



Foreign Takeovers in the Nordic Countries

1. Summary and Policy Recommendations



A report produced by
NIFU STEP, ITPS, VTT, DTU and RANNIS

Published by NIFU STEP, Oslo, January 2005

Financed by





Foreign Takeovers in the Nordic Countries
Summary report and policy recommendations

Siri Aanstad and Per Koch (eds.), NIFU STEP



Published by
NIFU STEP Studies in Innovation, Research and Education
Hammersborg torg 3
0179 Oslo
January 2005
www.nifustep.no

© NIFU STEP and its FOTON partners 2005
Cover photo © Photos.com

Version 1.2



The main objectives of FOTON are to study how foreign takeovers of firms in the Nordic countries affect local innovation capabilities and how this issue is approached by policy makers. FOTON is made up of three modules:

The first module is a statistical exercise providing an overall picture of foreign industrial ownership in the Nordic countries. A quantitative analysis of the effects of foreign ownership on firms' innovation performance is presented in FOTON report No. 3: *Corporate Innovation Activities - Does Ownership Matter?* Report No. 1 has a short overview of available statistics.

The second module consists of case studies of Nordic firms that have been taken over by foreign companies. To allow for inter-Nordic comparisons, takeovers within two specific industries have been selected: Pharmaceuticals and ICT. The main focus of the case studies is on how the takeovers have affected innovation capabilities, not only in the acquired firms but also – through these firms' linkages to local actors – in the surrounding innovation systems. Module 2 is presented in FOTON report No. 2: *Impacts of Foreign Takeovers in the Nordic Countries - what do the company case studies tell us?*

Module 3 studies policy developments of importance for foreign direct investments in general. The policy analysis is included in FOTON report No. 1: *Summary and Policy Recommendations*.

The reports can be downloaded for free from www.step.no/foton.

The FOTON team would like to thank the Nordic Innovation Centre for its support to this study. More information about NICE can be found at www.nordicinnovation.net.

The following researchers have contributed to FOTON:

NIFU STEP Studies in Innovation, Research and Education, Norway
Per M. Koch (Project Leader)
Siri Aanstad (Assistant Project Leader)
Sverre Johan Herstad
Amir Piric
Svein Olav Nås
Johan Hauknes
Marianne Broch
Nils Henrik Solum

VTT Technical Research Centre of Finland, Finland
Juha Oksanen (Team Leader)
Nina Rilla
Bernd Ebersberger

RANNIS, Iceland
Thorvald Finnbjörnsson (Team Leader)
Elva Brá Aðalsteinsdóttir

Swedish Institute for Growth Policy Studies, ITPS, Sweden
Anne-Christine Strandell (Team Leader)
Hans Lööf (KTH)
Magnus Frostenson (SSE)
Tommy Borglund (SSE)
Katarina Arbin (SSE)
Hans de Geer (SSE)

DTU Technical University of Denmark, Department of Manufacturing Engineering and Management, IPL, Denmark
Jørgen Lindgaard Pedersen (Team Leader)
Martin Tølle

Table of Contents

Table of Contents	iii
Index of tables and figures	v
Thanks	v
Executive summary	1
Main findings and policy recommendations	3
Globalisation and innovation	3
The systemic approach	3
Foreign takeovers: Good or bad?	4
Research questions	5
The statistical study	6
Results, the input side.....	9
Propensity to carry out innovation.....	10
R&D expenditures	10
Public R&D support	10
Embeddedness in the national innovation system	11
Results, the output side.....	12
Patent applications	13
Radical innovation	13
Innovation sales	14
Labour productivity	14
Reasons for takeovers.....	14
Consequences of takeovers	17
The heterogeneity of companies	18
Do we need a special policy for foreign takeovers?.....	19
Restrictions on foreign ownership	19
Foreign takeovers are not bad for the Nordic economies in general	21
The need for foreign investments	21
Possible conclusions	21
The Nordic countries as arenas for foreign investment	22
Policy recommendations	25
New Nordic innovation and investment portal.....	25
Strengthening public understanding of foreign investments	26
Improving framework conditions	26
The integration of foreign owned companies in the national innovation system	27
Policy analysis	29
Establishing key policy parameters.....	29
Regulatory environment	31
Non-regulatory measures.....	31
Additional parameters.....	32
Key policy parameters and their relevance and impact.....	33
Assessment for Denmark.....	34
Assessment for Finland.....	37
Assessment for Iceland.....	41
Assessment for Norway.....	44

Assessment for Sweden.....	47
Country rankings and values of the UNCTAD FDI Potential 2000-2002.....	50
Other relevant indicators	52
Policies targeting foreign direct investments.....	53
Denmark.....	55
Finland.....	56
Iceland.....	57
Norway.....	58
Sweden.....	60
Discussions on foreign industrial ownership.....	60
Denmark.....	61
Finland.....	62
Iceland.....	65
Norway.....	66
Sweden.....	68
Foreign controlled enterprises in the Nordic countries, a statistical survey.....	71
Globalisation of companies	71
Insufficient statistics	72
Indicators on globalisation	73
Big acquisitions in Sweden compared to other OECD countries.....	73
Services dominate international merger and acquisitions.....	75
Mode of entry in Sweden	76
Increased number of employees in foreign controlled enterprises.....	77
Foreign controlled enterprises generate most value added in medium high-tech industries	83
Highest productivity in foreign controlled enterprises.....	86
Conclusions.....	87
Improvement of statistics	88

Index of tables and figures

Figure 1 The value of inward merger and acquisitions in per cent of GDP, 1996-2002	24
Figure 2 What are the most important prerequisites for greater investment in Sweden the forthcoming 10 years?	49
Figure 3 The value of Inward Merger and Acquisitions in per cent of GDP, 1996-2002.....	74
Figure 4 The value of inward merger & acquisitions in the Nordic countries, 1996-2002. Current prices in MUSD. 75	
Figure 5 Number of employees in foreign controlled enterprises and their share of total employment in the business sector in Sweden 1990-2003.	77
Figure 6 Number of employees in foreign controlled enterprises in Sweden by country of origin 2003 and 2002.....	78
Figure 7 Number of employees in foreign controlled manufacturing enterprises in Finland 1995-2002.....	78
Figure 8 Number of employees in foreign controlled enterprises in Finland by country of origin 2002 and 2001.....	79
Figure 9 Number of employees in foreign controlled manufacturing enterprises in Norway.	79
Figure 10 Top five controlling countries in Denmark by share of value added in the business sector 1999 (%).	80
Figure 11 Share of foreign controlled enterprises' employment in total industries in Sweden 2003. (figure in not nice, should be replaced to be more in line with the previous ones)	81
Figure 12 Share of foreign controlled enterprises' employment in total industries in Finland 2002. Per cent. (This figure in not that nice either)	82
Figure 13 Share of foreign controlled enterprises' employment in total industries in Norway 2001.....	83
Table 1 Types or groups of firms included in the statistical study	8
Table 2 Corporate ownership and gap in engagement in innovation activities	9
Table 3 Corporate ownership and gap in innovation and economic performance.....	13
Table 4 Companies studied by FOTON.....	16
Table 5 Key policy parameters and their relevance and impact (R&I)	34
Table 6 Summary assessment for Denmark.....	37
Table 7 Summary assessment for Finland.....	40
Table 8 Summary assessment for Norway.....	46
Table 9 Summary assessment for Sweden	50
Table 10 A comparison of the Nordic countries by some indicators.....	53
Table 11 Value of worldwide inward merger & acquisitions by industry, MUSD.	75
Table 12 Number of foreign controlled enterprises by year of entry and mode of entry into Sweden.....	76
Table 13 Value added in the manufacturing industry by level of technological intensity in Denmark 2000, per cent. 84	
Table 14 Value added in the manufacturing industry by level of technological intensity in Finland 2000, per cent. ..	84
Table 15 Value added in the manufacturing industry by level of technological intensity in Sweden 2000, per cent..	84
Table 16 Share of value added in service sector generated in knowledge-intensive services 2000, per cent.....	85
Table 17 Definition of technological intensity	86
Table 18 Enterprises' productivity in Sweden 2002 and 2000.....	86
Table 19 The three biggest countries of origin investing in Nordic countries by number of employees.	87

Thanks

The FOTON team would like to thank the FOTON reference group, which has provided valuable information and advice to the researchers. The members of the group should not be held accountable for any mistakes found in these reports, nor for our policy recommendations, but they deserve much credit for their input.

The members are:

- Mark Riis, the Ministry of Science, Technology and Innovation, Denmark
- Isam Salih, the Ministry of Industry, Employment and Communications, Sweden
- Gabriel Benito, BI Norwegian School of Management, Norway
- Pentti Vuorinen, the Ministry of Trade and Industry, Finland

We would also like to thank the Nordic Innovation Centre for their support and their contribution to the development of a Nordic innovation policy knowledge base.

Executive summary

The debate on globalisation has led to an increased political interest in the effect foreign takeovers may have on national industrial development, employment and innovation. The FOTON project aims at answering the following question:

Are there any major differences between nationally owned companies and local firms taken over by foreign multinationals as regards capabilities for innovation and the interaction with other firms and institutions?

Hence the point is not to give an answer to the question of whether foreign acquisitions are good or bad for a country in general, but to what extent they influence learning and innovation in the relevant companies and the national economy as a whole. However, given the importance innovation has for economic growth and welfare development, our study should provide important input to the wider discussion as well.

FOTON has carried out the following studies:

- A statistical study based on data from the Community Innovation Survey and other sources
- Ten case studies of takeovers in the Nordic countries
- A survey of discussions and policies related to the issue of foreign direct investments

The main conclusion is that we find no clear differences between domestic companies and affiliates of foreign multinationals as regards innovation activities. Hence foreign companies are not more likely to be innovative than domestic companies.

However, *domestic* multinationals outperform foreign owned firms in terms of R&D investments in Finland and Sweden. In Norway domestic multinationals and Anglo-Saxon multinationals have significantly higher R&D intensity than other firms.

It seems that domestic multinationals are the main beneficiaries of public R&D support. Moreover, the domestic multinationals are also more closely embedded in the national innovation system compared to foreign multinationals, meaning that they are more likely to interact with other firms and institutions. This is important, as insufficient involvement in this area weakens the competence flow from the foreign-owned companies to the rest of the economy.

The FOTON team will argue that we see no clear behavioural patterns that justify discrimination positively or negatively against foreign owners.

Foreign-owned companies take part in international networks that might benefit other firms in the national innovation system. They may also bring

in capital that can be used for innovation. This calls for a policy that aims at attracting foreign investments.

Given that the framework conditions are favourable to foreign investments in the Nordic countries, we would argue that the best option for attracting more foreign owners would be to market these countries as innovation friendly and knowledge intensive countries. Thus the activities of the national “Invest in” institutions should be strengthened.

The Nordic Council of Ministers should consider establishing a new Nordic web portal, leading potential investors to relevant information and potential contacts.

Public opinion is probably not a strong impediment to foreign investments in the Nordic countries. The governments should nevertheless consider measures aimed at strengthening public understanding of the effects of such investments.

In general the Nordic level of corporate taxes is not excessively high. In countries where the corporate tax level is considered high, governments may consider adjustments. However, it could also be that foreign investors believe that Nordic tax levels are higher than they actually are. If that is the case, an active information campaign could be of help.

Foreign investors will normally look for the same favourable framework conditions as domestic companies. An enterprise friendly innovation policy will also encourage foreigners to invest these countries. Governments should, for instance, establish stable and transparent regulatory environments, encourage international activities in local knowledge institutions, and include languages and foreign culture in relevant curricula.

Furthermore, foreign companies should be encouraged to take part in publicly funded R&D and innovation projects.

Main findings and policy recommendations

By Per Koch and Siri Aanstad, NIFU STEP¹

Globalisation and innovation

One of the most important economic trends in the late 20th and early 21st century is the strong tendency towards increasing globalisation in trade. Cross-border trade is increasing due to free trade agreements and free trade areas. For small countries like Sweden, Iceland, Denmark, Finland and Norway this is very important, as these are small economies that are depending on international trade for their livelihood.

Internationalisation leads to harder competition. Companies that succeed globally are normally those that are able to keep up with the technological development, or – even better – those that are able to stay in front, developing new and improved products, processes and services.

This is why we see such a strong interest for innovation among policy makers. They know that their economies – and hence the economic foundation for any welfare policy – depend on the innovative capabilities of their companies. Hence it becomes a very important political objective to develop framework conditions and policy instruments that strengthen the development of innovative and profitable companies. After all, these are the companies that generate wealth and new employment opportunities.

The systemic approach

Innovation policies in the Nordic countries are all influenced by the so-called systemic approach to innovation. According to this view technological advancement and competence building is characterized by constant interplay and mutual learning between different types of knowledge and actors, including firms, institutes, universities, sources of financing, relevant public agencies, and more.

Accordingly, a national innovation system (NIS) is normally understood as the system of firms, knowledge institutions and other institutions that influence the innovative capabilities of firms. The premise is that the competences developed in one part of the system, may – directly or indirectly – influence the learning process in the firms that are part of that system by way of collaboration, the acquisition of goods and services, and other forms of knowledge and technology diffusion.

According to this way of thinking public authorities may encourage innovation by strengthening industrial learning and by developing efficient networks for the distribution of knowledge and personnel. The general

¹ This part of the report is based on all three FOTON reports. For literature lists, see the various chapters of the three reports.

framework conditions for innovation, including taxation, physical infrastructure, laws and regulations must also be taken into consideration.

However, politicians answer to their local electorate and most such policies are restricted to the national arena. Research on innovation and innovation policy is normally also limited to the national innovation system, i.e. the network of companies, institutions and regulations that shape the national economies.

This means that the globalisation phenomenon often falls outside their reach, including the development of multinational companies in general and foreign takeovers in particular.

It is important to keep in mind that according to the systemic view of innovation, which also underpins the FOTON reports, the company is the main arena for industrial innovation.

It is certainly true that many companies make use of universities and research institutions in their innovation efforts, but much innovation grow out of in-house activities. This does not mean that universities and research institutes are unimportant. Far from it: They often contribute indirectly through the production of new candidates, new knowledge and new methods. However, most commercial inventions are born in companies, which mean that modern innovation policies become increasingly more company centred as opposed to science centred.

This also means that company ownership may become an important factor. If ownership influences the innovative capabilities of firms and – consequently – the competence development in the national innovation system as a whole, policy makers must address the question of foreign takeovers.

Mergers and acquisitions

If a financial transaction leads to one party getting a controlling interest in another firm – i.e. more than 50 percent of the voting power – we count that as a takeover or acquisition.

A merger, on the other hand, is understood as a merger of equals – i.e. when two firms voluntarily and with relatively equal strength join within a common structure and under a common name.

Foreign takeovers: Good or bad?

The policy debate on foreign direct investment (FDI) is normally dominated by two scenarios.

The positive scenario looks upon FDI as a beneficial phenomenon. First of all FDI brings in money that can be invested in innovation. Secondly, local branches of foreign companies may bring in new competences, directly through the people who are working there, and indirectly by the fact that they have access to the knowledge base of the whole multinational

company. Through trade and cooperation with local companies, this activity will strengthen the national economy and the national innovation system.

Countries like Ireland have made it an important national objective to attract such investments, mainly in order to achieve the effects mentioned above. Admittedly, such policies have focused on attracting greenfield investments, i.e. the establishment of completely new operations on national soil, but they often also cover takeovers, i.e. foreign multinationals buying local companies. The argument is that takeovers are good for the national economy, again because they bring in fresh capital, the development of new competences and access to global networks.

According to the alternative negative scenario, foreign acquisitions may equally well have a negative effect on the knowledge base of a nation. The reasons for this may vary.

One argument is that multinationals may buy local companies in order to get access to their physical as well as human resources. As soon as a company has been acquired, these resources may be moved to the multinational's home country. The worst case scenario is that the local branch is closed down altogether.²

Another argument is that foreign companies may implement company policies that undermine the innovative capabilities of the local branch. Hence the need to keep company secrets may stop the local affiliate from interacting with other companies and knowledge institutions in the way it used to. This means that even if the local unit gets access to the knowledge base of the large multinational, it is not able to diffuse this knowledge into the national innovation system, and it will find it harder to interact with national partners.

The foreigners may also implement a system of governance that is alien to the local culture or that in other ways hinders innovation, creativity and collaboration.

Research questions

The main objective of FOTON is to find out how foreign takeovers in the Nordic countries influence the innovative capabilities of the acquired companies and of the innovation systems that surround them. Hence we would like to answer the following question:

Are there any major differences between nationally owned companies and local firms taken over by foreign multinationals as regards innovative capabilities, research and development, and interaction with other firms and institutions in the local innovation system?

² In a comment on the effects of international ownership on the Norwegian economy, Senior Officer (*førsteamanuensis*) at the Norwegian School of Management BI, Erik W. Jakobsen, says that we must take seriously the threat that foreign ownership may imply an outflow of strategic and competence intensive activities from Norway to the headquarters of transnational corporations. Newspaper article in *Dagsavisen*, published 07.05.02

If the answer is yes and it is the case that companies taken over by foreign multinationals are *less likely* to innovate and interact with the national innovation system, that might signify a need for a policy that (a) protects local companies from foreign takeovers or (b) a policy that encourages foreign multinationals to invest in local innovation and networking.

Alternatively, if the answer is that companies taken over by foreign multinationals are *more likely* to innovate and interact with the national innovation system, that might signify a need for a policy that encourages foreign multinationals to invest in local companies.

On the other hand, if the answer is no, there are *no significant differences* between companies taken over by foreigners and nationally-owned companies, one could argue that there is no need for a specific innovation policy in this area.

Please note that the FOTON team has focused on the effect foreign takeovers have on the innovative capabilities of firms and innovation systems. We have not focused on other possible positive or negative effects of such takeovers.

Hence we have not studied whether companies taken over by foreign companies in general are more likely to be closed down than companies taken over by local national companies, nor have we looked at any differences in the employment rate.

The statistical study

Our statistical study is based on data from the Community Innovation Survey (CIS), a questionnaire sent to companies all over Europe. Our statistical experts, led by Bernd Ebersberger and Hans Lööf, have made use of a large sample of over 5000 firm level observations in the five Nordic countries, Denmark, Finland, Iceland, Norway and Sweden.³

However, even given our access to these statistics, it is not easy to find definite answers to the question given above.

For instance: There exist no separate data on the innovative capabilities of firms that have been *taken over* by foreigners. However, most foreign-owned companies in the Nordic countries are the result of takeovers. Because of this we have chosen to use foreign ownership in general as a proxy for foreign takeovers, thus making it possible to answer the following question:

Do foreign owned firms perform better or worse innovation-wise compared to domestic firms?

³ For a more detailed presentation and references, see FOTON Report No. 3: Bernd Ebersberger and Hans Lööf: *Corporate Innovation Activities, Does Ownership Matter?*

There is another methodological problem: There is no way we can find out what would have happened if acquired companies had not been taken over.⁴

To give one example: If a company is closed down a few years after it has been acquired by a foreign multinational, this can be a result of the takeover. However, it could equally well be that the local company would have died anyway, due to e.g. market conditions.

If one reads the raw data – i.e. the data from the CIS survey as they are – the conclusion must be that companies taken over by foreigners are superior innovators. Compared to domestic firms, foreign-owned firms in the Nordic area are distinguished by having

1. a larger proportion of innovative firms;
2. a higher R&D intensity;
3. a higher level of innovation sales per employee;
4. a larger proportion of firms applying for patents;
5. a larger proportion of firms possessing patents;
6. a larger proportion of firms conducting R&D on a regular basis;
7. a higher export intensity;
8. a stronger focus on global markets;
9. more human capital in terms of well educated people as a share of total employment;
10. a higher level of labour productivity; and
11. a stronger dependence on sources of knowledge for innovation from other enterprises within the group.

However: firms taken over by foreigners are likely to be more innovative than domestic firms, because that is exactly the kind of firms foreigners are most interested in buying. They want to acquire R&D intensive firms in order to get access to their knowledge base and technologies.

