in the Gota group.

Norwegian and Danish partners might also eventually participate.

This Swedish/Finnish movement is in response to the wave of mergers and acquisitions occurring in the European finance industries. To an extent, it is a protectionist step anticipating a situation in 1992, where Scandinavia might be outside an increasingly protectionist inner market.

In Sweden the close relationship between the banks and the large industries resembles somewhat the Zaibatsu or feudal family structure in Japan involving the Mitsui and Mitsubishi groups and so on. In Sweden overlapping directorships within the Wellenberg group links into a sort of extended family framework.

The Norwegian finance industry will also soon be deregulated and it is anticipated that a great deal of capital can be mobilised through increased competition and improved products. It is also anticipated that Swedish banks and insurance companies will penetrate through mergers and acquisitions. Failures are also anticipated, as is a great deal of unemployment, especially amongst women who are strongly represented in Norway's financial industry workforce.

MINI CASE STUDIES

Scandinavian Airways (SAS)

SAS started in 1946 after the Second World War. It is headquartered in Sweden but owned by and serves all three Scandinavian countries. Finland is primarily served by Finnair, the national carrier. The CEO of SAS is Jan Carlzon, who has restructured the organisation of the airline significantly to reduce the number of desk and paper jobs and increase the number of customer contacts or direct-service uniform-wearing personnel.

Keeping with the Scandinavian tradition, the revitalisation of SAS occurred with retraining and reorganising the service nature of the firm - not lay-offs.

SAS has also introduced and developed the business class, a product which has also rendered it an industry leader.

Anticipating deregulation of the European air-transport system, SAS is seeking a global network to establish its operation outside Europe.

It grew well and reorganised during the "jet age" of the 1960s. In the 1970s the oil crises came and SAS diversified into hotels and charter airlines (Vingresor). The brunt of the oil crises hit SAS in the late 1970s at which time the company developed the niche of the business class.

In the early 1980s SAS began developing a complete air-transport service involving more integrated systems of hotels, car reservations, baggage handling and transport, etc.

The break point came in the early 1980s. The SAS fleet was ageing and the company lacked the liquid resources necessary to modernise the fleet. This is being solved by enlarging the company through a global system of co-operation with other systems. SAS has just opened new routes to China and recently begun merger discussions with the Argentinian national carrier, Aerolines Argentinas. They are also dealing at present with Continental and

with KLM. Deregulation of the European air-transport industry has prompted these merger talks. In recent years SAS has been involved in the evolution and design of improved administrative and handling systems at major airports like Copenhagen and the location of the new airport at Oslo.

Summary facts of SAS's operations are presented in table 69.

Table 69: SAS summary facts
(in millions of Swedish kroner)

	1982-83	1985-86
Turnover	12808	21585
Employees	24770	31775
Investments	391	4128

Personnel	Flight Deck	1258
	Cabin Crew	2279
	Other	16236
<hr/>		
	Total	19773
	Daughter Company	12002
	Total SAS group	31775
<hr/>		

Personnel in	Denmark	9232
	Norway	7948
	Sweden	8983
	Other countries	5612
	<hr/>	
	Total	31775

IKEA

IKEA is a private company began by Ingvar Kampman in Sweden.

IKEA makes simple Swedish-design furniture and has grown to a network of about 80 franchised retail shops in Europe, North America and Asia. Until 1985, 60 per cent of the products were still made in Sweden but there is a strong production movement towards Eastern Europe and Asia where production costs are lower.

IKEA has moved administrative operations to Denmark and Switzerland, and is rapidly opening franchise shops in the United States and Asia.

The company has grown rapidly and its success is based on good, basic, simple construction, Swedish-designed knock-down furniture which is easy to transport and easy to assemble, at mass market prices and with excellent innovative supermarketing techniques and immediate delivery.

IKEA is an intelligence-intensive operation and in fact is moving the industry with a young senior staff. IKEA is considered an industry leader, perhaps more for its innovative supermarketing techniques and excellent franchise system than for the furniture itself. The shops are well-designed, well-located, on the basis of a strong demographic approach and supported by a high-quality centrally produced catalogue and standardised pricing.

Volvo

Volvo in the 1970s experimented with and became known for attempts to improve the working life of the employees and the quality of the product by breaking down or restructuring the production line process.

Essentially in Sweden there is a well-developed social system and absenteeism grew rapidly amongst production line employees. As one Volvo official put it, in the early part of the century the workers were less educated and needed the jobs more. Now they get bored and walk off the jobs.

Volvo tried putting eight people in groups with all the processes and subcomponents for the final product at their disposal. These eight people should complete the product and work patterns between them were democratically organised. For example, if one wanted Wednesday afternoon off, the group would vote to rearrange the work schedule. Reports of this experiment show less absenteeism, happier workers and better quality control on the finished products. There was no clear evidence that the finished product took more or less time to complete than on the assembly line.