Hence we cannot take these “facts” at face value, because the two groups of companies (foreign-owned vs. domestic) are not directly comparable. Because of this we have used various statistical techniques in order to increase comparability. Thus the study takes into account that differences in firm performance can be explained by factors such as firm size, business sector, human capital, physical capital, market orientation and more.

The FOTON researchers have also made adjustments based on the fact that innovative firms constitute a particular group of companies. So, even if the total sample is exploited, the main focus is on innovative firms.

Finally, we have decided to go beyond the foreign/domestic dichotomy, in order to capture other dimensions of the topic at hand. As a result the study covers the following company types:

⁴ See for instance Geoffrey Jones: *The Evolution of International Business*, NY 1996.

Table 1 Types or groups of firms included in the statistical study

Domestic firms (DOM)	Foreign-owned firms (FOR)
Domestic uninational firms (DU) Domestic companies that are not part of a multinational group	Nordic multinationals (NM) Danish, Finnish, Icelandic, Norwegian and Swedish owned companies (with the exception of local companies when analysing individual countries)
Domestic multinational firms (DM) Domestic companies being part of a domestically owned multinational group	Anglo-Saxon multinationals (ASM) UK-owned, US-owned, Irish, Canadian and South African corporate groups
	European and other multinationals (EOM) Rest-category dominated by European countries

The control group is the domestic uninational firms.

Table 2 Corporate ownership and gap in engagement in innovation activities

Gap	The importance of corporate ownership				
	Den	Fin	Ice	Nor	Swe
The likelihood to carry out innovation projects.				-DM	
Investment in R&D and other innovation activities per employee	-DM	+DM		+DM -NM +ASM	+DM
The probability of receiving public R&D support		+DM -NM -EOM		+DM	+DM
The embeddedness in the domestic innovation system.	+DM	+DM +NM		+DM	+DM
The embeddedness in vertical innovation system.	+DM	+DM +NM		+DM	+DM
The embeddedness in the horizontal innovation system.		+DM			+DM
The embeddedness in the scientific innovation system.	+DM	+DM		+DM	+DM +ASM +EOM
The utilization of knowledge for innovation from other enterprises within the group	+DM +NM +ASM	+DM +NM		+DM +NM +ASM +EOM	+DM +NM +ASM +EOM

The control group is uninational firms.

+ (-) indicates significant association at the 1% or 5% level of significance.

DM is domestic multinationals, NM Nordic multinationals, ASM Anglo-Saxon multinationals and EOM is European and other multinational.

Results, the input side

When adjusted for factors like firm size, sector, human capital etc. we get the following results (cp table 2). Note the important role of domestic, as opposed to foreign, multinationals.

Propensity to carry out innovation

For the Nordic region as a whole, we find that there are no differences between domestic and foreign-owned firms as regards the propensity to carry out innovation. Hence foreign companies are no more likely to be innovative than domestic companies.

Nor do we find any clear differences when we look at the individual countries, with the exception of Norway, where domestic multinationals – i.e. Norwegian companies with units in other countries – are less innovative than other firms.

R&D expenditures

In general multinational firms invest more in R&D than uninationals firms (i.e. firms with no units abroad).

The evidence is compelling that domestic multinationals outperform foreign owned firms in terms of R&D investments in Finland and Sweden, everything else being equal.

In Norway domestic multinationals and Anglo-Saxon multinationals have significantly higher R&D intensity than the control group of domestic uninationals, as well as Nordic multinationals and European and other multinationals.

Note that we have adjusted for the fact that foreign multinationals are more likely to be large and therefore more R&D intensive companies. One possible conclusion is therefore that the fact that a company is multinational – that is, that it controls assets in more than one country - makes it more likely to invest much in research and development.

Public R&D support

In general it seems that *domestic* multinationals are the main beneficiaries of public R&D support in most of the Nordic countries.

Among the firms that can be classified as innovative (i.e. that bring out new or improved products, processes or services) we find that domestic multinationals are much more likely to receive public R&D funding than the other groups in Finland, Norway and Sweden.

For Denmark and Iceland we find no significant differences between the five groups of firms.

It should not come as a surprise that multinationals are able to get access to public funding. These are often the kind of firms that make use of R&D to stay competitive on the world market. Being large firms they also find it easier to set aside resources for R&D projects and R&D collaboration, and the public agencies are more likely to trust their ability to carry out such research.

It is interesting to see the strong position of *domestic* multinationals – as opposed to foreign companies. The relatively weak position of the foreign companies does not have regulatory causes. Local branches of foreign multinationals have access to public R&D funding in the Nordic countries, as long as the local unit is registered as a company in the relevant country.

It could be that the foreign multinationals do not feel the same need for public funding as the domestic multinationals. If this is the case, this may not cause major problems for local units acquired by foreign firms. However, the national innovation system as a whole may suffer. If these units get less involved in publicly supported collaboration projects, there may be less interaction between them and other companies and knowledge institutions, weakening the diffusion of technology and competences.

It could also be that foreign-owned companies have not been able to build long term relationships with the civil servants in the public agencies, making it less likely that they ask for support and less likely that they get it. However, given that most of the foreign-owned companies have been taken over, this cannot be the main explanation, at least not if these national affiliates have a long history in the relevant Nordic country.

Another possible explanation can be that other institutions and companies loose interest in the acquired firm after the takeover, believing that the foreign owner will reduce R&D activities or that the owner will no longer be interested in collaborative projects or that. Some FOTON respondents have indicated that this might be the case. If the public servants get the same impression, these companies are less likely to be involved.

Embeddedness in the national innovation system

The fact that domestic multinationals are more successful as regards public R&D support rhymes with the fact that they are more integrated in the national innovation system than any other type of investigated firms.

The only group of firms that have the same presence as the domestic multinationals is Nordic-owned multinationals in the Finish innovation system.

We have divided the national innovation systems into three parts, in order to find out what kind of institutions the various company types are most likely to interact with.

As regards vertical integration – i.e. interaction with customers and suppliers in the same value chain – we find the same pattern as for embeddedness in the innovation system in general: Domestic multinationals are significantly more involved in vertical innovation collaboration than other firms. Again Finland presents a variation of this theme, as Finish and Nordic multinationals are most closely integrated along this dimension.

If we look at horizontal cooperation – i.e. collaboration with firms within the same industry (including competitors) – we find that domestic multinationals are much more likely to engage in such cooperation than other groups. In Denmark, Norway and Iceland we find no difference.

In Denmark, Finland and Norway domestic multinationals are also more likely to cooperate with the science system, i.e. universities and research institutes. In Sweden the domestic multinationals share this position with Anglo-Saxon multinationals and European and other multinationals.

We have not been able to subdivide foreign companies into different groups as regards Iceland. However, the pattern is the same as for Sweden: xxxx Domestic and foreign owned companies show the same tendency to cooperate with the science system.

Not surprisingly we find that other enterprises within the same company group play an important role as knowledge sources in domestic as well as foreign owned multinationals. This is most evident in the case of Denmark, Finland, Norway and Sweden.

Results, the output side

We have found that domestic multinationals play a dominating role as regards innovation activities and collaboration in the Nordic countries. The only exception is Iceland, where we see no clear pattern.

One likely conclusion is that being a multinational helps when it comes to innovation and collaboration with other parts of the innovation system. However, the fact that the company has its headquarters in the relevant country is equally important. Companies with a long local history are more likely to be deeply embedded in the national innovation system.

However, we must also look at performance indicators. A high innovation activity level should lead to higher output. As it turns out, we are unable to find a robust pattern confirming the superiority of domestic multinationals as regards output indicators.

In Denmark and Norway foreign firms seem to outperform domestic firms. We find no systematic differences in Iceland and Sweden, while Finish multinationals deliver a better innovation performance than other firms located in Finland.

One possible explanation for this is that domestic multinationals are using their home country for developing a technological capacity that is ultimately exploited by affiliates abroad. Correspondingly, the innovation and productivity performance of foreign owned multinationals can partly be caused by innovation activity carried out in their home countries.

Table 3 Corporate ownership and gap in innovation and economic performance

Gap	The importance of corporate ownership				
The probability to patent.	Den +NM +ASM	Fin +DM	Ice	Nor +NM +ASM	Swe +DM +ASM
Radical innovations	+DM +ASM	+DM +NM			+DM +EOM
The return on innovation investments (innovation sales)	+ASM	+DM			+DM +NM
The Economic performance (Labour productivity)				+NM	

Notes: Uninational firms are the reference group.

+ (-) indicate significant association at the 1% or 5% level of significance

DM is domestic multinationals, NM Nordic multinationals, ASM, Anglo-Saxon multinationals and EOM is European and other multinational.

Patent applications

Patents are by no means an unambiguous measure for innovation output. In many industries inventions are protected by other means, and companies may innovate without patenting. That being said, patents do give an indication of innovation awareness and the ability to develop new products and processes.

In both Denmark and Norway Nordic multinationals (i.e. foreign companies owned by Nordic neighbours) and Anglo-Saxon firms are more likely to apply for patents than other firms.

In Finland domestic multinationals have a higher propensity to apply for patents than other firms. It should be noted that this is not due to Nokia, as we have adjusted for company size.

In Sweden domestic multinationals and Anglo-Saxon multinationals are more likely to patent inventions.

Radical innovation

When we talk about innovation we normally mean products and processes that are new to the firm. What we are looking for is the companies' ability to change behaviour and do things in a different way, so that they are able to compete in a changing market. You do not necessarily have to do things radically differently in order to succeed.

For the economy as a whole, however, it helps to have companies that are able to bring out radical innovations – i.e. innovations that are not only new to the company, but also new to the market.

It is interesting to note that we have not been able to pinpoint any significant differences between foreign-owned and domestically-owned companies as regards the ability to bring forth radical innovations in Denmark, Finland, Iceland and Sweden.

In Denmark no differences in this respect can be found between domestic multinationals and Anglo-Saxon enterprises. In Finland domestic and Nordic multinationals have the same propensity to introduce innovations new to the market, while in Sweden domestic multinationals and the “European and other” category seem to be most radical.

Domestic multinationals, however, exceed the domestic uninationals in their ability to launch products that are new to the markets in Denmark, Finland and Sweden. Norway is the odd man out as neither the domestically-owned multinationals nor the foreign-owned companies show a better performance in launching radical innovations. Hence foreign ownership matters in different ways in different countries.

Innovation sales

There are definitely other incentives out there, but companies investing in innovation hope that this activity shall help them make a profit. Innovation sales are a gross measure on the return on innovation investments.

In our study we find no clear pattern as regards such returns. In Norway and Iceland we can actually detect no robust differences.

Anglo-Saxon firms seem to have the highest level of innovation sales in Denmark, while the domestic multinationals are the best performers in Finland. In Sweden Nordic multinationals seems to be superior to other firms.

Labour productivity

Existing research suggests that foreign owned firms generally have a higher productivity than domestic firms.

When we look at the Nordic countries as a group, however, we find no differences in productivity between foreign and domestic firms. There is one exception, Norway, where foreign-owned firms do indeed outperform domestic companies.

Reasons for takeovers

Companies may have various motives for taking over another firm. And companies may also have different reasons for actually wanting to be taken over.

Among the reasons pointed to in current research are:⁵

- the need for complementary products and a broadening of the product line;
- the need for competent owners/affiliates;
- the need for financially strong owners/affiliates;
- the wish to reach a critical mass (in order to invest in innovation, develop markets etc., i.e. economies of scale);
- the need for access to competence and innovation networks and clusters;
- access to global or local markets and distribution channels;
- access to a favourable regulatory environments (including tax systems);
- the need to monitor new technological development;
- the ability to generate entirely new technologies and products;
- the wish to acquire strong brands;
- the wish to increase shareholder value;
- the wish to eliminate a competitor;
- obtaining legitimacy for the organisation;
- using the takeover as a tool for introducing structural change in the organisation; and
- to get returns on investments (by selling stock).

In order to deepen our understanding of takeover processes, the FOTON teams carried out ten case studies of selected companies in the pharmaceutical and ICT industries. A selection of ten case studies is in no way representative for Nordic takeovers in general. They do, however, offer some insight into how such processes can take place in a Nordic context.

⁵ See Hans de Geer, Tommy Borglund and Magnus Frostenson: “Impacts of foreign takeovers – some findings from literature” in FOTON report No. 2; Sverre Herstad: “Theoretical perspectives on MNE organisation, strategy and subsidiary implications” in FOTON report No. 2; Bernd Ebersberger and Hans Lödf in “Brief review of the literature” in FOTON report No. 3; Juha Oksanen and Nina Rilla: “Case Findings – Overview” in FOTON Report No. 2.

Table 4 Companies studied by FOTON⁶

Country	Acquired	Acquirer	Sector	Takeover year
DK	DAK-Laboratoriet	Nycomed, Norway Amersham, UK, A group of investors	pharma	1991 1997 1999
DK	Datacentralen	CSC, US	ICT	1996
FIN	lobox	Terra Mobile S.A of Teléfono Group, Spain	ICT	2000
FIN	Oy Star Ab	Santen Ltd., Japan	pharma	1997
IS	Computer Knowledge Inc	Eastman Kodak, US	ICT	2000
IS	deCODE genetics, Inc ⁷	An Icelandic company with sites in the US	pharma	1996 (founded)
NO	Nycomed/Axis Diagnostics	Axis Shield Plc, UK	pharma	1999
NO	Zoomit	Kelkoo, France	ICT	2000
SE	Astra	Zeneca, UK	pharma	1999
SE	Internet AB ⁸	Deutchnet GmbH, Germany	ICT	1999

Among these companies we find that one very important reason motivating the acquired firms was the size of the Nordic markets. The national economies are small, and the financial resources available for expansion and growth are rather restricted.

The takeover of Norwegian Nycomed Diagnostics by the UK-based Axis Shield Plc could serve as an illustration. The company respondents doubted that they would have been able to find the risk capital needed for their radical product renewal in Norway. By merging with Axis Shield they got access to the London capital market.

The pharmaceutical Astra's decision to merge with British Zeneca was partly caused by the large investments needed to launch new pharmaceutical products on the world market. Many of the respondents noted that the acquired companies wanted to take part in international business, and becoming part of a larger conglomeration made that easier.

The Danish case company, Datacentralen, provides another reason for takeovers. The Danish government wanted to increase competition within the domestic IT sector by privatizing a publicly owned company.

One important reason for the sale of the Danish pharmaceutical company DAK-Laboratoriet was that the owner, the Danish Pharmaceutical Association, wanted to abandon its sensitive double role as a producer and retailer of pharmaceuticals in Denmark.

⁶ FOTON Report No. 2, Juha Oksanen & Nina Rilla (eds.): *Impacts of Foreign Takeovers in the Nordic Countries – what do the company case studies tell us?*, Oslo 2005

⁷ deCODE genetics Inc has not been a target of a takeover, but is a multinational company which has itself acquired companies both in Iceland in the United States.

⁸ The names of the Swedish software case company and the acquiring German company have been changed – or anonymized – by the FOTON team.

In our cases the acquiring multinationals seem to be motivated by the search for growth and new markets. US-based CSC had, for instance, a very weak presence in the Nordic countries before they acquired Datacentralen. Japanese Santen Ltd bought the ophthalmic unit of Leiras Oy in order to get access to the European markets.

The foreign multinationals were also looking for new products, platforms or production lines complementary to their own.

Consequences of takeovers

It is interesting to note that in general the acquisitions studied in the FOTON project must be considered successful, in that the local units continue to thrive after the takeover. All the pharmaceutical companies have achieved a more central position in the market after the takeover. The units have access to more resources and the number of employees has in some instances increased.

There are two possible exceptions to this rule: The selected Finish and Swedish ICT companies were closed down some time after the takeover. However, even here the ownership transfers cannot be considered totally negative. The previous owners made fortunes because of the sales, the staff got valuable international experience and some of them established new companies. Moreover, the two companies would probably not have survived, even if they had not been taken over.

The interaction between the mother company and the new affiliate varies a lot. Many affiliates have achieved an autonomous status within the multinational company. However, a general trend among “the FOTON companies” is an increasing demand for reporting on business performance. In general requirements made by the new owners have led to an upgrading of local business and innovation practices.

One should keep in mind, however, that any final judgments as regards the success or failure of a these takeovers require more in depth investigation. There is also the time perspective to consider. A takeover may seem a failure one year after the acquisition, but a success three years later – or visa versa.

Moreover, previous research presents a large number of failed takeovers, where the acquiring companies are unable to make use of the competences of their new employees, where new management practices kill local initiative, where local learning networks dissolve, in short: Where opportunities are lost.

In some cases too much energy can be devoted to integrating technologies and harmonising activities, in other cases too little is done to merge cultures. The transfer process and reorganisation may be traumatic for employees, dampening their creativity. On the other hand, a merger may lead to much needed reform and be liberating for local intrapreneurs.

But then again, this is the case in any merger or acquisition, domestic as well as international. This is an important point, as it raises the questions

whether there really is a need for a “foreign takeover” policy, or if policy makers rather should focus on the effects of mergers and acquisitions in general.

That being said international acquisitions pose special problems and opportunities, especially as regards culture and attitudes. Several of our respondents point out the difference in management styles between the Nordic unit and the mother company. Nordic workers may also interact in a different way than their American or Japanese colleagues, which may lead to conflicts and misunderstandings. Unless the foreign company is located in an English speaking country, there may also be a language barrier to overcome.

On the other hand: Cross-cultural collaboration is very often a stimulating and prejudice-bashing experience that may give birth to much creativity and innovation.

Another concern is that local innovation capabilities may be weakened due to the practice of transfer pricing in multinational companies. Transfer pricing refers to the strategic setting of prices for intra firm trade, which is to facilitate the concentration of profits in subsidiaries located in countries with favourable tax regimes. Thus, given the assumed high levels of company taxation in the Nordic countries, foreign takeovers may result in local firms being drained of financial resources. This may reduce their ability to invest in innovation enhancing activities which in turn may have a detrimental effect on the innovation capabilities of other local actors.

There is no available statistics that makes it possible to answer this question on an aggregate level. The FOTON teams did ask their case study respondents about this phenomenon, but found no evidence of this taking place to any large degree. However, due to the limited number of case studies, we can not draw any general conclusions based on these companies.

The heterogeneity of companies

If we are to sum up, the main lesson from the studies presented above must be that it is hard to make general comments about the effects foreign-owned companies have on the innovation system, or – rather – that there are no *significant and systematic* differences between foreign-owned companies and domestically-owned companies as regards innovation output, and only small differences as regards input and integration in the national innovation systems.

This should probably come as no surprise, as the group of foreign companies is very heterogeneous indeed, and as such individual companies will behave differently, also when it comes to innovation and research.

This heterogeneity can also be seen on an aggregate level, which is why we have divided the group of foreign companies into “Nordic”, “Anglo-Saxon”

and “Other”. As pointed out by FOTON researcher Sverre Herstad,⁹ there is a correlation between traditions of corporate governance and innovation practices.

One such dichotomy can be found between insider and outsider systems of ownership.

In the Continental European and Japanese traditions owners regularly have an insider position in the firm, meaning that they have first-hand information about what is going on and that they get more closely involved in the long term strategies of the company. Because of this these companies may find it easier to make long-term investments in R&D and innovation.

The Anglo-Saxon companies are more often characterised by highly fragmented and stock-exchange driven systems of corporate control. This system is dominated by smaller, non-committed investors, focused on short term company reports. Innovation is considered equally important, but the boards tend to focus on radical innovations that impress stock markets. In general these companies become focused on generic financial indicators as measures of success.

The point here is not to argue that one system is better than the other. As Herstad points out, both systems have their strengths and weaknesses. The important lesson is rather that it is impossible to make an argument that is equally true for all kinds of foreign companies.

If you ask whether foreign ownership is good for the national economy, we will have to ask back: What kind of foreign ownership? What kind of corporate governance are we talking about? And what kind of innovation activities are you looking for – short term investments, long term investments, incremental innovations, radical innovations?

Do we need a special policy for foreign takeovers?

It would be politically impossible to develop an innovation policy that discriminated against Anglo-Saxon, European or Japanese companies, based on a perceived need for one type of innovation.

Moreover, given that we can find no clear distinctions between foreign-owned companies and domestic companies as regards innovative capabilities in general, it is also unreasonable to develop a policy that discriminate against foreign investors per se, at least based on an innovation policy argument.

Restrictions on foreign ownership

Restrictions on foreign ownership do exist in the Nordic countries – mainly in strategic sectors such as public utilities, and natural resources like waterfalls and fish. However, during the past decades a common trust in the

⁹ See Sverre Herstad: “Theoretical perspectives on MNE organisation, strategy and subsidiary implications”, FOTON Report No. 2 (to be consistent cf. footnote 3)

benefits of inward FDI has given a generally low level of restrictions in the Nordic region as well as in the whole OECD area.

Both in Iceland and in Norway the governments seem to uphold the right to keep certain natural resources out of the hands of foreigners. One argument is that this generation has not the right to take these resources away from coming generations. Another argument is that fish or energy (waterfalls, mining, oil and gas) represent resources of vital interest to the future of the nation, and that they must be kept under national control for that reason.

We suspect that it will be very hard to uphold this distinction in the future and that the pressure from the EU and WTO ultimately will lead to its removal.

Moreover, we have no reason to believe that national control over these resources is needed from an innovation policy perspective. The Norwegian waterfalls were originally exploited by foreign investors, meaning that foreigners were the original innovators in this field.

On the other hand, national ownership does not necessarily preclude international investments in the related industries. It is the national *ownership* that is protected in the case of Norwegian waterfalls and offshore fields. Foreigners may get the right to exploit and make use of the national resources in question. Moreover, the energy sector is a good example of an area of the Nordic economies that has been radically liberalised during the last decade. The common Nordic energy area proves this. Still, foreigners – like national companies – may underinvest in innovation if they risk losing their extraction rights after a certain period of time or as a result of mergers.

The question of national ownership of vital resources is an issue that requires more deliberation. Some of the Nordic countries have already instigated such a debate. It is important that this debate is underpinned with a good analysis of the consequences foreign ownership will have for innovation in the relevant sectors. However, this is a task that goes far beyond this study.

In general participation in the European market and the WTO agreements makes it very unlikely that the Nordic governments can make it *harder* for foreign companies to invest in the Nordic area, especially in the way of regulations. If one accepts these free establishment principles, one must also live with the consequences.

This leaves only one efficient tool for ensuring national ownership, and that is state ownership of companies. The state can refuse to sell stock to foreign companies. This has been an argument for state ownership made in the Norwegian debate. The results are mixed. Government control of Statoil has clearly kept important parts of the oil and gas resources on Norwegian hands, but the government did not use its stock to stop Nordea from taking over Kreditkassen. Moreover, the idea of using state ownership as an active tool in a liberalised and global economy does not fit well with the neoliberal political hegemony today. Still, it should be noted that it is possible to use ownership as a tool in this respect.

Foreign takeovers are not bad for the Nordic economies in general

As mentioned above, the FOTON team has not looked into the effect foreign takeovers have on employment. However, we have no reason to believe that foreign companies are more likely to close down companies than others. Nor have we found any evidence for the hypothesis that foreign takeovers lead to a decrease in innovation activities in general.

If foreigners buy companies in order to get access to their knowledge base, it would normally make no sense to close down that knowledge base shortly after the takeover. These competences reside in the heads of local employees, and Scandinavians do probably not move that easily.

Hence, we find weak support for the proposition that foreign takeovers – in general – are “bad for you”, and we do not recommend that the Nordic governments in general should try to stop foreign companies from taking over national firms.

The need for foreign investments

On the other hand, one could argue that we need *more* foreign direct investments to compensate for weak national financial markets.

In general, the Nordic countries have well functioning venture capital markets. In Norway parts of industry do complain about a lack of capital, but this lack could be compensated for with public money.

Still, there are quite a few examples of Nordic companies that have gone looking for international partners in order to get funding for more large scale innovation projects. Several of our case study respondents report that the need for more capital was an important motivation for accepting a foreign owner.

In many cases foreign takeovers bring in much needed competences, including access to laboratories, complementary skills, networks of collaboration etc.

Hence, in quite a few cases and in many industries, foreign takeovers can be beneficial.

Possible conclusions

This line of argument leads to several possible conclusions:

1. Given that there are no clear distinctions between foreign owned and nationally-owned companies innovation wise, there is no need for a special policy targeting foreign ownership in general or takeovers in particular.
2. Even if there are no clear distinctions between foreign and domestic companies *in general*, foreign ownership does entail certain advantages for the innovation system as a whole, including access to

capital and corporate and international networks. There is therefore a need for policy measures that makes the Nordic countries more attractive for foreign investments.

3. According to the FOTON survey foreign companies seem to be less involved in the national innovation systems than domestic firms, which may lead to a suboptimal exchange of competences and technologies between these companies and the rest of the innovation system. Hence there is a need for policy measures that involves such companies more actively.

There are certainly valid arguments for alternative 1 above. Given that the Nordic countries have accepted open markets and thrive from taking part in a global economy, these countries have already done enough to attract foreign investments. Hence there is no need for a more pro-active policy.

However, if one accepts the heterogeneity of the innovation system, and the fact that different companies with different competences play different roles in the innovation system, one can clearly argue for the need of a policy that attracts foreign investments.

All the Nordic countries have small internal markets and the economies must rely on exports. In order to survive in the global markets, many of the companies need to grow in order to get the weight needed to invest in innovation and marketing. In many cases this means that they will have to establish strategic alliances, buy other companies or be bought themselves.

In this respect being taken over by a foreign company can be a good alternative. However, this means that foreign multinational must (1) know about the Nordic economies and (2) find them an attractive arena for investment.

The Nordic countries as arenas for foreign investment

In our chapter on policy analysis (p. 29) we have tried to make general assessments as regards the framework conditions for foreign investments in the Nordic countries. We have looked at the following parameters:

- the stability and transparency of the political, economic and cultural system;
- international legal obligations;
- formal restrictions on FDI;
- fiscal incentives and tax breaks;
- measures for pro-active investment promotion;
- access to public finance and instruments for facilitation;
- access to international markets;
- access to skills and expertise;
- access to finance;
- access to technological capabilities;
- access to networks and clusters;
- access to infrastructure; and

- cultural attitudes towards foreign investments.

According to these – admittedly subjective – assessments made by the FOTON researchers, the Nordic countries should in general be attractive for foreign investors. This is mainly because of very positive framework conditions as regards political stability and transparency, participation in international trade regulations, access to international markets, access to skills, expertise, and technological capabilities, access to infrastructure, as well as the existence of strong networks and clusters.

These countries are among the wealthiest in the world, and they are so for reasons that should be appealing, also for multinationals looking for a friendly harbour.

It should be noted that this FOTON assessment is in harmony by the latest version of UNCTAD's Foreign Direct Investment indicator. This is a composite indicator that is meant to give an indication of how attractive a country ought to be for foreign investors, given certain parameters. Among these we find factors such as GDP per capita, GDP growth, ICT infrastructure, commercial energy usage, R&D spending, tertiary education, risk factors, imports and exports, and the share of world FDI inward stock.

As most composite indicators, this one has its weaknesses, and the reader should definitely not read too much into smaller variations as regards national rankings.

According to this indicator all the Nordic countries must be considered FDI friendly, as they are all in the top 20 (out of 140 countries):

Position	Country
2	Norway
10	Sweden
13	Finland
15	Iceland
19	Denmark

Again, a very likely conclusion is that there is no need for a special policy in this field, as long as the Nordic countries continue to develop innovation and business friendly framework conditions.

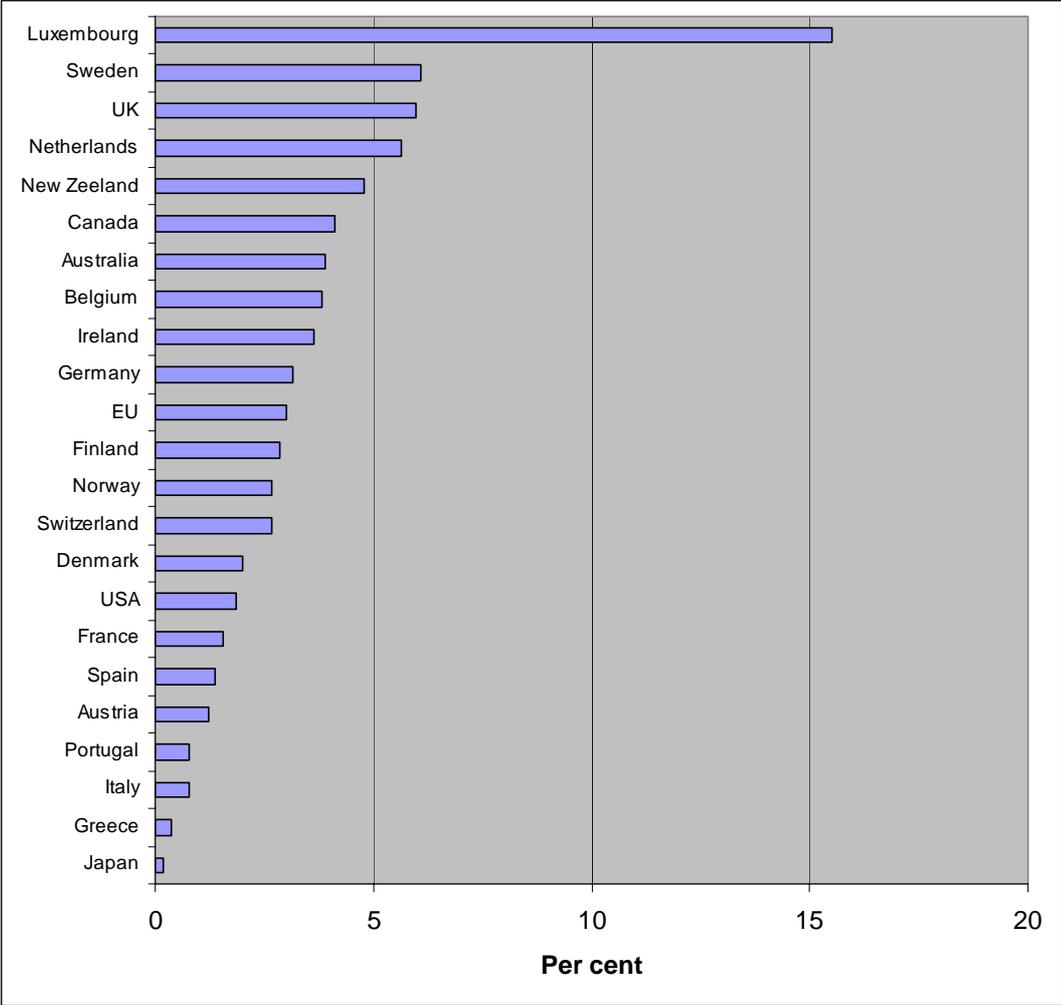
However, the fact that the Nordic countries are FDI friendly does not necessarily mean that they actually attract foreign investors. We must also find out to what extent foreigners actually invest in the Nordic countries.

The Nordic countries have experienced a large increase in inward foreign direct investment since mid 1990s, and the number of employees in foreign-controlled enterprises has increased significantly. In general it seems that the pattern of globalisation is about the same in the Nordic countries as in the other EU countries and in the US.

As can be seen from the figure below Sweden saw a large number of inward foreign acquisitions in the period 1996 to 2002.¹⁰ Finland, Norway and Denmark can be found near the average.

However, it is more than reasonable to compare the Nordic countries with nations like the Netherlands, New Zealand, Ireland and Belgium, which means that Norway, Denmark, and Finland should be able to attract more foreign investments.¹¹

Figure 1 The value of inward merger and acquisitions in per cent of GDP, 1996-2002



Source: UNCTAD, World Investment Report based on data from Thomson Financial Corporation and compiled by ITPS. OECD is the source for GDP.

¹⁰ The value of takeovers in Sweden reached a unique high level in 1999, which mainly can be explained by two very big acquisitions (AstraZeneca and Volvo Cars).

¹¹ We lack some data for Iceland, which makes it harder to give an assessment. For a more detailed introduction to foreign investments in the Nordic countries, see the appendix to this report.

Policy recommendations¹²

Given that the framework conditions are favourable to foreign investments in the Nordic countries, we would argue that the best option for attracting more foreign owners would be to market these countries as innovation friendly and knowledge intensive countries.

In practice this means strengthening national “Invest in” organisations – organisations given the responsibility of promoting foreign investments. With the exception of Norway all the Nordic countries have such organisations. Norway should establish one, or give Innovation Norway a clear responsibility in this area followed by additional funding.

To many foreigners, the Nordic countries look like one unified cultural area, which they to a large extent are. Because of this it would make sense to launch a Nordic initiative, profiling the Nordic or Scandinavian region as an attractive place for investments.

New Nordic innovation and investment portal

Very often it all boils down to a question of easy access to information. Hence we propose that the Nordic Council of Ministers consider the establishment of a new Nordic web portal, leading potential investors to relevant information and potential contacts. Such a web portal could contain information on:

- local culture;
- economic and regulatory framework conditions;
- knowledge institutions and educational systems;
- access to finance;
- public infrastructure and innovation policy measures;
- industries looking for partners;
- essential statistics;
- relevant public institutions, including the “Invest in” institutions; and
- public and private consultants.

Not all international investors and business managers are fluent in English. Hence it would make sense to present French, German, Spanish, Chinese and Japanese version of this portal as well – at least as regards the most essential information. The Nordic Ministries of Foreign Affairs and Ministries of Industry should be involved, as should innovation, research and trade related councils and agencies and the local “Invest in” organisations.

¹² These are the recommendations made by the FOTON research team. They should not be considered as recommendations made by the Nordic Innovation Centre, nor of the participating organisations.

Strengthening public understanding of foreign investments

A policy aimed at attracting foreign investments may be followed by measures aimed at strengthening the public understanding of the effects of such investments. Many citizens are not fully aware of the potential benefits of FDI and its importance for the economy, like – for instance – that FDI can provide jobs and boost economic growth, bring Nordic companies into global business networks, give local businesses access to the latest technologies, lift the competitiveness of Nordic businesses at home and abroad, and so forth. A public uproar against foreign takeovers may make the Nordic countries less attractive for foreign investors. In other words, there may be need for an information campaign that aims at giving the public a nuanced view of the benefits of – and the problems following – foreign investments in general and foreign takeovers in particular. This can be done by active campaigns targeting press representatives and the media. The relevant ministries could involve public and private innovation, research and trade organisations in this work

That being said, we do not believe that public opinion is a strong impediment to foreign investments in the Nordic countries at the moment. Some extraordinary cases, like the Volvo and Saab takeovers or Nordic bank mergers, will raise public debate, but in general foreign takeovers seem to be accepted as a normal business practice.

We would also like to add that any public campaign regarding foreign ownership must open minded and take serious objections into considerations. There are valid arguments against a policy promoting foreign investments, and there may indeed be people and companies that loose when some acquisitions take place. These voices must be heard.

Improving framework conditions

The Nordic countries are already considered good arenas for foreign investments. Still, there will always be room for improvement.

One area of particular interest is company taxation. Both in Finland and Denmark there have been a discussion on reducing taxes in order to make the countries more attractive for foreign investors. The Danish government has decided to lower the corporate tax from 30 to 28 per cent, putting it more on the level with the other Nordic countries.

Indeed, there is reason to believe that some investors will shun a country if taxes are too high. However, it could also be that foreigners believe that Nordic tax levels are higher than they really are. If that is the case, an active information campaign involving a web site like the one presented above as well as national embassies and trade delegations could be of help.

Foreign investors will normally look for the same factors as domestic companies, and innovation policy measures that make local companies thrive will normally also benefit foreign-owned companies. Among such measures are relevant R&D programs, administrative simplification etc. For

a further discussion of general innovation policy recommendation, see FOTON's predecessor, the GoodNIP project.¹³

The integration of foreign owned companies in the national innovation system

We have argued that foreign companies in general are as innovative as domestic companies, and that they may even be better than national companies as regards innovation output. However, it seems that they are not that closely embedded in the national innovation systems, and that they do not take part in public R&D programs to the same extent as domestic companies.

The foreign-owned companies may, of course, suffer for this, and given that they contribute to the national economy by way of employment and taxes, it should be in the national interest to get them more involved.

However, the main argument for proposing such a policy is that the participation of these companies will strengthen the diffusion of competences from these companies to domestic companies. By taking part in public R&D programmes these companies will interact with other companies and knowledge institutions, contributing to important national learning processes.

This argument also applies for participation in the EU Framework Programme. Having local branches of multinational companies on board will normally strengthen an application to the Commission. Such collaboration may also make it easier to improve the interaction between company affiliates in various countries, improving the flow of knowledge to the Nordic countries.

The point here is not to introduce some kind of positive discrimination of foreign-owned companies, but to make research councils and similar institutions more conscious of the need to involve foreign companies in research and innovation programs.

This often amounts to encouraging well known and trusted companies to involve foreign-owned affiliates in their applications and contacting R&D intensive foreign-owned companies that do not take part in such programmes.

This approach should be limited to programs and measures that encourage cooperation and interaction between companies, and between companies and knowledge institutions.

This approach can be combined with a clear strategy for investing in technologies, industries or disciplines that are of vital importance for the future development of the national economy, if these match the interest of foreign multinationals. This is especially important if the government wish

¹³ *Good Practices in Nordic Innovation Policies, Summary and Policy Recommendations*, Oslo 2003. The reports can be downloaded from www.step.no/goodnip.

to develop “new” technologies, i.e. technologies and activities that are not already present in the innovation system. The development of – let’s say – advanced biotechnology or nanotechnology could benefit from local representation of large international firms that can become developers as well as customers in this area.

Policy analysis

By Amir Piric, with contributions from the national FOTON teams

Establishing key policy parameters

Since the early 1980s, the world economy has seen a rapid acceleration in foreign direct investments (FDI). Among many things, growth in FDI has accompanied global specialisation, where companies search internationally for market opportunities where the quality and price of resources provide attractive returns.

More firms in more industries from more countries engage in FDI activity to exploit the comparative advantages of locating their operations in different countries. Participation in international markets, through investment as well as trade, is essential for many firms and national economies to continue to grow, and in this context virtually all countries now compete to attract or retain global enterprises.

Due to the significant role it plays in the world economy, FDI is often on the top of the policy agenda.

This is partly caused by the fear that foreign takeovers will weaken the national innovation system, by for instance leading to a transfer of national assets abroad or to a weakening of the innovation activities of the local units.

At the other end this interest is based on a perceived need for more foreign direct investments – i.e. funding – and knowledge transfer. Hence a foreign greenfield investment is considered a good thing, as it adds financial and human capital to the local innovation system. However, a foreign takeover may give the same effect, if the local unit survives the acquisition.

As argued elsewhere in these reports, the FOTON research does not indicate that foreign takeovers, *in general*, are more or less beneficial for the national companies that are taken over, than other forms of acquisitions.

Moreover, it should be noted that we have focused on the effects the takeovers have on the innovative capabilities of the local units and their surroundings. We have not looked at other effects of the acquisitions, like employment or national control of natural resources.

However, foreign takeovers may have a different effect than national takeovers. Hence a foreign takeover may strengthen the national unit's international network, while at the same time weakening its national collaboration. Whether the national innovation system is strengthened or weakened by this is hard to ascertain. The wide variety of foreign multinationals and national firms certainly makes it difficult to make generalisations in this respect.

Still, given the fact that Nordic firms are operating in small national markets, and thus are forced to go abroad if they want to expand, find more

capital or develop more extensive competence networks, we would argue that takeovers may be very beneficial for the national innovation systems. Hence, this aspect should be taken into consideration when governments develop national innovation policies.¹⁴

Regardless of the overall policy approach taken by different governments - i.e. active (FDI promotion) *versus* passive (FDI mitigation) or somewhere in between - there are several factors which can influence, either encourage or discourage, FDI on both demand and supply side.