In the early 1980s Prof. M. Frankenhauser of Stockholm University began a project to identify and investigate the dynamics and parameters of working conditions, productivity and human values in the Volvo operations.

SKF rationalisation

In the present decade SKF have cut 20,000 jobs and closed plants in Australia, the United States, France, Britain and Sweden.

In 1981 the manufacturing operation of SKF Canada ceased to exist. About 600 people were out of work. Despite the fact that SKF controlled a considerable portion of the Canadian market and that overall Canadian operations were running at a profit, the manufacturing section was running at a loss and the plant was shut.

Production runs in Europe were increasing and SKF's Chief Executive Lennart Johansson said that SKF had realised its major European factories so that each made a major type of bearing thus reducing products' range and extending the length of the production runs. Transportation across national boundaries is an increasingly important part of the operation now.

Asea Brown Boveri (ABB)

The merger between the Swedish Asea and the Swiss Brown Boveri and Cie. (BBC) is Europe's largest post-war transnational merger (\$4.9 billion). The resultant company, ABB, is the world's largest heavy engineering group. The merger reduces the global competitors to four, ABB, Westinghouse, GE and Hitachi.

Brown Boveri was financially weak and seeking to diversify to reduce its dependence on electrical engineering. Asea had a wider spread of industries and was financially strong. Excluded from the merger is Asea's 49 per cent share of the votes and 10 per cent of the capital in Electrolux. Another motivating factor involves Sweden's phasing out of nuclear power stations.

The merger is not expected to be consummated without problems. Asea's Chief, Percy Barnevik, will run the combined operation and corporate cultural problems may emerge from the differences between Swedish and Swiss managerial methods and decision-making processes. Also, rationalisation will be strong. Head office staff at Asea was reduced from 1,700 to 200 and Asea was decentralised into many profit centres. English will be the company language. The affiliate at Mannheim lost 4,000 jobs and the BBC operation at Baden in Switzerland will lose 2,000 jobs within the next two years. Eleven thousand R & D jobs will be concentrated in Västerås, Baden and Heidelberg.

Officially the firm began on 1 January 1988 and is a Swiss company owned jointly by Asea and BBC.

The merger strategy is considered defensive, not aggressive, since it appears to protect what ABB does now. It is not innovative in the sense that no new products or services will emerge directly and immediately from the merger. It is expected, however, to lead to a restructuring of the industry.

As regards markets, Asea and Brown Boveri have roughly complementary geographical domains. Asea is in Sweden, Scandinavia, the Middle East and a bit in the United States. Brown Boveri is in Switzerland, the Federal Republic of Germany, Italy and Austria.

Tables 70 and 71 show the distribution of ABB's employment in Scandinavia and world-wide.

Table 70: Scandinavian employment, ABB

	Year end 31.12.87		
	Asea	BBC	Total
Denmark	1 767	2 236	4 003
Finland	8 967	263	9 230
Norway	10 446	4 113	14 559
Sweden	34 406	-	34 406
Switzerland	212	17 824	18 036

Table 71: World employment, ABB

	Average			Year end 31.12.87		
	Asea	BBC	Total	Asea	BBC	Total
Europe	57 443	73 022	130 465	64 335	71 854	136 189
Africa	50	1 832	1 882	49	1 942	1 991
North America	2 822	2 829	5 661	2 939	2 838	5 777
Latin America	2 321	7 923	10 244	2 229	8 529	10 758
Asia	3 979	5 439	9 418	4 111	5 175	9 286
Oceania	1 550	2 260	3 810	1 468	1 940	3 408
Total	68 165	93 305	161 470	75 131	92 278	167 409

Source: Asea Brown Boveri: Anatomy of a merger, International Metalworkers' Federation, IMF World Conference on Asea Brown Boveri/Westinghouse, Berne, Switzerland, 16-17 Aug. 1988.

Appendix Table I: Fortune 500 (1988), Scandinavian sample

Company	Sales Rank	Country
<u>Top 100</u>		
Volvo	30	S
Electrolux	49	S
Statoil	66	N
Asea	68	S
Norsk Hydro	69	N
Saab Scania	98	S
<u>Top 200</u>		
Neste	101	F
L.M. Ericsson	139	S
<u>Top 300</u>		
Stora	207	S
Nokia	209	F
SKF	218	S
KF Industry	267	S
Procordia	269	S
Sw. Match	276	S
Sv. Cellulosa	280	S
Trelleborg	290	S
<u>Top 400</u>		
Nobel Industries	311	S
SSAB	321	S
Sandvik Group	324	S
Esselte	333	S
Rauma Repola	342	F
Kemira	343	F
Enzo Gutzeit	359	F
Atlas Copco	361	S
Alfa Laval	371	S
AGA	391	S
VALMET	397	F
<u>Top 500</u>		
Metsa Serla	409	F
Kymmene	426	F
Mejeriselskabet	432	DK
Arla	445	S
A. Ahlstrøm	471	F
Carlsberg	485	DK
Kone	494	F
<u>TOTAL</u>		
	Sweden	20
	Finland	10
	Norway	2
	Denmark	2
		<hr/> 34