It remains a bit unclear what actually constitutes an “optimal” set of policies for FDI, and almost every country needs to customise its policies in order to meet country-specific needs and aspirations. Based on research done by e.g. the World Bank¹⁵, OECD¹⁶ and UNCTAD¹⁷ as well as the findings in the FOTON project, it is possible to summarise some of the critical policy parameters that drive FDI, namely:

- Regulatory environment;
- non-regulatory measures; and
- additional factors (e.g. access to markets and access to skills and expertise).

The quantity and quality of the interface and interplay of these factors will largely determine the dynamics of FDI, including the configuration and impact it has on any given economy, both in terms of outcomes and related policy measures. The following discussion will introduce broad descriptions of the factors outlined above.

¹⁴ The following quote from OECD’s Policy Brief on *Foreign Direct Investment for Development*, the OECD Observer 2002, exemplifies common contemporary ideas about the effects of foreign direct investments:

“The overall benefits of FDI for developing country economies are well documented. Given the appropriate host-country policies and a basic level of development, a preponderance of studies shows that FDI triggers technology spillovers, assists human capital formation, contributes to international trade integration, helps create a more competitive business environment and enhances enterprise development. All of these contribute to higher economic growth, which is the most potent tool for alleviating poverty in developing countries. Moreover, beyond the strictly economic benefits, FDI may help improve environmental and social conditions in the host country by, for example, transferring “cleaner” technologies and leading to more socially responsible corporate policies. While FDI on the whole is greatly beneficial to the development process, it must be recognised that certain drawbacks (“costs”) may occur. These drawbacks arguably reflect shortcomings in the domestic policies of host countries, but important challenges may nevertheless arise when these shortcomings cannot easily be addressed. Potential drawbacks include a deterioration of the balance of payments as profits are repatriated (albeit often offset by incoming FDI), social disruptions as a consequence of accelerated commercialisation in less developed countries, and the effects on competition in national markets. Moreover, some host country authorities perceive an increasing dependence on internationally operating enterprises as representing a loss of political sovereignty.”

¹⁵ <http://rru.worldbank.org/PapersLinks/Policies-Attract-Foreign-Direct-Investment/>

¹⁶ http://www.oecd.org/searchResult/0,2665,en_2649_201185_1_1_1_1_1,00.html

¹⁷ <http://www.unctad.org/Templates/Page.asp?intItemID=2095&lang=1>

Regulatory environment

FDI is dependent on a supportive regulatory environment (both domestically and internationally) and business climate. The regulatory environment is critical to FDI as it affects costs (administrative and technical barriers) and the level of competition among firms, thereby impacting on firm efficiency. Good regulatory practice is therefore part of an integrated approach to FDI. In this context, four broad areas of the regulatory environment are important:

Stability and transparency of the system

A stable and transparent regulatory environment, including political and socio-economic stability, is often perceived as critical to investment decision-making. Instability and obscurity in the system can be very destructive and result in negative trends, such as negligible FDI inflows, corruption and overall insecurity among investors. Therefore it is necessary to make the regulatory system as stable and transparent as possible, preferably with little or no “red-tape”.

International legal obligations

Being part of a larger economic cooperation area, along with harmonisation and synchronisation of rules within parameters given by the European Union and World Trade Organisation, means that the space for policy manoeuvre is relatively limited, especially in the context of competition laws, labour laws, anti-trust laws and so forth.

Formal restrictions on FDI

FDI flows are evidently affected by the existence of formal restrictions on foreign ownership. Such restrictions may include majority domestic ownership requirements, obligatory screening and approval procedures as well as operational controls on foreign companies such as constraints on the number of foreign employees or board members.

Fiscal incentives and tax breaks

Fiscal incentives and tax breaks are types of regulatory measures that are often used to attract FDI. Ireland is a recent example of successful impacts of such policies. However, these types of policies are usually good in the short run, but less desirable in the long run as fiscal systems in principle are very static and often exhibit discomfort with highly dynamic measures.

Non-regulatory measures

Non-regulatory measures are often used as an integral part of pro-active investment promotion policies. They can take several different forms and shapes but the most commonly used measures are those which are actively seeking for foreign investors, usually through designated agencies. Sometimes these agencies are attached to diplomatic missions or embassies abroad.

Pro-active investment promotion

This type of investment promotion involves active promotion of a country as an investment destination through presentations in bilateral and multilateral fora. It is often used to identify and match investment opportunities and for undertaking customised market research (e.g. using sector strategies and taskforces as sources for research into industry value gaps and investment opportunities).

Facilitation and/or targeted grants

Facilitation is often seen as a form of “soft” measure whereby both central and local authorities aim at building investment relationships and networks between local firms and foreign investors. It also involves helping out foreign investors to obtain different environmental compliance permits and to provide guidance through regulatory requirements. Sometimes, so-called targeted grants are used in order to complete feasibility studies or risk analysis for both/several parties.

Additional parameters

FDI rarely takes place just because of a highly favourable regulatory environment or highly effective non-regulatory measures. Additional factors, such as access to markets, technological capabilities and/or highly skilled labour and expertise, are *primus inter pares* reasons why companies decide to invest in any given country.

Access to markets

This is perhaps one of the most commonly cited factors attracting FDI. Investors are constantly on search for new markets, including access to domestic and regional markets (such as the Nordic area and the EEA). The more open and integrated domestic market any given country has, the more likely it is going to attract foreign investors, especially “high-quality” FDI.

Access to skills and expertise

A wide range of skills and capabilities are critical to firms’ ability to pursue innovative and entrepreneurial opportunities. Highly skilled labour and presence of critical expertise are of pivotal relevance to foreign investors and it often happens that domestic firms get acquired by foreign firms because they have a skilful workforce and unique expertise.

Access to finance

FDI often takes place because there is a potential for attracting more investment and enlarging the pool of potential investors. This is in particular relevant if a foreign firm is keen to gain access to regional stock exchange markets.

However, given the small financial markets in the Nordic countries, the more likely motivation for a takeover is the local company’s need for funding or access to capital markets in larger countries.

Access to technological capabilities

Access to specific technological capabilities is often cited as one of the major reasons why foreign firms want to be present in a certain market and/or overtake a certain local firm.

Not surprisingly, access to technological capabilities is critical in many of the “new economy” areas, such as ICT, biotechnology and nanotechnologies. In addition, presence of significant S&T capabilities along with world-class research institutes is very important.

Access to networks and clusters

Networks and linkages between businesses, local and central governments, community organisations, institutions, customers and advisors are critical to the development of innovative and dynamic economic regions. In recent years foreign investors have been very keen on accessing, via takeovers, different clusters and networks, especially in high tech areas.

Access to infrastructure

Among many factors, firms rely on high quality infrastructure to produce goods and services, maintain contracts, and get products to markets on time and at the lowest possible cost. Hence foreign investors are keen to have a reliable supply of energy and high quality telecommunications and transport services in their host countries.

Cultural attitudes

The presence of supportive cultural attitudes - namely positive attitudes towards FDI, is often cited as critical to successful outcomes of FDI in any given country. Hostile attitudes and distrust may lead to withdrawal and a gradual disappearance of foreign investors.

Key policy parameters and their relevance and impact

Clearly, the relevance and consequent impact of policy parameters will differ among countries. The FOTON project has assessed the relevance and impact of different policy parameters in the Nordic countries.

These assessments have been made by the FOTON project teams and are based on their knowledge of the effects of foreign direct investments and related innovation policy issues and instruments. *Hence these are subjective qualitative appraisals presented for didactic purposes, and they must be treated as such.*

The idea behind these appraisals and the corresponding table is to give the reader a visualisation of the framework conditions that influence foreign companies' propensity to invest in a Nordic country.

The reader should keep in mind that success in this area does not necessarily require a “top score” along all dimensions. Some companies will consider some factors to be more important than others. Furthermore, strength in one area may compensate for less favourable conditions in another.

Furthermore, it is important to remember that innovation policies are not primarily developed out of concern for foreign investors, nor should they necessarily be so. There are other needs that have to be met, some of them also outside the area of innovation policy.

On the other hand, as has been repeated over and over again in the three FOTON reports, there is not necessarily a clear distinction between the behaviour and needs of foreign and nationally based companies. What is important for foreign multinationals may be equally important for national companies and nationally based multinationals. Hence to a large extent innovation policy strategies and measures aimed at stimulating business innovation in general overlap with potential measures aimed at encouraging foreign direct investments.

The results are presented in table 3-1. As can be read from the table, the *primus inter pares* policy parameters for the Nordic region as a whole are identified to be stability & transparency of the system, international legal obligations, access to skills and expertise and access to technological capabilities.

Table 5 Key policy parameters and their relevance and impact (R&I)

Nordic Countries						
		N	S	DK	IS	SF
Regulatory Environment	Stability and transparency of the system	4	4	4	4	4
	International legal obligations	4	4	4	4	4
	Fiscal incentives and tax breaks	1	2	3	1	1
Non-regulatory Measures	Pro-active investment promotion	0	4	2	3	1
	Facilitation and/or targeted grants	0	1	1	1	0
Additional Factors	Access to markets	3	4	4	2	3
	Access to skills and expertise	4	4	4	4	4
	Access to finance	1	2	3	2	1
	Access to technological capabilities	4	4	4	4	4
	Access to networks and clusters	1	4	4	4	3
	Access to infrastructure	3	4	3	2	3
	Cultural attitudes	3	3	3	3	4

Legend:

0	No relevance and impact
1	Insignificant relevance and impact
2	Low relevance and impact
3	Medium relevance and impact
4	High relevance and impact

Assessment for Denmark

In terms of the business environment, the Danish economy is very stable with a sound macro economic policy. Denmark is along with the other

Nordic countries traditionally ranked among the top countries with the most competitive economies in the world. Most recently in the *Global Competitiveness Report 2004-2005* released by the World Economic Forum, Denmark is placed as the 5th most competitive economy in the world.¹⁸ The country furthermore has a stable and international regulatory environment.

The political system in Denmark is fairly stable, although the current government to a higher extent than the previous ones are executing a bloc politic compared to the traditional wide agreements over “the centre”. An example of this is the so-called tax-freeze, which has limited the manoeuvrability of the legislators in the way that they cannot impose new taxes unless the same amount or more are released through other tax-breaks.

Furthermore, the current government has tightened the legislation towards immigrants and refugees. Internationally this has given Denmark a somewhat rightwing image that might influence the general perception of Denmark from a foreign investor’s point of view. It is hard to predict what will come out of the bloc policy especially if the majority shifts towards the opposition after a new election. One thing is clear; the political climate is less stable than in the preceding years.

Denmark has a high level of taxation as regards personal taxes. In the aforementioned *Global Competitiveness Report* the taxation regulations and the taxation level are pointed out as the biggest obstacles for doing business in Denmark.¹⁹ However, the corporate taxation is relatively low (30 per cent in 2004) and there is a low taxation for expatriates (25 per cent).²⁰ In 2005, the corporate taxation will be reduced to 28 per cent.²¹ In comparison, the EU14 average²² is 31,4 per cent, the OECD average 30 per cent and the EU25 average 26 per cent in 2004.²³

Concerning the non-regulatory measures, there generally is some focus on foreign investment initiatives in Denmark and the government encourages foreign investments. One of the pro-active initiatives is *Invest in Denmark* under the Danish Ministry of Foreign Affairs. In 2003, Invest in Denmark participated in 36 investment projects and created 781 jobs²⁴. An example of a more regional inward investment agency is Copenhagen Capacity, which is an investment agency for foreign companies that are interested in locating in the Danish capital region²⁵. In 2003, Copenhagen Capacity contributed to the establishment of 24 new investments in the region, which

¹⁸ The Global Competitiveness Report 2004-2005, The World Economic Forum, <http://www.weforum.org>

¹⁹ ”Nordiske lande har den bedste konkurrenceevne”, Berlingske Tidende, 14 October 2004, www.berlingske.dk

²⁰ www.investindk.com

²¹ ”Dansk Skat i mellemklassen”, Berlingske Tidende, 25. November 2004, www.berlingske.dk

²² EU15 minus Denmark

²³ Skatteministeriet, ”Oversigt over selskabsskattesatser i EU25”, 24 November 2004, www.skat.dk

²⁴ Invest in Denmark, ”You are looking at the best location in Europe... DENMARK”, www.investindk.com

²⁵ www.copcap.dk

led to almost 400 directly-created jobs and just over 350 indirectly-created jobs²⁶.

The geographical location close to the Nordic countries and the Baltic Sea Region gives access to markets of 24 million and 93 million inhabitants respectively. Moreover, the country has close proximity to the central EU market. In general the workforce is well-educated and international minded with good language skills. There is however, still room for improvements. According to the aforementioned global competitiveness report, Denmark scores a 16th place with regards to the number of people getting a higher education.²⁷

A wide range of sources of finance exist in Denmark, from public incentives and private investors to banks, venture capitalists, and the Copenhagen Stock Exchange. The technological capabilities are also among the top. The well-educated workforce enables a high technological capability. Special attention is given from the political system to certain areas such as nano-technology.²⁸ Other areas where clusters with leading R&D centres have emerged are within mobile telephony in North Jutland and the Biotech/Medico cluster in the so-called Medical Valley in the Øresund region.

The infrastructure in Denmark is well functioning both with regards to the physical infrastructure with good and extensive railroad and freeway networks and not least the ICT infrastructure. The latter is among the best with a high penetration of PCs and private Internet connections of which an increasing amount is via broadband. An early liberalisation within the telecommunication market has derived a competitive market with low data and telecommunication rates. In the recent IDC's Information Society Index, which measures the abilities of 53 nations to participate in the information revolution, Denmark was ranked as the top nation.²⁹

Finally, with regards to cultural attitudes the official attitude is positive towards foreigners and not least their investments. However, among some political parties and the general population there is emerging a less positive attitude towards "foreigners" at large. In the longer term, this can influence the attitude towards foreign ownership of Danish assets and takeovers of Danish companies.

²⁶ Copenhagen Capcity, "Annual Report 2003", p. 3, www.copcap.dk

²⁷ "Skatten er stadig det største problem", Berlingske Tidene, 14 October 2004

²⁸ Ministeriet for Videnskab Teknolog og Udvikling "Fokus på fremtiden, Nanoteknologi – resultat af faglig dialog", August 2004

²⁹ IDC – Press Release, "Denmark Displaces Sweden as Top Ranking Nation in IDC's Information Society Index", 2 November 2004, www.idc.com

Table 6 Summary assessment for Denmark

KEY PARAMETERS	
Regulatory Environment	
Stability and transparency of the system	Fairly good, stable & predictable Consistent rules and transparent processes
International legal obligations	Important Openness of the economy for FDI a self-evident requirement as an EU member country
Fiscal incentives and tax breaks	Fairly important Taxes still perceived as high among general population. Corporate taxation however is low.
Non-regulatory Measures	
Pro-active investment promotion	Moderate importance Investments agencies such as Invest in Denmark and Copenhagen Capacity promote Denmark with reasonable success.
Facilitation and/or targeted grants	Not important More or less absent
Additional Factors	
Access to markets	Very important Ideal geographical location in relation to the Nordic countries and the Baltic Sea Region as well as the close proximity to the central EU.
Access to skills and expertise	Very important Education system provides high quality labour International minded workforce
Access to finance	Important A wide range of sources of finance exist including a well-established market for venture capital
Access to technological capabilities	Very important The highly educated workforce derives high technological capabilities Political focus on nano-technology
Access to networks and clusters	Very important Special regions such as the Medical valley with high concentration of universities and medical industry and the mobile telephony in North Jutland.
Access to infrastructure	Important Well functioning infrastructure. Highly developed and penetrated IT infrastructure with low data and telecommunication rates
Cultural attitudes	Important Government supportive, public a bit reluctant Current attention and policies concerning foreigners establishes a somewhat negative attitude

Assessment for Finland

Finland's business environment has been rated in numerous international comparisons as one of the most favourable in the world. The national innovation system is generally working well even if there is always room for improvement. Also, the regulatory environment is transparent and predictable. The stable societal system including the welfare, health and educational system is seen as a major asset for Finland as a location for FDI.

Despite of the favourable business environment, Finland has succeeded to attract less inward FDI than many other EU or OECD countries. The volume of inward FDI in relation to annual GDP was in average 4,6 per cent between 1999 and 2001, whereas the EU average was 6,9 per cent in the same period. Finland is a net exporter of direct investment capital: The amount of outward FDI has been circa two times higher than inward FDI.

Policies towards foreign direct investments have changed substantially during the past twenty years. In the 1980s, restrictive policies on foreign ownership and FDI were still at place. The gradual liberalisation of national legislation on capital movements since the late 1980s was triggered by global economic and political trends and international legal obligations which Finland had engaged in. The European integration process and Finland's accession to the EU in 1995 gave the final thrust for the abolishment of the remaining controls on FDI and foreign ownership, including acquirement of real property. The international ties were further strengthened by Finland's decision to join the Euro-zone among the first ones from the beginning of 2002.

Fiscal incentives and tax breaks for FDI have traditionally not belonged to Finland's policy toolbox even if there is a fixed-term tax scheme for key staff members immigrating from abroad. This scheme is however rather insignificant because of too strict requirements set for eligibility (on average, the scheme has covered 150-200 people per year) and there is identified a need to reform the scheme. Instead, foreign owned companies are eligible for government incentives on an equal footing with Finnish-owned companies. The adopted policy can be crystallized as follows: Finland does not compete for investments in terms of company subsidies or tax concessions but on the ground of the business environment available and country specific strengths. The chosen policy guideline emphasises a non-discriminatory approach towards domestic and foreign owned firms alike.

Overall, the legal and fiscal environment in Finland is stable and do not discriminate against foreign owned companies. The current corporate tax rate is 29 per cent which is the same as the capital gains tax rate. Finland applies the so-called "avoir fiscal" system in eliminating the double taxation of company income and dividends. The taxation of personal incomes is progressive and the marginal tax rate is internationally, if not in the Nordic terms, high.

In recent years, a re-emergent theme in the public discussion has been the demand for more thorough regulatory reforms in relation to taxation. In late 2003, the Government presented its plan to reform company and capital income taxation. The reform aims to reinforce the international competitive position of the Finnish tax system which, in turn, should promote companies' investment, growth and their capacity to generate employment. A main item of the reform is a reduction of the corporate income tax rate by 3 percentage units to 26 per cent, as well as a reduction of the capital tax rate by 1 percentage unit to 28 per cent. Besides changes in the tax rates, the government plan includes a more profound reform of company and capital income taxation including taxation of dividends and the abolishment of the "avoir fiscal" system. The reform of company and capital income taxation is scheduled to come into force from the beginning of 2005.

In the current tax legislation is an item which in some instances has discriminated against foreign investors investing in Finnish venture capital funds in comparison to domestic investors. The majority of equity and venture funds in Finland have been organised as limited partnerships (kommandiittiyhtiö) in which the management company acts as the general

partner. This has facilitated limited liability and tax transparency for domestic investors. In accordance with the law, however, foreign corporate investors investing in the limited partnership may be deemed to have a permanent place of business in Finland and therefore subject for taxation. The Government has announced its plan to ensure the equality of foreign and domestic investors in Finland which in practice means an amendment to the tax law. The timeline for the revision is not yet announced.

In Finland, globalization has so far been characterised by a strong orientation outwards. The development of internationally competitive products, services and innovations and the promotion of export efforts of domestic firms have had a central position in national policies. Concurrently, the large domestic companies have rapidly increased their activities and production abroad. Promotion of inward foreign investments on the other hand has not belonged to central issues in policy-making. One of the few existing initiatives is the Invest in Finland bureau, which is a national organisation promoting foreign direct investments in Finland.³⁰

Continuous investments in education and technology development as well as in the development of national and regional innovation environments have had a key role in increasing Finland's attractiveness as a business location in recent years. Finland presents itself outwards as a world-class centre of knowledge and expertise which offers a viable location for international research and development investments. The ICT sector, the forest industry and associated branches are most often named as national strengths which also attract foreign investments. The potential risk/possibility of subsequent foreign takeover when investing in R&D and the development of expertise and know-how is an accepted part of the game.

In general, foreign ownership is not seen as a threat among Finnish decision-makers nor among the public. This does not mean, however, that critical voices would be non-existing. On the contrary, in the public debate concerns about the impacts of foreign ownership typically emerge whenever a major acquisition or merger of a domestic firm takes place. The official policy adopted is however pro FDI. This is well illustrated in the following excerpt from the Ministry of Trade and Industry's 2004 report on policy guidelines for foreign investments: "from perspective of competitiveness of national economy it is more fundamental where the companies locate, expand activities and increase manpower than who owns the companies".

³⁰ <http://www.investinfinland.fi>

Table 7 Summary assessment for Finland

KEY PARAMETERS	
Regulatory Environment	
Stability and transparency of the system	Stable societal system (incl. welfare, health and education) and transparent legislation key national assets Cons: smallness, language etc.
International legal obligations	Very important Openness of the economy for FDI a self-evident requirement for the EU member country
Fiscal incentives and tax breaks	Insignificant A tax concession scheme for key staff members immigrating from abroad The scheme defined too narrowly today Personal taxes perceived high in int. comparison
Non-regulatory Measures	
Pro-active investment promotion	Insignificant if not non-existent Invest in Finland full-time engaged with, but under-resourced in int. comparison Need to strengthen co-operation between public organisations A few municipal agencies promoting investments Proactive stance needed from regional actors to attract investments fitting well with local expertise and know-how
Facilitation and/or targeted grants	Non-existent Foreign owned companies, however, on a par with domestic firms in use of public support measures Particularly R&D intensive foreign owned firms welcome in research & technology programmes
Additional Factors	
Access to markets	Very important Finland as a base for domestic market and neighbouring areas within Baltic Sea rim (Russia, the Baltic countries) and the EU markets
Access to skills and expertise	Very important Continuous investment in highly qualified work force Access to R&D funding and domestic innovation environment
Access to finance	Insignificant Same financial channels available as for the domestic firms Foreign owned companies have good knowledge of international finance market
Access to technological capabilities	Very important (see Access to skills and expertise above)
Access to networks and clusters	Currently medium R&I, but so far, under-utilised Could be used more consciously in promotion FDI Mutual gains for domestic networks/clusters and foreign owned firms (learning etc.)
Access to infrastructure	Very important Well working domestic innovation environment a major selling argument Logistics, Finland as a gateway to Russian and the Baltic countries' markets Long distances a hinder
Cultural attitudes	Important Official policy positive and open towards FDI and foreign ownership Procedures for work and residence permits too rigid and slow Prejudices still exist against foreigners

Assessment for Iceland

Iceland has a long tradition of political stability and democratic government. The civil code is closely related to Nordic laws and regulations and largely harmonized with the European legal system. It has been a clear policy by the Icelandic government to facilitate competitiveness of the national industries, resulting in Iceland being ranked number one of European countries in terms of competitiveness in the IMD World competitiveness yearbook 2004.³¹ The main strengths are governmental efficiency, a strong societal framework, a strong domestic economy and high business efficiency, due to strong flexibility and people's adaptability.

The Icelandic government has managed to make the environment of doing business in Iceland much better than it used to be. Framework conditions are in many cases better than abroad. The tax system has been made more transparent, and the company income tax rate at 18 per cent is among the lowest in Europe. Many taxes, such as property tax, have been abandoned as have various costs related to doing business. The interest rate is lower than it has been for quite a long time but still not yet competitive to other countries.

Iceland is an active participant in international organizations such as the OECD, WTO and the European Economic Area (EEA). This means that Icelanders are rather well aware of the development of economic procedures abroad, despite the geographical distance from the major markets in Europe in the south and east and America in the west.

Since the beginning of 1995, in accordance with the EEA agreement, capital movements have been fully liberalized, with the exception of certain restrictions that apply to foreign direct investments in fisheries and fish processing, energy production and distribution, and aviation companies. Foreign exchange controls have been fully abolished in Iceland since 1995, although the Central Bank is authorized to impose temporary restrictions on capital outflows in the event of exceptional circumstances. This has never been done, however.

Non-residents may invest in a business enterprise in Iceland with some limitations, which are stipulated in the Act on Investment by Non-Residents in Business Enterprise or in specific legislation, and upon the fulfilment of other conditions and acquisition of licenses required by law. Under the European Economic Area Agreement, investment in Iceland by EEA residents is in principle free, but a few exceptions were negotiated in specific fields considered to be of national political importance.

New foreign enterprises operating in Iceland that set up a branch or subsidiary are obliged to register with the Register of Limited Companies, and for others than residents of the EEA/OECD countries, certain requirements are made regarding minimum number of board directors resident in Iceland. EEA residents do not require work permits or residence permits.

³¹ see <http://www01.imd.ch/documents/wcc/content/ranking.pdf>

Restrictions on investment by foreign entities in fisheries are the only ones that apply to EEA residents. They have the purpose of protecting the nation's exclusive rights to the fishing grounds around Iceland. Only the following may conduct fishing operations within the Icelandic fisheries jurisdiction or own or run enterprises engaged in fish processing³²:

- Icelandic citizens and other Icelandic entities;
- Icelandic legal entities wholly owned by Icelandic entities or Icelandic legal entities, which are:
 - Controlled by Icelandic entities;
 - not under more than 25 per cent ownership of foreign entities (up to 33 per cent in certain circumstances);
 - in other respects under the ownership of Icelandic citizens or Icelandic legal entities controlled by Icelandic entities.

Only Icelandic citizens and other Icelandic entities, as well as individuals and legal entities domiciled in another member state of the European Economic Area, are permitted to own energy exploitation rights as regards waterfalls and geothermal energy for other than domestic use. The same applies to enterprises, which produce or distribute energy. The maximum total shareholding owned by non-residents (except residents of a country that is a member of the European Economic Area) in Icelandic airline companies is 49 per cent. Special permission must be applied for from the Minister of Commerce in the case of investment in Icelandic enterprises by foreign states, foreign municipalities or other foreign authorities involved in enterprises.

Broadly speaking, Iceland does not offer direct subsidies for business investment. Its prime incentives lie in the favourable environment for businesses in general, including low corporation tax at 18 per cent, competitive labour costs and payroll costs, and low electricity prices. Industrial sites are available around Iceland at competitive cost. Local communities may offer certain further incentives. As a member of the EEA, Iceland has access to EU research funds for R&D programmes and joint ventures undertaken with companies from at least one other EEA country.

Iceland has however established a special tax concession for international trading houses which can be established and registered in Iceland to perform business in their own name with foreign parties outside the country. Those companies pay corporate tax of only 5 per cent instead of 18 per cent. Further special incentives are granted for film and television production in Iceland. These projects can get back certain cost of the production until 2006.

³² Fish processing means any processing that preserves marine products from decay including production of fish oil and fish meal, but does not include further processing designed to render products more suitable for distribution or consumption. Canning of seafood, however, is open to foreign investment.

In 1995, the Invest in Iceland Agency was established as an independent agency under the Ministry of Industry. The main task of the agency is to attract foreign direct investment to Iceland and assist foreign companies. This is a “one stop shop” for foreign investors. The agency has been efficient in publishing material about Iceland as an investment alternative.³³

With regards to other factors relevant to inward FDI, Iceland has a well-developed infrastructure with technological and education infrastructure as the main strong points. The country has a skilful and well educated workforce. University education is among the highest in the world and university studies abroad are very frequent. This enables the Icelanders to use experience from different parts of the world to solve problems at hand. Iceland has moreover developed a very prominent system of life long education, a system that EU considers among the best in Europe.

The cultural attitudes towards foreign industrial ownership in Iceland are generally positive. All in all, both the government and the public are supportive of inward investments. However, better communication of the benefits of FDI is needed.

³³ see <http://www.invest.is/>

Table 4 Summary assessment for Iceland

KEY PARAMETERS	
Regulatory Environment	
Stability and transparency of the system	Very good, stable and predictable Consistent rules and transparent processes Some restrictions on FDI non-residents
International legal obligations	Important, especially EEA regulation Restrictions in fisheries, energy & aviation More openness is needed (e.g. aviation)
Fiscal incentives and tax breaks	Special tax concessions for international trading houses and film and TV production Low corporate tax Better communication of tax rules is needed
Non-regulatory Measures	
Pro-active investment promotion	Important Active promotion through Invest in Iceland Diversification of promotion is needed
Facilitation and/or targeted grants	Facilitation partly achieved through Invest in Iceland Absence of targeted grants Better coordination is needed
Additional Factors	
Access to markets	Important Access to Scandinavian and EU markets Better communication of opportunities
Access to skills and expertise	Very important Education system provides high quality labour Better liaison with firms is needed
Access to finance	Less important Small local financial market Better communication on financial constraints
Access to technological capabilities	Very important Good S&T capabilities Enhancement of S&T capabilities is needed
Access to networks and clusters	Less important Critical to expansion and building networks Better communication on clusters is needed
Access to infrastructure	Important Very good maritime cargo facilities Further infrastructure improvements needed
Cultural attitudes	Important Government and public supportive Better communication on benefits is needed

Assessment for Norway

In terms of the business environment, investment conditions in Norway are generally favourable. The country has an open, stable economy with no foreign exchange controls and a sound macroeconomic policy. After a series of cuts over the past two years, the key interest rate of the central bank is currently 1,75 per cent. The corporate tax rate is 28 per cent which is below

the EU15 average at 31,4 per cent.³⁴ Norway furthermore has a stable political system, and generally runs transparent, non-discriminatory rules.

Along with Iceland, Norway is the only Nordic country who has not joined the EU. As a party to the European Economic Area (EAA) Agreement and a member of international organisations such as the OECD, WTO and IMF, the country is however firmly integrated in the international system of rules regulating investment and trade.

In accordance with the EEA agreement, foreign nationals and foreign owned companies are free to acquire real estate in Norway as well as shares in Norwegian companies without any government interference. This is however a fairly recent development. In 1995, the Law on Industrial Acquisitions (*Ervervsloven*) replaced the relevant paragraphs in the Concession Law of 1917 (*Industrikonsesjonsloven*) under which foreign acquisitions of real estate or shares of companies holding rights to real estate in Norway required a government concession.

Under the new law, the concession requirements were replaced by a reporting system which required any acquisition of more than one third of a Norwegian company - by foreign and Norwegian actors alike - to be reported to the government. The Law on Industrial Acquisitions was abolished in 2002.

While this meant that there no longer existed any general regulations of foreign industrial ownership in Norway, restrictions still apply in specific areas of the economy. FDI is e.g. prohibited or restricted in basic utilities, the arms industry, waterfalls, mines and in areas where the government holds a monopoly, such as retail sales of wine and spirits.

The EFTA Surveillance Authority (ESA) has recently questioned the Norwegian restrictions on ownership of waterfalls (*hjemfallsretten*). As a result the Government in April 2003 established a Commission for the Reclaiming of Property Rights (*Hjemfallsutvalget*). The Commission delivered its green paper in November 2004 (NOU 2004:26 *Hjemfall*). The mandate was rather restrictive, as it was clear that the government wanted a continuation of existing regulations. Because of this the Commission was asked to consider the effects of an abolition of the relevant paragraphs.

The majority of the members of the Commission argued for the need for exceptions in this area. They argued without these regulations (*hjemfallsinstituttet*) future generations will not be able to uphold basic national control of natural resources.

Fiscal incentives and tax breaks for FDI are currently absent from the Norwegian system. In terms of non-regulatory measures such as pro-active investment promotion and facilitation along with targeted grants, Norway has taken rather passive approach and these measures do not feature in the current policy. Like its Nordic neighbours, the country did establish a

³⁴ European Communities, *The structures of the Taxation systems in the EU*, Luxembourg: Office for Official Publications of the European Communities, 2004,
URL: http://europa.eu.int/comm/taxation_customs/resources/documents/structures_2004_final.pdf

government agency for the promotion of inward FDI in the 1990s. The Invest in Norway agency was however closed down after only a few years, following an internal evaluation which concluded that the results achieved did not match the a priori expectations nor the resources used.

It appears that access to the Norwegian market and consequently to the Scandinavian and European markets - not just in a geographical context but also in terms of competition and free trade access - plays a very important role in attracting FDI to Norway. With a highly developed infrastructure and advanced communications, it is possible to run European scale operations from almost any corner of Norway and easily access markets of neighbouring countries.

As a direct outcome of the country's high quality educational system, access to skills and expertise ranks highly among the factors that make Norway an attractive location for FDI. The same goes for access to technological capabilities, including world-class research institutes and universities. This is especially a feature of high tech industries, and to the lesser extent traditional industries.

In terms of cultural attitudes vis-à-vis FDI, there seems to be some variation between the public and political opinion. While the general public tend to view foreign ownership as a threat to national interests, policy makers are generally less categorical. The fear of losing control over national resources is no doubt present, but FDI is at the same time acknowledged as an important source for inflows of capital, technology and competence.

Table 8 Summary assessment for Norway

KEY PARAMETERS	
Regulatory Environment	
Stability and transparency of the system	Very good, stable and predictable Consistent rules and transparent processes Needs better external communication
International legal obligations	Important, especially EU regulation Vis-à-vis WTO, still in adjustment phase More openness is needed (e.g. agriculture)
Fiscal incentives and tax breaks	Insignificant, very little impact Taxes still perceived as high Better communication of tax rules is needed
Non-regulatory Measures	
Pro-active investment promotion	Non-existent Currently is irrelevant Better promotion through Innovation Norway
Facilitation and/or targeted grants	Non-existent Absent from central and regional development Better coordination is needed
Additional Factors	
Access to markets	Very important Critical to firms to enter Scandinavian market Better communication of opportunities
Access to skills and expertise	Very important Education system provides high quality labour Better liaison with firms is needed
Access to finance	Less important Conservative local financial market

	Better communication on financial constraints
Access to technological capabilities	Very important Very good S&T capabilities Involvement of institutes to be encouraged
Access to networks and clusters	Less important Critical to expansion and building networks Better communication on clusters is needed
Access to infrastructure	Important Sometimes too costly and slow Further infrastructural improvements needed
Cultural attitudes	Important Government supportive, public a bit reluctant Better communication on benefits is needed

Assessment for Sweden

The Swedish economy is characterized by its openness. The country has a stable macroeconomic environment, and low interest rates. In April 2004, the Bank of Sweden lowered the discount rate to 2 per cent. This is in line with the level set by the European Central Bank. The Swedish corporate tax at 28 per cent in nominal terms is low compared to many other EU countries. After deductions, the tax rate is much lower. The regulatory environment is transparent and non-discriminatory.

Sweden is member of the European Union but not of the European Monetary Union (EMU). The referendum on Sweden's participation in EMU in 2003 resulted in a "no" to introducing the euro at this point. In substance, the economic and financial requirements for EMU membership are met. Sweden is also very active in the work of WTO as regards free trade issues.

Over the recent period, rules and restrictions affecting inward investment have been liberalized. Amendments were made to the Foreign Exchange Control in 1989, and on the Act on foreign acquisitions of Swedish businesses and the Act on foreign acquisitions of real estate in 1992. The nationality requirement in the Companies Act for executives was also amended in 1992. The State employment service, the market for telecommunications and energy were also liberalised in the early 1990s. According to business surveys, an unstable regulatory environment due to frequent changes in regulations has for some years been of great concern for future investment in Sweden.³⁵

There are in principal no special fiscal incentives for foreign investment except 25 per cent tax relief on income for foreign key personnel for three years. According to the Invest in Sweden Agency, the criteria for getting tax relief has to be improved, i.e. to become easier to understand and more predictable. Tax on earned income is perceived as high by business leaders. Sweden has comprehensive tax treaties for the avoidance of double taxations with most countries. In 2003, Sweden introduced a new legislation in order to facilitate the operations of holding companies. This law provides

³⁵ ITPS, NUTEK, Näringsklimatet i Sverige (The Business Climate in Sweden). Several issues.

capital gain exemptions on the sales of long-term holdings of controlling shares.

The Swedish Government gives priority to an active investment promotion in order to attract foreign direct investment to the country, especially those which could contribute to increased employment and new competence.³⁶ One central measure is the Invest in Sweden Agency (ISA), which is a government agency assisting and informing foreign investors about business opportunities in Sweden.³⁷

When it comes to additional factors affecting inward FDI, access to skills and technological capabilities is very important. Together with Finland, Sweden is ranked as the leader in European innovation. Sweden heads the ranking for employment in high-tech services, business R&D expenditures, number of high-tech patents and amount of innovation expenditures.³⁸ The International Telecommunication Union (ITU) ranks Sweden the top global nation when measuring its ability to access and use ICT.

While the Swedish Government is supportive of inward FDI, the general public is a bit reluctant. In the public debate, negative aspects of foreign control due to acquisitions of some very big enterprise groups have dominated. Worries have been expressed that inward investment by acquisitions might lead to reductions in production and employment or to relocation of headquarters and other strategic functions. Recently, closures of some foreign controlled manufacturing plants and possible relocation to other EU countries supported by subsidies have been widely debated. The mentioned worries also concern Swedish enterprise groups, which increase production as well as research and development abroad.

In conclusion, it can be mentioned that ITPS, in cooperation with Statistics Sweden, has interviewed about 250 enterprises based on a sample of those 18 in each industry with most employees. The questions regarded the most important factors for decision on where they plan future big investments 2003-2007.

Stable regulation, growing market and personnel with the “right” competence were perceived as most important for location of big new investments. There were no big differences in views between foreign and Swedish controlled enterprises. Proximity to customers was also regarded as an important factor. Low taxes and level of wages were perceived less important. However, there were some differences in opinion in different industries. For example, low taxes got higher priority in the energy industry and low wages in business services and food industry. In other manufacturing industries, about a third of the interviewees regarded low wages as important for future investment.

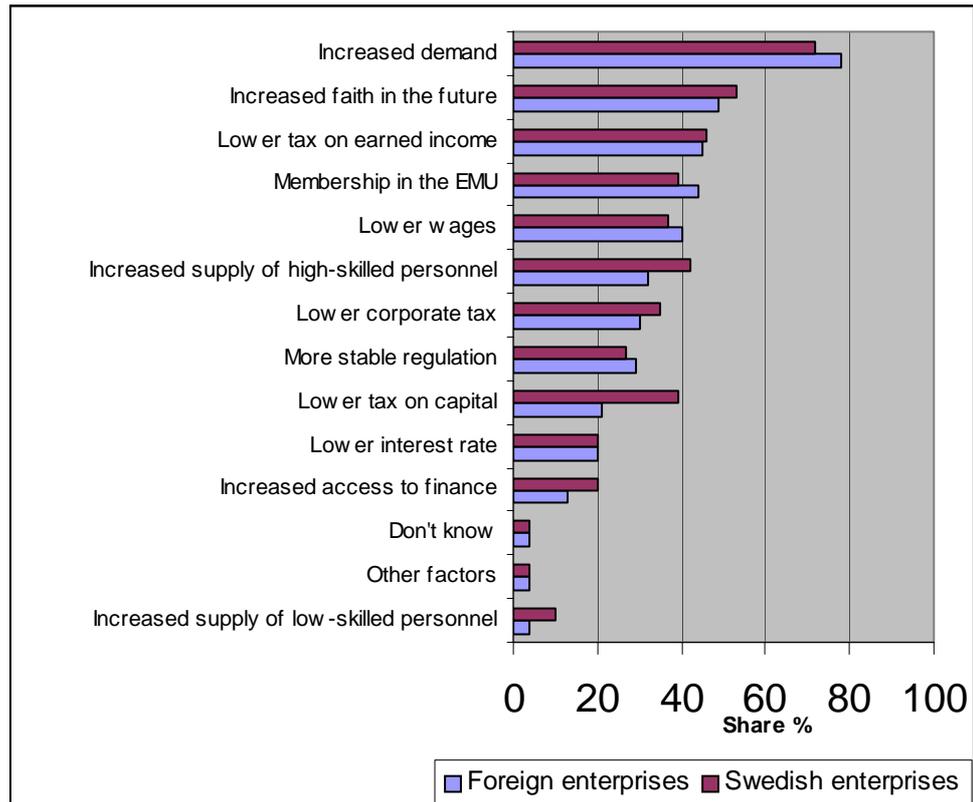
³⁶ The Budget bill 2003/2004.