Appendix Table II: Imports from all countries
(in millions of US\$)

	1984	1985	% change
Sweden	26372	26287	- 0.32
Finland	12417	13242	+ 6.64
Norway	13883	15558	+ 12.06
Denmark	16607	18222	+ 9.72
Total	69279	73309	+ 5.82

Source: Nordisk Statistisk Arbok, 1987.

Note: Norway imports rose strongly from 1984 to 1985 (refer to table 12 in text).

Appendix Table III: Stopford's 1983 sample of
15 investigated Swedish MNEs

AGA
Alfa Laval
Asea
Atlas Copco
Electrolux

Fläkt
Ericsson
Granges
Saab Scania
Sandvik

SKF
Statsforetag
Svenska Cellulosa
Swedish Match
Volvo

Appendix Table IV: Example - Alfa Laval
(in millions of Swedish kroner)

	1977	1981	% change
Sales	4208	7273	72.8
% foreign	83	85 ↑	
% rest Europe	61	55 ↓	
Assets	5189	8066	55.4
Cap. expenditure	220	374	70.0
% abroad	30	45	
Amount abroad	66	168	155.0
R + O	155	260	67.7
Employees	17800	18500	3.9
Domestic %	39	40	
Foreign %	61	60	

Note: 60% of employees (foreign) produce 85% of sales (foreign).

Capital expenditure abroad growing double as fast as in home country:
155% versus 70%

45% of capital expenditure is abroad.

Appendix Table V: Employees of Fortune 500 group,
Scandinavian sample (1987)

Sweden	686 000
Finland	134 845
Norway	49 766
Denmark	18 835
	<hr/>
Total (34)	886 446
	<hr/> <hr/>

Appendix Table VI: Geographical distribution of employees and wages for Nobel

Nobel

	1987	Employees	Wages (S.Kr.)
Sweden		14441	1965
Denmark		433	80.7
Finland		117	20.9
Norway		200	36.1
France		502	76.9
Ireland		17	2.6
Italy		576	81.4
Netherland		34	5.4
Spain		156	22.3
United Kingdom		178	24.1
Germany, Fed. Rep. of		722	113.9
Austria		101	14.6
Belgium		12	4.8
Canada		82	12.4
United States		487	85.1
Kenya		34	5.4
Côte d'Ivoire		14	1.8
Other		25	5.1
Total ex. Sweden		3681	588
Total		18122	2553
Social costs			1054
Total			3607

Nobel summary

	1983	1987	% change
Sales (S.Kr. million)	4200	13950	232%
Capital exp.	200	1050	425%
Employees total	11200	18200	
Sales Sweden	2100	4758	
Exemployees Sweden	10200	14441	
Employees abroad	1000	3681	
Wages/ soc. costs.		2554	
		1054	= Kr.199/per employee

Capital expenditure 1957

Sweden	842
Nordic	10
Europe	133
NA	30
Other	18
Total	1033

Nobel sales

	1987		1986	
	S.Kr. m	%	S.Kr. m	%
Sweden	4758	34	4670	40
Other Nordic	1823	13	1623	14
Other Europe	3749	27	3017	26
NA	1094	7	626	6
Central + SA	279	2	351	3
Africa	120	1	64	1
Asia	2065	15	1070	9
Australia	32	1	114	1
<hr/> Total	<hr/> 13920	<hr/> 100	<hr/> 11535	<hr/> 100

Nobel

Sweden has 72.2% of and exports
79.6% of employees
81.5% of investments
76.96% of wages

Norway, Denmark and Finland have 4.14% of employees
5.39% of wage

Third World - Côte d'Ivoire has 2.152% of employee
0.94% of wages

: ratio Third World 0.436 wages/employee
Sweden 0.965 wages/employee

Production units abroad

13 in Sweden

United Kingdom	1
Norway	2
Netherlands	1
United States	1
Canada	1
Brasil	1
Denmark	3
Finland	1
Trinidad	1
France	2
Italy	3
Spain	3
Germany, Fed. Rep.	2
United States	3
Kenya	1
Ivory Coast	1
Belgium	1
Austria	2

+ sales offices in many countries

Nobel has also sales offices in:

Canada	Hong Kong
United States	Indonesia
India	Borneo
Australia	Greece
Singapore	Yugoslavia
Japan	Barbados
Taiwan	

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