³⁷ [http:// www.isa.se](http://www.isa.se)

³⁸ European Commission 2004, European Innovation Scoreboard.

According to the business leaders interviewed, the most important prerequisites for greater investment in Sweden are increased demand, more faith in the future, reduced taxes of earned income and membership in the EMU. There were the same ranking of prerequisites by Swedish and foreign controlled enterprises in 2003. More foreign controlled than Swedish controlled enterprises focused on increased demand, membership in the EMU, and reduced wages.³⁹

Figure 2 What are the most important prerequisites for greater investment in Sweden the forthcoming 10 years?



Source: ITPS, *The Swedish Business Climate 2003*.

³⁹ ITPS, NUTEK, *Näringsklimatet i Sverige 2003*.

Table 9 Summary assessment for Sweden

KEY PARAMETERS	
Regulatory Environment	
Stability and transparency of the system	Very good transparent processes which does not discriminate foreign owners Frequent changes in legislation is not accepted by business leaders
International legal obligations	Important, especially EU regulation Sweden is also active in OECD and WTO Sweden gives priority to openness
Fiscal incentives and tax breaks	Insignificant, very little impact Taxes on earned income is perceived as high, but corporate taxes are very competitive There are tax relief for foreign key personnel Better communication of tax rules is needed
Non-regulatory Measures	
Pro-active investment promotion	Active investment promotion by Invest in Sweden Agency
Facilitation and/or targeted grants	Central and local authorities coordinate their activities in order to facilitate foreign investment Same conditions for foreign and national enterprises as regards public support measures
Additional Factors	
Access to markets	Very important factor for localisation, especially access to EU, Nordic and Baltic countries Sophisticated demand in ICT and pharmaceuticals is important A growing market is very important
Access to skills and expertise	Very important Education system provides high skilled labour at competitive cost
Access to finance	Regarded less important by foreign investors due to access in other countries
Access to technological capabilities	Very important Very good S&T capabilities
Access to networks and clusters	Clusters in ICT and life sciences are used in marketing of Sweden abroad
Access to infrastructure	Not so important according to business leaders as stable regulation, growing market and supply of high skilled personnel
Cultural attitudes	Important Government supportive, public a bit reluctant Better knowledge of benefits is needed

Country rankings and values of the UNCTAD FDI Potential 2000-2002

The FOTON assessment may be compared to the UNCTAD composite indicator for Foreign Direct Investment. The indicator is meant to give an indication of how attractive a country ought to be for foreign investors, given certain parameters. It does not try to measure actual investments.

Please note that this indicator, like most composite indicators, has its weaknesses. Information may for instance be available for some indicators for some countries. Rankings based on it should therefore be read for what they are: very rough estimates.

Out of a list of 140 countries, all the Nordic countries are placed within the top 20, underlining the FOTON conclusion that the Nordic countries, in general, present framework conditions that are favourable to foreign direct investments.

The inward FDI Potential Index is based on the 12 economic and policy variables listed below.⁴⁰

1	United States	0.659
2	Norway	0.471
3	United Kingdom	0.467
4	Singapore	0.465
5	Canada	0.459
6	Belgium and Luxembourg	0.446
7	Ireland	0.433
8	Qatar	0.433
9	Germany	0.432
10	Sweden	0.427
11	The Netherlands	0.420
12	Hong Kong	0.413
13	Finland	0.409
14	France	0.396
15	Iceland	0.394
16	Japan	0.389
17	United Arab Emirates	0.388
18	Republic of Korea	0.387
19	Denmark	0.387

Source: UNCTAD, *World Investment Report 2004*; www.unctad.org/fdistatistics

UNCTAD explains the methodology behind the Inward FDI Potential Index as follows:

“The Inward FDI Potential Index captures several factors (apart from market size) expected to affect an economy’s attractiveness to foreign investors. It is an average of the values (normalized to yield a score between zero, for the lowest scoring country, to one, for the highest) of 12 variables (no weights are attached in the absence of *a priori* reasons to select particular weights):

- GDP per capita, an indicator of the sophistication and breadth of local demand (and of several other factors), with the expectation that higher income economies attract relatively more FDI geared to innovative and differentiated products and services.
- The rate of GDP growth over the previous 10 years, a proxy for expected economic growth.
- The share of exports in GDP, to capture openness and competitiveness.

⁴⁰ World Investment Report 2004, pp. 15, UNCTAD, NY and Geneva 2004.

- As an indicator of modern information and communication infrastructure, the average number of telephone lines per 1,000 inhabitants and mobile telephones per 1,000 inhabitants.
- Commercial energy use per capita, for the availability of traditional infrastructure.
- The share of R&D spending in GDP, to capture local technological capabilities.
- The share of tertiary students in the population, indicating the availability of high-level skills.
- Country risk, a composite indicator capturing some macroeconomic and other factors that affect the risk perception of investors. The variable is measured in such a way that high values indicate less risk.
- The world market share in exports of natural resources, to proxy for the availability of resources for extractive FDI.
- The world market share of imports of parts and components for automobiles and electronic products, to capture participation in the leading TNC integrated production systems.
- The world market share of exports of services, to seize the importance of FDI in the services sector that accounts for some two thirds of world FDI.
- The share of world FDI inward stock, a broad indicator of the attractiveness and absorptive capacity for FDI, and the investment climate.”

Other relevant indicators

According to many surveys companies find market size and market growth to be very important location factors. GDP comparisons based on purchasing power parities could be used to measure the relative size of different economies. OECD recommends using country groupings instead of precise ranking.

Norway belongs to the high-income group (>120) together with Ireland, Luxembourg, Switzerland and United States. The other Nordic countries belong to the high-middle income group (100 -120) together with Australia, Austria, Belgium, Canada, France, Germany, Italy, Japan, the Netherlands and United Kingdom. Small differences in real GDP per capita are in general not statistically or economically significant, i.e. Sweden and Finland are not significantly different from each other. Country indices are based on OECD 30 = 100.

The comparative price level is highest in Norway followed by Denmark, while the other Nordic countries have price levels closer to the average of the 30 OECD countries.

Business expenditure on research and development (BERD) as a percentage of GDP is an indicator used to capture the creation of formal knowledge within firms – i.e. it does not cover all types of innovation activities. Sweden is the leading OECD country followed by Finland, but all Nordic countries belong to the top 15 OECD countries.

The indicator “innovation expenditure in per cent of turnover in manufacturing industry” is used to measure many different activities of relevance for innovation. The data given below refers to 1996, but all the Nordic countries do probably still belong to those countries with the highest expenditure on innovation in the European Union.

The indicator “expenditure on information and communication technology (ICT) as a percentage of GDP”, shows that Sweden and Iceland belong to the high-performing countries and the other Nordic countries’ expenditures are on the average compared to other EU countries. There is one disadvantage with these data – which is given by the private source IDC – as there is a lack of good information on the reliability of data. It would also be preferable to have data on ICT investment instead of expenditure.

Any analysis based on these indicators, should indicate that the Nordic Countries are attractive for foreign investment in innovative businesses.

Table 10 A comparison of the Nordic countries by some indicators.

Indicator	Denmark	Finland	Iceland	Norway	Sweden	EU 15	EU 25
Real GDP/capita 2002	118	109	115	144	111	105	96
Comparative price levels 2002	118	100	111	126	106	93	90
Business R&D expenditure/GDP 2003	1,8	2,5	1,8	0,86	2,92	1,28	n.a.
Innovation expenditure/turnover in manufacturing 1996 CIS 2	4,8	4,3	n.a.	2,7	7	3,7	n.a.
ICT expenditures/GDP 2001	7,42	6,74	9,3	5,65	9,85	6,93	8,01

Source: OECD and EU Commission. Real GDP/capita and comparative price level are compared to the average of 30 OECD countries (OECD = 100). R&D/GDP for EU 15 refers to 2001. CIS 2 for Norway refers to 1997.

Policies targeting foreign direct investments

It follows from the section on key policy parameters driving foreign direct investments, that the scale and direction of inward FDI to any given country is influenced by national policies in a wide range of areas, e.g. trade policies, labour market policies, education and research policies, etc. In addition to more general policies affecting the national investment climate, most countries nowadays have policies specifically targeting inward FDI. Such policies can be aimed at either *restricting* or *attracting* such investments.

As pointed out earlier, FDI restrictions may include majority domestic ownership requirements, obligatory screening and approval procedures or operational controls on foreign companies such as constraints on the number of foreign employees or board members. Restrictions on foreign ownership

do exist in the Nordic countries - mainly in strategic sectors such as public utilities, bank and insurance, and in the case of Iceland, the fisheries. However, an increasing consensus over the past decades on the benefits of inward FDI has resulted in a generally low level of restrictions in the Nordic region as well as in the whole OECD area.⁴¹

The increasing consensus on the benefits of FDI has led a wide range of countries to introduce policy measures aimed at attracting - and ensuring national benefits from - inward investments. In developing countries, policy measures such as export processing zones and incentives to establish science parks or similar facilities are used actively to attract FDI. Another policy measure, which is widely used in developing and developed countries alike, is public agencies working exclusively to attract and maintain inward investments. The past two decades have seen the establishment of such investment promotion agencies in a wide range of countries, and today more than 160 national and 250 regional agencies exist worldwide.⁴² These agencies are typically involved in pro-active investment promotion and in providing hands-on assistance to potential and actual investors. Many agencies operate through offices and/or representatives abroad as well as in their home country.

In Europe, IDA Ireland and CzechInvest have been identified as particularly successful examples of investment promotion agencies.⁴³ IDA Ireland was established as early as in 1949 to support both domestic and foreign owned companies operating in Ireland, and has since 1994 been working exclusively on attracting FDI. In addition to the head office in Dublin and ten regional offices around the country, the agency have twelve offices abroad in order to be close to potential foreign investors. By facilitating the establishment of industry-science networks, dynamic clusters and a well-functioning infrastructure in Ireland, IDA Ireland works to attract research intensive and innovative businesses within sectors matching the needs of the national economy. The agency furthermore offers information, advice and networking services to potential and actual foreign investors. Foreign companies wishing to locate - or expand their existing operations - in Ireland can also apply for financial assistance in the form of various grants, including employment, R&D, training and capital grants.⁴⁴

CzechInvest was set up in 1992 to contribute to restructuring and growth in the Czech economy by attracting inward FDI. The agency, which was placed under the Ministry of Industry and Trade, was given the tasks of marketing the Czech Republic as an attractive investment destination and assisting potential foreign investors. In early 2004, CzechInvest was merged with two other public agencies into a new agency called the Business and Investment Development Agency CzechInvest. While the new agency is responsible for business development in a much broader sense than mere

⁴¹ OECD, *OECD Economic Outlook*, Volume 2003/1, No 73, June

⁴² <http://rru.worldbank.org/Discussions/Topics/Topic33.aspx>

⁴³ <http://rru.worldbank.org/Discussions/Topics/Topic33.aspx>

⁴⁴ the web pages of IDA Ireland, URL: <http://www.idaireland.com/home/index.aspx>

FDI attraction, it is still involved in a wide range of investment promotion activities, including the handling of investment incentives and offering services to investors - including aftercare services.⁴⁵

With the exception of Norway, government agencies promoting inward foreign direct investments currently exist in all Nordic countries. More detailed information on these agencies, as well as other policy measures aimed at attracting - and ensuring national benefits from - inward investments are presented below.

Denmark

Generally, foreign direct investments are considered as good for the Danish economy and the Danish government encourages foreign investments. Active promotion of FDI is however a fairly recent phenomenon. *Invest in Denmark* was established in 1989 as a national body promoting the country as a location for foreign investment in collaboration with private sector organisations and sub-national public bodies.⁴⁶

Invest in Denmark is part of the Danish Trade Council under the Danish Ministry of Foreign Affairs. Through its ten offices, the agency actively provides focused marketing efforts in North America, Asia and Europe and gives foreign companies and potential investors a detailed insight into the business opportunities that Denmark offers.⁴⁷

Invest in Denmark organises its operations into three focus areas where Denmark has proven competitive global strengths:

- *Location Denmark* focuses on attracting investments such as distribution, Shared Services Centres, e-business centres and regional headquarters;
- *IT/Telecom/Electronics* focuses on attracting R&D centres within wireless communications, optics, and e-learning; and
- *Life Sciences* focuses on attracting investments to Denmark's growing cluster of activities within bioinformatics, proteomics, therapeutic proteins, stem cells, and diagnostics (Medicon Valley).

In 2003, the main office of Invest in Denmark had a staff of approximately 15 while the work of the nine offices abroad involved around 30 persons all together. The total budget was €4 million.⁴⁶

⁴⁵ the web pages of the Business and Investment Development Agency CzechInvest, URL: <http://www.czechinvest.org/web/pwci.nsf/home/en?OpenDocument>

⁴⁶ Henrik Halkier, Ewa Helinska-Hughes & Michael Hughes, "Governing Inward Investment, Emerging National and Regional Patterns in West and East European Countries", European Studies, Series of Occasional Papers, no. 34/2003, European Research Unit, Aalborg University

⁴⁷ www.investindk.com

In 2003, Invest in Denmark's website had on average 40 000 visitors each month,⁴⁸ and the agency participated in 36 investment projects and created 781 jobs.⁴⁹

In addition to the national Invest in Denmark agency, there exists a set of regional inward investment agencies such as *North Denmark Invest*⁵⁰ and *Copenhagen Capacity*. The latter is an investment agency for foreign companies that are interested in locating in the Danish capital region.⁵¹ Copenhagen Capacity's activities are supported by regional politicians and leading industrial persons from the largest companies in Copenhagen. It was founded in 1994 by the five regional bodies that make up the Greater Copenhagen Region.⁵² Its annual budget amounts to approximately €3,0 million. In 2003, Copenhagen Capacity contributed to establishing 24 new investments in the region, which led to almost 400 directly-created jobs and just over 350 indirectly-created jobs.⁵³

Finland

Generally, the policy towards inward foreign direct investments in Finland is characterised by a non-discriminatory approach, i.e. the operating environment for businesses, investment conditions and public policy measures should be equal for both domestic and foreign owned companies. In practice, this is reflected in a low number of policy measures specifically targeting inward FDI.

The policy focus has been on the provision of a stable societal system and a transparent legislative environment for businesses irrespective of nationality. Generic factors, such as access to infrastructure and markets, to skills and expertise, to networks and clusters and to technological capabilities are deemed to be significant preconditions for domestic and foreign companies alike. While the international competition for investing in Finnish industry gradually has become part of the political consciousness since the early 1990s, it has led to few policy measures.

The Invest in Finland bureau is a national organisation promoting foreign direct investments in Finland.⁵⁴ The organisation was founded in 1992, and is today judicially a foundation which is owned and funded 100 per cent by the Ministry of Trade and Industry. Until 1999 Invest in Finland was granted FIM 10 million (circa €1,68 million) per year for operations.

⁴⁸ Danmarks Eksportråd "Danmarks Eksportråd Beretning 2003-2004", www.eksportraadet.dk

⁴⁹ Invest in Denmark, "You are looking at the best location in Europe... DENMARK", www.investindk.com

⁵⁰ www.northdenmark.com

⁵¹ www.copcap.dk

⁵² City of Copenhagen, Frederiksberg Municipality, and the counties of Copenhagen, Frederiksborg and Roskilde.

⁵³ Copenhagen Capacity, "Annual Report 2003", p. 3, <http://www.copcap.dk>

⁵⁴ see <http://www.investinfinland.fi>

In 1999, the Ministry of Trade and Industry assigned a project to prepare a plan for the further development of the operations of the Invest in Finland bureau. The project recommended that the organisation's resources should be increased to €2 million. However, in the budget for 2000 the appropriation was cut by almost €100 000, and the annual appropriation has since stayed at the same level. Of the total of 190 foreign owned firms that were established in Finland in 2003 (117 through acquisition and 73 through greenfield investment), Invest in Finland was involved in around 10 per cent.

In March 2004, an internal working group assigned by the Ministry of Trade and Industry to review the policy guidelines for foreign investments recommended that "the resources of the Invest in Finland Foundation will have to be increased" in order to bring the organisation closer to the level of the competitor countries in terms of resources. The working group proposed that the appropriation should be increased gradually between 2005 and 2008 to approximately €3 million. The working group also pointed out that "the Foundation will need a new operating strategy, which will make the cooperation with the current Finnish innovation organisations closer and clearer." In the opinion of the working group, a contractual network model would serve this purpose.

Fiscal incentives and tax breaks for FDI have not belonged to Finland's policy toolbox so far. An exception is a fixed-term tax scheme for key staff members immigrating from abroad. In volume this scheme is however rather insignificant because of the strict requirements set for eligibility (the scheme has covered 150-200 people in average per year), and there has been identified a need to reform the scheme.

In the perspective of FDI promotion, a few items in the current Finnish tax legislation have been identified as needing reform. According to the above-mentioned working group "the most important measure will be to reduce the tax withheld at source of foreign key personnel and the capital gains tax of subsidiaries." Furthermore, the working group recommends that "the tax obstacles to foreign fund investments should be abolished." In line with the recommendation, the current Government's programme contains a plan to revise the tax law so as to ensure the equality of foreign and domestic investors in Finnish venture capital funds.

Iceland

The Invest in Iceland Agency,⁵⁵ founded in 1995, acts as an independent agency of the Ministry of Industry and Commerce promoting foreign direct investment to Iceland. The Agency's advisors provide free of charge information and expert confidential service on all aspects of investments.

The Invest in Iceland Agency functions as a "one-stop shop" for foreign investors. The Agency's team provide information on investment opportunities in Iceland and the business environment. They arrange site

⁵⁵ see <http://www.invest.is>

visits and plan contacts with local authorities as well as local business partners, professional consultants, etc.

Iceland furthermore offers favourable tax and working conditions for international trading companies (ITCs), including:

- income tax at 5 per cent;
- no net-worth tax;
- no stamp duties on documents related to ITCs' general business activities.

An ITC can locate its business wherever it chooses in Iceland. This measure has not been widely used, however.

The Ministry of Industry and Commerce has made it possible to reimburse up to 12 per cent of cost for making film in Iceland. As it says on the website of the Ministry: "Up to 12 per cent of the production costs incurred in the production of films and television programmes in Iceland, or, as appropriate, in other EEA member states, may be reimbursed by the State Treasury..."

Norway

Norway lacks an offensive policy targeting inward foreign direct investments. As pointed out above, the country has no fiscal incentives or tax breaks for FDI nor any non-regulatory measures aimed specifically at attracting or facilitating inward investments. Current policy makers have chosen a passive, indirect approach, focusing on establishing good, stable framework conditions for industry in general and offering a portfolio of business oriented policy measures to all companies with registered business operations in Norway, irrespective of nationality.

There is however a tradition for more offensive policies towards FDI in Norway. Between 1959 and 1966, a separate government committee was responsible for facilitating inflows of foreign capital to Norwegian manufacturing industry. The background was the need for increased investments in the post-war economy. Under its administrative agency, the office for financing of manufacturing industry, *Kontoret for industrifinansiering*, the committee was active in marketing Norwegian manufacturing projects vis-à-vis foreign investors and offering favourable power contracts to companies locating production in Norway.⁵⁶

Another set of FDI related policy measures were introduced in the wake of the discovery of oil on the Norwegian continental shelf in 1969. While the building up of a national petroleum industry depended upon inflows of foreign capital and competence, the development of relevant national capabilities was a central government concern. To this end, the so-called technology and goodwill agreements were introduced in 1979. According to these agreements, foreign oil companies were to carry out parts of their

⁵⁶ White paper no 61 (1996-1997) *On industrial ownership*, electronic version, URL:

R&D activities in Norway in return for concessions to operate on the Norwegian continental shelf.⁵⁷

A more recent initiative was the establishment in 1994 of the government agency Invest in Norway (IIN), which - like its counterparts in the other Nordic countries - was to promote inward foreign direct investments. The underlying idea was that FDI could play an important role in Norwegian industry, e.g. as a source for employment, technology and capital.

IIN's main responsibilities were to promote Norway as an attractive investment location, and to provide assistance to potential and actual investors. The agency was placed under the Norwegian Industrial and Regional Development Fund, SND⁵⁸ and was to cooperate closely with other national actors representing and promoting Norway abroad, e.g. the foreign service missions of the Ministry of Foreign Affairs and the Norwegian Trade Council⁵⁹. The life-span of the IIN agency proved to be short term, however. It was closed down in the late 1990s, following an internal evaluation which concluded that the results achieved did not match the a priori expectations nor the resources used.⁶⁰

Thus, while policy measures targeting foreign direct investments are absent in current Norwegian policies, the country has made use of such measures earlier on. Also, arguments in favour of reintroducing policy measures aimed at pro-active investment promotion have been voiced recently. In connection with the evaluation of the Norwegian business-oriented policy instrument system carried out by the Ministry of Industry and Trade in 2002-2003, an internal working group published a report entitled *Policy measures for tomorrow's industry*. The report maintains that it should belong to the tasks of the national policy instrument system to facilitate inward FDI by marketing Norway as an attractive investment location and spreading information on current regulations and investment opportunities. This should, according to the report, be done by establishing an "Invest in"-agency similar to the ones that exist in other countries.⁶¹ The recommendation was however not followed up in the formal outcome of the evaluation process, the government proposition *Instruments for an innovative and creative industry*.⁶²

⁵⁷ NOU 2000:7 *New impetus for innovation*, electronic version, URL:
<http://odin.dep.no/nhd/norsk/dok/regpubl/stmeld/024005-040002/dok-bn.html>
http://odin.dep.no/nhd/norsk/dok/andre_dok/utredninger/024001-020004/dok-bn.html

⁵⁸ On January 1st 2004, SND was merged into the new innovation policy agency Innovation Norway.

⁵⁹ Like SND, the Norwegian Trade Council is today part of Innovation Norway.

⁶⁰ The information on the Invest in Norway agency is from an unpublished evaluation report developed by the Norwegian Industrial and Regional Development Fund, SND in 1998.

⁶¹ *Policy measures for tomorrow's industry*, report prepared by an internal project group under the Ministry of Trade and Industry in connection with the evaluation of the business-oriented policy instrument system, 2002, electronic version, URL:
http://odin.dep.no/nhd/norsk/dok/andre_dok/rapporter/024091-990020/dok-bn.html

⁶² Parliamentary bill no 51 (2002-2003) *Instruments for an innovative and creative industry*

Sweden

The Swedish government gives priority to an active investment promotion in order to attract foreign direct investment to Sweden, especially those which could contribute to increased employment and new competence.⁶³ One central policy measure aimed at attracting FDI is the Invest in Sweden Agency (ISA) under the Ministry of Foreign Affairs.⁶⁴ ISA is headquartered in Stockholm, but has operations in several countries worldwide.

ISA has organised its activities in three focus areas: ICT and Automotive, Life sciences, and HUB Sweden. Besides these areas, ISA also provide information on business opportunities, assistance to foreign investors and access to its regional network in Sweden. The business covers greenfield investment, expansion investment, cooperation agreements and acquisitions, but facilitation of greenfield investment by small and medium sized enterprises has dominated so far.

ISA has initiated several cooperation agreements with regional organisations in order to facilitate foreign investment in Sweden. The Swedish Government has created a working group for the purpose of mapping investment obstacles. ISA submits an annual report based on the views of foreign investors to the government.

There are in principal no special fiscal incentives for foreign investment in Sweden, except 25 per cent tax relief on income for foreign key personnel for three years. According to the Invest in Sweden Agency, the criteria for getting tax relief has to be improved, i.e. they should become easier to understand and more predictable.

The potential closure of production of Saab cars in Trollhättan has resulted in some policy measures. The Swedish government, the Left-Wing Party and the Environment Party have agreed on increased investments in infrastructure, R&D and education in order to strengthen Trollhättan and the South West part in Sweden as competitive locations for the production of vehicles.

Discussions on foreign industrial ownership

The topics of globalisation and foreign takeovers are discussed in all the Nordic countries, and the fact that many policy makers consider foreign investments to be beneficial does not mean that these are uncontroversial issues.

Below we give a brief overview of some of the most relevant national discussions.

⁶³ The Budget bill 2003/2004.

⁶⁴ <http://www.isa.se>

Denmark

Over the past year the discussion with regards to globalisation has focused on the movement of jobs from Denmark to low cost countries such as China, India, and more nearby countries in East-Europe as for example Poland. A lot of attention has been given to outsourcing of physical production to low-wage areas. Examples are seen of some employees agreeing to lower their wages in order to keep the production in Denmark. but after discussions with their colleagues abstained.

Recent publications related to the internationalisation of the Danish economy including foreign ownership are presented below in order to provide an outlook of the current policy discussions in Denmark.

The most recent bi-annual report published by the Danish Economic Council, *Danish Economy, Autumn 2004*, addresses the effects of international outsourcing.⁶⁵ The report states that over the past decades a skill-biased labour demand shift has occurred in Denmark as well as in many other advanced economies. Their analyses do not support the hypothesis that job losses have been accelerating in recent years as a result of outsourcing.

However, outsourcing does affect the functioning of labour markets; for individuals a higher level of outsourcing in a sector implies lower wages, and a higher level of outsourcing in a sector also implies more job destruction. Their calculations show that the loss of jobs due to outsourcing amounts to less than 5000 jobs yearly. This number of job loss should be compared to a total, economy wide destruction of 260 000 jobs each year. Accordingly, outsourcing explains only a small part of the ongoing labour market dynamics. New technology is probably much more significant in that respect. The biggest change will be the shift towards the need for more skilled labour. Thus, the unskilled will face the biggest pressure for adjustment. The report maintains that an upgrading of the qualifications of the labour force is decisive.

Another report, *Growth through globalisation* published by the Ministry of Economic and Business Affairs in January 2004, describes the Danish Government's strategy to take as much advantage of the opportunities inherent in globalisation as possible.⁶⁶ According to the report, an increase in inward foreign investments will be conducive to national economic growth. Foreign companies operating in Denmark have a higher average productivity than Danish companies. Thus, the Government encourages foreign direct investments in Denmark and sees it as a means for further growth. A comparison of the formal barriers to incoming FDI reveals that the Danish formal barriers are among the lowest in the entire OECD in all trades and industries. Still with regards to attracting investments the report shows that Denmark's performance in international competition is "only" average.

⁶⁵ see <http://www.dors.dk/rapp/dors204.htm> for an English summary

⁶⁶ see <http://www.oem.dk/publication/growthfeb04/growth.pdf>

The report points out some areas in which Denmark is not doing so well, e.g. with regards to corporate taxes. The corporate tax is higher in Denmark than in the other Nordic countries. Consequently, the Government has decided to lower the corporate tax from 30 per cent in 2004 to 28 per cent in 2005.

The analysis carried out in connection with the globalisation initiative also reveals that Denmark's non-participation in the euro influences the integration with other countries' financial markets. If the level of the financial interaction of the euro countries were transferred to Denmark, the total cross-border financial transactions to and from Denmark would increase by 20-30 per cent compared with the current situation, according to the study. Thus, the Government would - when the time is ripe and after a referendum - like to see Denmark's full participation in the European cooperation.

Finland

Over the past year the discussion on the impacts of economic globalisation has flourished in Finland. In this context attention has also been paid to issues of national and foreign ownership. Many organisations have contributed to the public discussion by publishing a wide range of reports concerning this particular issue. The concern for Finland's competitiveness has functioned as an impetus in the discussion. It is argued that in the pressure of global competition, companies are increasingly comparing location bound advantages and weaknesses for business. This means that companies also consider moving production and other operations to more competitive countries and/or growing markets as a strategic decision.

The so-called "China phenomenon" has been one of the most widely debated topics in the Finnish media recently. This discussion has been fuelled by some companies' decisions to move part of their operations abroad and in some cases also to China. These decisions and the public debate on the impacts of globalisation have caused concern and demands to clarify Finland's position and strategy in the global economy.

It is a widely held opinion, that in order to sustain its position in international competition Finland has to invest further in knowledge and innovation based development and firms' operational preconditions. Globalisation is not seen simply as a threat but also as an opportunity provided that Finland manages to stay an attractive location for business. This has led to increased demand for studies concerning foreign direct investment and foreign ownership at large. In the following, a few essential reports are mentioned to provide an outlook on the level of policy discussion in Finland.

In September 2003, the Confederation of Finnish Industry and Employers published a report of Finland's attractiveness as a location for production and headquarters. According to the report, increasing Finland's attractiveness would demand lowering taxation of earned income and

especially lowering taxation of experts. Other issues raised were increasing the levels of R&D and education.⁶⁷

In the beginning of 2004, the Finnish Prime Minister's Office set up a committee to investigate Finland's position in global economy. The final report was submitted to Finland's Prime Minister on November 9th the same year. A wide range of background publications were produced in this particular project. According to the report, the share of foreign investment to Finland in proportion to GNP has been relatively small and is well below the EU average. It is maintained that especially new and growing entrepreneurship should be allured to Finland.

Over the past years, the country has seen few examples of these so called greenfield investments. Foreign investment has largely taken the form of acquisitions. Three proposals are presented in the publication. Firstly, in order to attract more foreign investment Finland should tighten the cooperation with various actors in this field, e.g. with the Invest in Finland agency and Finpro. Finpro is an association for assisting Finnish companies in internationalisation. Another proposal is to create a common strategy for various operators for attracting new foreign investment. Thirdly, the final report proposes a government bill in order to change the taxation of foreign investors. This is to say that profits should be taxed in the investor's home country.⁶⁸

As mentioned above, the committee assigned by the Prime Minister's office commissioned several background papers which assess Finland's position in global competition and factors affecting companies' decision of location. The Prime Minister's Office published altogether six background reports and a report on the sector-specific dialogue between the employers' and employees' organizations.

The research institutes involved in the preparation of the background studies have also published a number of reports in their own publication series.⁶⁹ For instance the Research Institute of Finnish Economy, ETLA published in September 2004 the report *Finland in Global Competition - Determinants of Firms' Locational Decisions*. According to the report, Finland's strengths can be found in society's functionality and stability, people's trustworthiness and honesty as well as technological competence. On the other hand, personal taxation and labour costs were seen as most important weaknesses.⁷⁰

Concrete recommendations to increase Finland's attractiveness as an investment destination were outlined by an internal working group set by the Ministry of Trade and Industry in the winter of 2003-2004. The aim was to investigate means to increase foreign investment. International

⁶⁷ see http://www.tt.fi/arkisto/getoriginal.pl?ft_cid=4173 (publication in Finnish only)

⁶⁸ for more information, see <http://www.vnk.fi/tiedostot/pdf/fi/89904.pdf> (publication in Finnish only)

⁶⁹ Publication list is available at <http://www.suomimaailmantaloudessa.fi/?m=5>, so far only in Finnish even though there are also few reports in English.

⁷⁰ for more information, see http://www.etla.fi/files/1080_Dp927.pdf (publication in Finnish only)

comparative studies show that Finland invests less in promotion activities than other EU countries. In March 2004, the working group published a document entitled *Policy Guidelines for Foreign Investments*, according to which foreign investments in Finland are:

“necessary for balancing the development of internationalisation and for maintaining international competitiveness. Promotion of the growth of foreign investments in strategically important sectors will have to be made an increasingly integral part of business environment policy.”

The working group’s report furthermore defines two related goals of business environment policies in Finland: “improvement of the general attractiveness of the operating environment and harmonisation of the investment conditions between domestic and foreign enterprises.” In order to reach these goals, “development of the functioning of the innovation environment and of Finland’s technological strengths, as well as removal of the obstacles to foreign investments without distorting competition” is required.

The report also includes comparative analyses of promoting activities in a few other EU countries (Denmark, Sweden, Ireland). Furthermore, means of public authorities for promoting foreign investment are discussed and Finnish actors promoting foreign investment are presented. Proposals for actions are categorised according to four themes: Industrial political actions, development of the Invest in Finland agency, removing legislative barriers and public enterprise financing and taxation.⁷¹

Finnish stakeholder organisations and the media have also been active in the lively discussion on foreign direct investment. Many articles published in Finnish newspapers and business papers have related to the previously introduced publications. One article concerning foreign investment in the leading Finnish newspaper *Helsingin Sanomat* in September 2004 introduced UNCTAD’s recent report on the international level of foreign investment. In this comparison Finland was not seen attractive for foreign investors. In another article in the paper called *Tekniikka&Talous* in September 2004, Finland’s Minister of Foreign Trade and Development raised her concern about Finland’s low level of foreign investment.

The issue was approached from a somewhat different angle by the chairman of the newly established Confederation of Finnish Industries (EK) in the business newspaper *Kauppalehti* in late November 2004. The chairman of EK demanded a better business environment for companies, which is a guarantee also for the Finnish welfare society. According to him, the Government’s decision to reform company and capital income taxation does not, however, support domestic ownership.

In late 2003 the Government presented a plan for reforming the Finnish tax system with the aim of reinforcing its international competitive position. This should in turn promote companies’ investment, growth and their capacity to generate employment. A main element in the reform is a

⁷¹ for more information, see http://ktm.elinar.fi/ktm_jur (publication in Finnish only)

reduction of the corporate income tax rate by 3 percentage units to 26 per cent, as well as reduction of the capital tax rate by 1 percentage unit to 28 per cent. Besides changes in the tax rates, the Government has introduced a more profound reform of company and capital income taxation including taxation of dividends. Overall, the Government's plan to reform company taxation has been welcomed in the public debate. However, the reform plan for capital income taxation and particularly the proposed model for (partial) taxation of dividends has raised criticism not only among the political opposition but also from industry and business stakeholders.

Iceland

There has been increase in both the stock and flow of FDI in Iceland in recent years. Acquisitions of Icelandic companies are not as frequent as greenfield investments. Recent examples of inward FDI are the large investment in an energy plant in the highland north of Vatnajökull and in a foreseen aluminium plant in East Iceland. It is however the outward FDI that is most noticeable for Icelanders. The stock of outward FDI was about ISK 120 billion in 2003 and the activity in 2004 has increased this stock considerably. Examples of outward FDI in 2004 are the large investment of the Baugur Group in the UK, investments of banks in the Nordic countries and even investments by Icelandic airline companies in Europe, to mention a few.

Icelanders have a generally positive attitude towards inward FDI, and politicians are in favour of foreign ownership since it is considered to have a positive effect on the economy. There are however rather strict restrictions on foreign ownership in some sectors of the economy, e.g. the fisheries - which are Iceland's main industry - and the production and distribution of energy.

There are those who mean that restrictions in the country's main industry limit investment in other industries. The argument is, that restrictions in one industry mean that investors sense that the market is not as open as they would prefer and turn their interest in other directions.

Most of the discussion on foreign industrial ownership in Iceland has been related to the restrictions on foreign investment in the fisheries. A foreign company can through various holding companies and by stretching the law to its limits acquire 49 per cent of a fishing company. It can be noted that leading managers in the fisheries are beginning to open up for the possibility of allowing FDI. The interest organization of Icelandic fisheries (LIU) does however state that it should not be made easier for foreigners to buy shares of Icelandic fishing companies.

Iceland may not have the advantage of a large market or even closeness to a large market. This means that Iceland is not very often considered a venue for investment in companies in production industry. Were the market is not the main advantage Iceland has a stronger situation. This means that when a supply of steady and relatively cheap renewable energy, is an advantage Iceland has been chosen to build up energy intensive industries. Same has

been the case when human resources are the main attraction. Iceland has a good stock of highly educated people who are capable to work in high- tech industries or knowledge intensive services.

The Icelandic government has managed to make the environment for doing business in Iceland much better than it used to be. Framework conditions are in many cases better than abroad. The tax system has been made more transparent and the company income tax is 18 per cent. Many taxes have been abandoned such as property tax and various costs related to doing business. The interest rate is lower than it has been for quiet a long time but it is still not yet competitive in comparison with other countries.

Norway

Foreign industrial ownership is a controversial issue in Norway, and foreign takeovers of large and well-known Norwegian companies as a rule make big headlines in the media. The media coverage and reactions by the general public are typically negative, reflecting a view of foreign ownership as a threat to national interests.

Among policy makers, attitudes towards foreign ownership are less one-sided. There is on the one hand wide acknowledgement that foreign direct investments are an important source for inflows of capital, technology and competence. On the other hand, there seems to exist an inherent fear of losing control over national resources and thus risking an outflow of strategic assets. While most political parties share this dualistic view, opinion differs on *the degree* of foreign ownership that is desirable. This issue is seldom raised in its own right, however, but rather as an integral part of a broader policy discussion on what types of ownership are most conducive to value creation and growth in the Norwegian economy.

Public scepticism towards foreign ownership in the Norwegian economy has surfaced on several occasions in the last decade. The acquisitions of the national chocolate manufacturer Freia by American Kraft in 1993, the pharmaceutical company Nycomed by British Amersham in 1997 and - most recently - the Ringnes breweries by Danish Carlsberg in the spring of 2004 were all met with negative reactions in the media. In all cases, loss of national control was argued to pose a threat to national employment and value creation. Just as much as socio-economic considerations, however, the negative reactions seem to have been rooted in patriotic sentiments. With reference to a well-known marketing slogan for the company's milk chocolate, the sale of Freia was referred to as a loss of "a small piece of Norway", and with Carlsberg's takeover of Ringnes the country was said to suffer a "sad cultural loss."⁷²

Differences in political attitudes towards foreign ownership in Norway can be illustrated by comparing the three white papers on industrial ownership

⁷² Article entitled "Norge selges bit for bit", published on the webpages of Dagens Næringsliv 13.09.04, URL: <http://www.dn.no/forsiden/naringsliv/article325728.ece>; Article entitled "Ringnes-salg et sørgelig kulturtap" published on the web pages of Aftenposten 20.02.04, URL: <http://www.aftenposten.no/nyheter/okonomi/article736292.ece>

that have been published over the last six year period. The white papers were published by three different governments, positioned at the left, centre and centre-right of Norwegian politics respectively.

In 1997, the Labour government in power published a white paper entitled *On industrial ownership*. The white paper states that one of the main principles in the government's strategy for industrial ownership is "to secure a balanced ownership structure in which *a substantial national ownership is maintained* [author's italics]."⁷³ While it is acknowledged that Norway should attract technology, competence and capital through foreign investments, emphasis is placed on the need to strengthen national ownership. National ownership is implicitly seen as a precondition for keeping strategic business activities in Norway, as well as for securing national employment and value creation more generally. The arguments in favour of national ownership furthermore serve as arguments in favour of state ownership, which - in an increasingly globalising economy - is seen as an important measure to secure national ownership in the long term.⁷⁴

In the autumn of 1997, the Labour government was replaced by a coalition government made up of three smaller parties holding a centre position in Norwegian politics.⁷⁵ The new government published a white paper entitled *Industrial ownership* in 1998. While the document to a large extent builds upon the Labour government's white paper, a departure from the strong emphasis on national ownership is evident. Overriding goals in the centre government's ownership strategy are held to be "to contribute to a balanced, distributed and varied ownership" and "to stimulate active, private ownership." The role of the State is reduced from being a guarantor of a strong national ownership to securing public ownership in business areas that manage important national natural resources.⁷⁶

The toning down of the importance of national ownership in the centre government's white paper does not mean that the value of having nationally owned firms is not acknowledged. The white paper maintains that national ownership can have positive spill-over effects on value creation in industry and in society at large, and that Norwegian owners can be assumed to be of significance for keeping strategic business activities such as management and R&D localized in Norway. However, it is emphasized that the *competence* of industrial owners often is a more important than their nationality, and that the country needs an ownership structure in which "both Norwegians and foreigners are represented in the capacity of their competence."⁷⁷

The next - and latest - white paper on industrial ownership to be published in Norway, came in 2002 on the initiative of the centre-right government

⁷³ White paper no 61 (1996-1997) *On industrial ownership*

⁷⁴ White paper no 61 (1996-1997) *On industrial ownership*

⁷⁵ the Christian People's Party (KrF), the Liberal Party (V) and the Centre Party (SP)

⁷⁶ White paper no 40 (1997-1998) *Industrial ownership*

⁷⁷ White paper no 40 (1997-1998) *Industrial ownership*

currently in power. In this government, the Conservative party holds the majority. While the white paper primarily focuses on state ownership, it reflects the government's view on industrial ownership more generally. According to the document, the government believes that "a wide variety, combinations of owners and different kinds of ownership create a good environment for high value creation through an active market for ownership."⁷⁸ The need for *active* ownership is emphasised, and - based on the view that the State is a passive owner, the white paper argues in favour of reducing state ownership to strategic sectors.

As in the two previous white papers, the value of national ownership is acknowledged. It is maintained that "for Norwegian industry, it is important that many both small and large businesses have a clear Norwegian anchoring and are managed from Norway." However, emphasis is placed on strengthening private ownership rather than national ownership, and the white paper explicitly states that "it must [...] be attractive for foreign investors to invest in Norway."⁷⁹

To sum up: Whereas the general public in Norway tend to be sceptical towards foreign industrial ownership, the positive effects of inward FDI are widely acknowledged among policy makers. The *degree* of openness towards foreign ownership does however vary between political parties. As the three latest Norwegian white papers on industrial ownership show, this seem to follow indirectly from broader views on what kind of ownership is most conducive to national value creation and welfare. In advocating national and public ownership, the Labour party is less open to foreign ownership than parties positioned further to the centre-right in Norwegian politics who generally emphasise the importance of private ownership.

Sweden

In the public debate in Sweden, negative aspects of foreign control due to acquisitions of some very big enterprise groups have been given attention. Worries have been expressed that inward investment taking the form of acquisitions might lead to reductions in production and employment or to relocation of headquarters and other strategic functions. Some examples of closures of foreign controlled manufacturing plants and possible relocation to other EU countries supported by subsidies have been widely debated. The mentioned worries also concern Swedish enterprise groups, which increase production as well as research and development abroad.

In 2004, most attention in the media was given to General Motors' potential closure of car production in Sweden or Germany due to unprofitable business in Europe. In addition the potential closure of a factory belonging to the Swedish enterprise group Electrolux got a lot of attention in 2004. Electrolux made a feasibility study on advantages and disadvantages to relocate production of vacuum cleaners from Sweden to its factory in Hungary. This resulted in a decision to move the production to Hungary.

⁷⁸ White paper no 22 (2001-2002) *A reduced and improved state ownership*

⁷⁹ White paper no 22 (2001-2002) *A reduced and improved state ownership*

Electrolux was a dominating employer in the municipality Västervik in Sweden, which caused a lot of worries on how to secure employment at the local level.

The merger between Astra and Zeneca in 1999 also raised a great amount of public discussion in Sweden. In a number of articles the issue was covered as if Astra's shareholders had lost out in the merger. In the Swedish press, the decision to locate the headquarters in London was seen as a visible sign of Swedish interests losing out in the merger.

At the time of the AstraZeneca merger, there was a wider debate in Sweden triggered by the relocation of a number of large headquarters from Sweden to other countries. The main motive according to surveys by ITPS was the increase in foreign takeovers.⁸⁰ In 2003, the share of headquarters abroad amounted to 37 per cent of about 200 interviewed businesses. There were no significant correlation between location of headquarters and changes in R&D investment. In this context, it can be mentioned that the main responsibility for the research and development operations of AstraZeneca has also after the merger been located in Södertälje, Sweden.

In a radio programme sent in July 2004, the Swedish pharmaceutical industry in general and AstraZeneca in particular was discussed by different actors.⁸¹ The discussion originated from a statement made by AstraZeneca, saying that they might reduce some activities in Sweden and carry out future clinical studies abroad. The background was that the county councils have recommended doctors to prescribe cheaper medicine copies instead of the more expensive originals, and that the rules regarding contact between doctors and the industry should be more restrictive. In Sweden, the pharmacies have also been recommended to exchange more expensive pharmaceuticals with less expensive ones. These conditions in combination with less respect for patents, might lead to less incentives for the pharmaceutical industry to invest in new research. This is not a policy issue for Sweden only, but probably for most countries in the European Union.

Outsourcing of services to "low-cost" countries, especially to India has been widely debated in the US. In Sweden, the debate has covered relocation of headquarters and production, but in 2004 relocation of services also got a lot of attention. For example, call centers, ICT consultancy and some computer based administrative functions have been relocated from Sweden to Eastern Europe and India. According to the former Swedish Minister of Industry, Leif Pagrotsky, Sweden cannot compete in simple low-cost production. Foreign investors probably find Sweden most attractive in international competitive areas such as R&D intensive businesses. He also maintains that Sweden, although the country has a high degree of inward foreign investment, must continue to attract foreign businesses.

⁸⁰ ITPS, NUTEK 2003, *Näringsklimatet i Sverige 2003* (The business climate in Sweden 2003 publication in Swedish).

ITPS 2003, *Flytt av huvudkontor, tänkbara orsaker* (Relocation of head quarters, possible motives publication in Swedish).

⁸¹ Radio program called Studio Ett, 20th of July, 2004.

Increased competition is another aspect of FDI that has been debated in Sweden recently. The Swedish trade union for construction workers has initiated a blockade of a Latvian company due to the payment of low wages (about half of Swedish wages) for immigrant workers. This resulted in a debate in the Swedish parliament on the Collective Agreements Act. The Latvian company Laval un Partneri has asked the Swedish Labour Court to try this case. The question regards the right for Swedish trade unions to demand foreign companies to sign Swedish collective agreements instead of the ones from other EU countries as well as the possibility to demand higher wages for immigrant workers.

Foreign controlled enterprises in the Nordic countries, a statistical survey

By Anne-Christine Strandell, Swedish Institute for Growth Policy Studies

Globalisation of companies

Globalisation is mainly an expression for new and more complex relationships between trade and direct investment as well as an increased dependence between performance of businesses within an enterprise group and localization in different countries. Today the focus on globalisation often relates to the upward trend in direct investment.

The acceleration of mergers and acquisitions in the US and European Union is the principal motive behind this trend. The former task force of Globalisation Reflection Group at Eurostat used the following concept of globalisation: *The existence of interactions between enterprises residing in different countries, which are related by other links than mere market, trade and their socioeconomic consequences.*

Definition of domestic multinational, foreign controlled and uninational enterprises

Domestic multinational enterprises are nationally controlled enterprises with at least one subsidiary abroad. Foreign controlled enterprises are those with subsidiaries or branch offices in host countries. Enterprises controlled by a foreign owner, with more than 50 per cent of the voting shares, are regarded as foreign controlled. An enterprise controlled by two or more owners with voting rights totalling to more than fifty per cent and with different country of origin, is since the reference year 2001 in Swedish statistics assigned to a special category, split control.

Enterprises which have not been defined as foreign controlled are regarded as domestic controlled enterprises.

Uninational enterprises are domestic controlled enterprises which do not have any subsidiaries abroad.

Proxy for domestic multinational, foreign controlled and uninational enterprises

In the main statistical analysis of FOTON, which is based on the Community Innovation Survey (CIS 3), proxies have to be used in order to identify domestic multinational, foreign controlled and uninational enterprises. Domestic multinational enterprises are those which report innovation collaboration within the enterprise group but outside the home country. Foreign controlled are those enterprise groups with head quarters outside the host country. Domestic enterprise groups which have no collaboration outside the home country have been defined as uninational enterprise groups.

Increased direct investment is in many ways associated with cross-border sales and the need for a physical presence. For products that need to be

adapted locally, being located near the customer is critical. Many types of services can only be sold in other countries through direct investment, that is, local presence. For manufacturing companies, direct investment is often a result of trade. Direct investment can also come about because of ownership advantages, i.e. internalising operations.

The wave of acquisitions in 1990's and 2000's is different from that in the 1980's. The deregulation of capital markets has made it easier for companies to expand globally. Now several driving forces for global expansion have become more important. Company strategies, for instance, have become an increasingly important factor. They are often focused on becoming bigger and bigger to face growing international competition and to manage increasing research and development costs. Many feel a need to concentrate resources on their company's core competencies.

Companies are also streamlining operations by reviewing the efficiency of their global activities. This also results in increased competition in global enterprise groups. Deregulation in telecommunication as well as in the financial and energy sectors has also helped to increase direct investment.

Insufficient statistics

Many might believe that it would be easy to find data presenting the extent of foreign takeovers in the five Nordic countries. But there are big future challenges for statistical providers: data should be more up to date and have a better coverage of valuables and countries. Statistics and, especially, international harmonised data on globalisation are lagging behind and are only available for a few countries. The European Commission is preparing a regulation on Community statistics on the structure and activity of foreign affiliates (FATS), which should commence in 2005, which is too late for the purpose of this study.

At the beginning of 2004, the latest data published on foreign affiliates in the EU⁸² covered nine countries (Denmark, Finland, France, Ireland, Luxemburg, the Netherlands, Portugal, Spain, Sweden and United Kingdom) for the reference year 2000. Yet, dramatic changes have occurred in the structure of cross-border ownership since 2000. Rapid changes in merger and acquisitions, which might have a big impact on growth and employment has led to cross-border restructuring of businesses. For example, the recent downturn in the ICT sector cannot be covered by existing statistics. According to data for 2000, the ICT sector in Sweden contributed more than other sectors to growth in the business sector.

The first aim is to analyse the extent of foreign takeovers and the development of this kind of cross-border activities over time for all Nordic countries. The second aim is to analyse the distribution of takeovers by country of origin and industry. The third aim is to show their contribution to productivity and intensity in research and development.

⁸² Statistics in focus, Theme 4 – 21/2004.

(note that the header in this section is inconsistent with the previous ones) Unfortunately, only Sweden can provide most needed statistics in this area. In order to manage this survey on foreign takeovers we have to do our best by using existing data. A private source, Thomson Financial Corporation, has been used in order to show the extent of merger and acquisitions in all the Nordic countries. These data are based on different public sources and the coverage is probably best for big enterprises. Further, the value of acquisitions is in many cases not available. There are also data on Iceland in this source, but the value is too small to be presented in the figures.

Some data on foreign controlled enterprises from Eurostat has been used for Denmark. Other sources are Statistics Finland and Swedish Institute for Growth Policy Studies. The OECD, in combination with data from Statistics Norway, is the source for information on foreign controlled enterprises in Norway. Iceland does not produce any statistics on the activity of foreign controlled enterprises.

However, there are other kinds of statistics available for all Nordic countries, i.e. statistics on foreign direct investment within the framework of balance of payment statistics. These statistics are produced by central banks and is used to measure financial cross-border flows, and inward and outward flows of capital as a part of a country's balance of payment. However, they cannot be used to measure the extent of foreign investment. For example: the financing of investments in the host country is not included.

Indicators on globalisation

In Sweden some simple indicators are used to measure the extent of globalisation. The main indicators are based on the number of employees. Inward foreign direct investment is measured as the number of employees and as a share of the business sector.

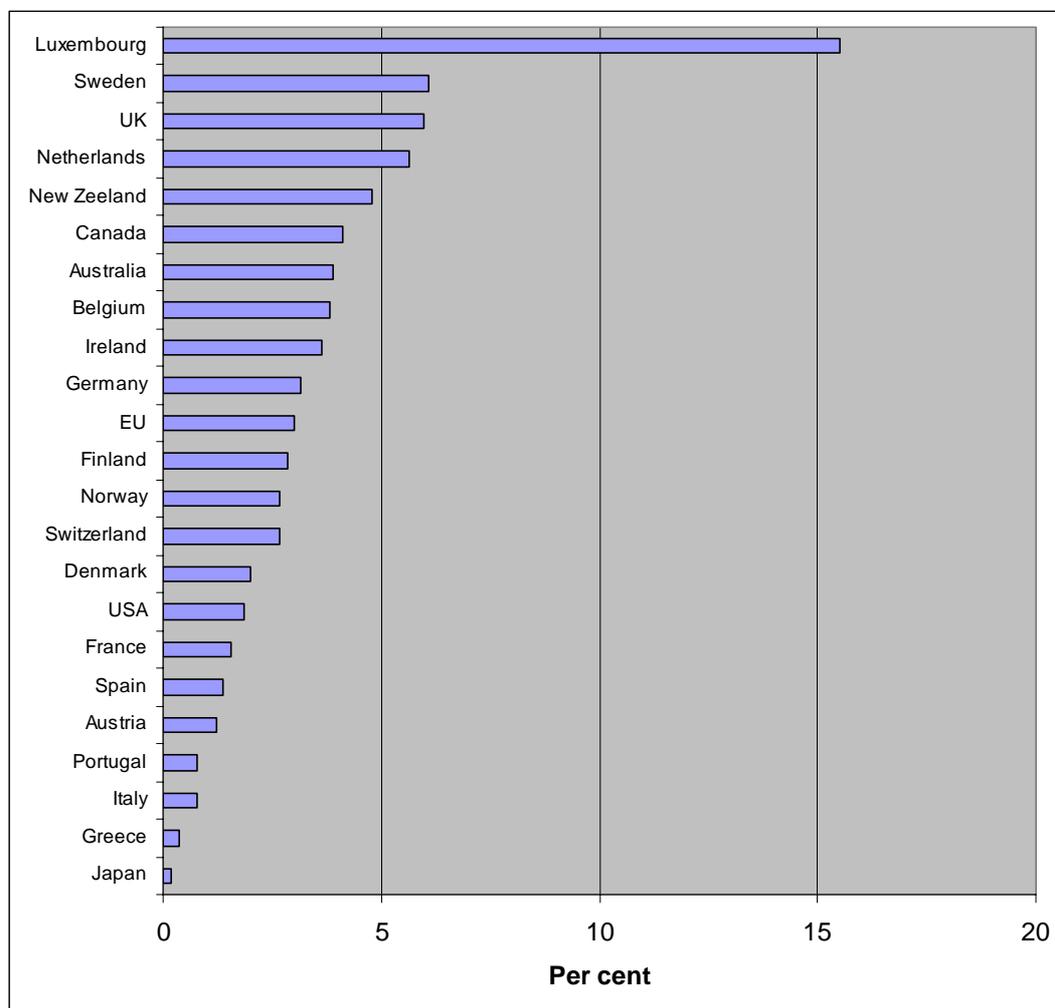
For outward foreign direct investment a special indicator is used to showing the degree of internationalisation, i.e. the share of employment abroad of all employed in Swedish international enterprise groups. R&D intensity is measured as number of R&D person years as a percentage of all employees in international enterprises.

Big acquisitions in Sweden compared to other OECD countries

Sweden had the second highest value of foreign acquisitions during 1996 to 2002 compared to several other OECD countries. Luxemburg had the highest value of acquisitions. United Kingdom and the Netherlands also had a share of GDP over five per cent. There were no big differences in value between Finland, Norway and Denmark, between 2-3 per cent.

In order to compare the extent of foreign acquisitions in relation to the size of the countries, the average value in current prices has been related to GDP.

Figure 3 The value of Inward Merger and Acquisitions in per cent of GDP, 1996-2002.

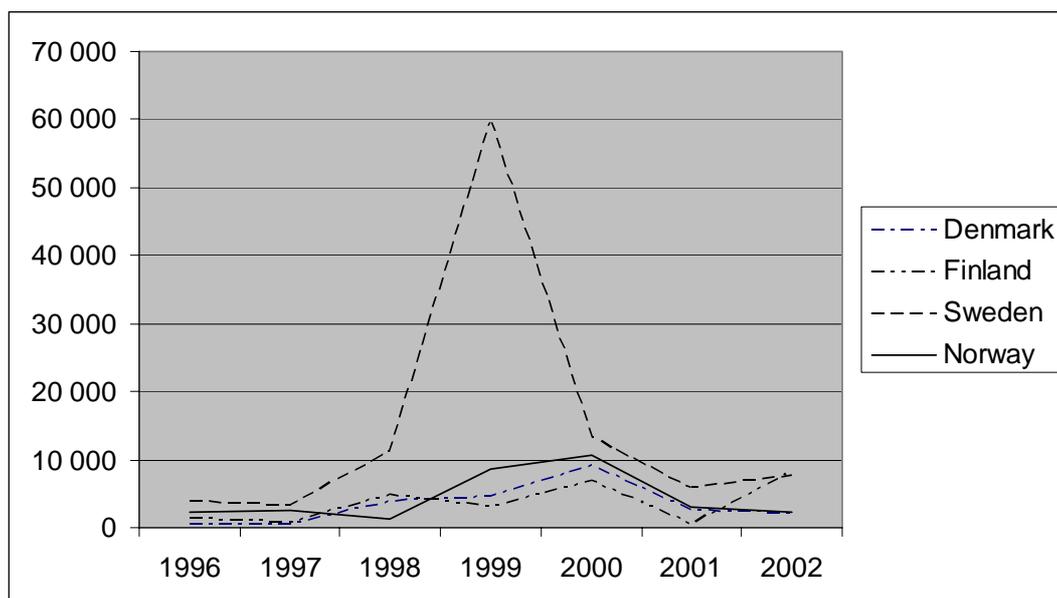


Source: UNCTAD, *World Investment Report* based on data from Thomson Financial Corporation and compiled by ITPS. OECD is the source for GDP.

The only possible way of covering mergers and acquisitions for all Nordic countries is to use a private source: Thomson Financial Corporation.

According to the value of inward merger and acquisitions in current prices for the period 1996-2002, there seems to be a common pattern in all Nordic countries except Iceland. There was a peak in takeovers in the period 1999 to 2000, which probably is influenced by the financial markets. The value of takeovers in Sweden reached a unique high level in 1999, which mainly can be explained by two very big acquisitions (AstraZeneca and Volvo Cars).

Figure 4 The value of inward merger & acquisitions in the Nordic countries, 1996-2002. Current prices in MUSD.



Source: UNCTAD, World Investment Report based on data from Thomson Financial Corporation and compiled by ITPS. Note: M&A in Iceland amounted to 4 MUSD in 1996 and 229 MUSD in 2002.

Services dominate international merger and acquisitions

Since 1995 enterprises in the service sector account for an increasing share of worldwide acquisitions. Between 1987 and 1994 manufacturing enterprises accounted for the highest share. In 2001 financial enterprises accounted for the highest value of acquisitions, followed by enterprises in transports and communications as well as business services.⁸³

Table 11 Value of worldwide inward merger & acquisitions by industry, MUSD.

Industry	2001	1994
Financial intermediation	122 005	10 568
Transports, communications	121 490	13 540
Business services	54 319	8 406
Food	34 628	13 528
Petroleum	31 167	4 216
Mining	27 964	4 568
Trade	27 668	8 753
Chemicals	26 462	20 061
Electronics	25 732	3 432
Electricity, heating, water	21 047	2 510

Source: UNCTAD, World Investment Report based on data from Thomson Financial Corporation compiled by ITPS. Current prices.

⁸³ UNCTAD, WIR 2002.

Mode of entry in Sweden

Sweden is the only Nordic country that makes regular surveys of mode of entry⁸⁴ within the framework of official statistics. Since the reference year 1997 a question on mode of entry is part of the annual survey on foreign controlled enterprises. The questionnaire is available at www.itps.se/in_english/statistics/Questionnaire.xls

Acquisitions including mergers have dominated as the main mode of entry. Among the biggest foreign controlled enterprise groups there are only a few examples of greenfield investment (i.e. meaning the establishment of new units) and these were by the end of the 1900 century and some in the early 1990's.

According to ITPS statistics there was a peak in four modes of entry in Sweden during the period 1999 to 2000, i.e. in the number of acquisitions, mergers, joint ventures and greenfield investment (Table 12). Sweden has probably had the highest number as well as the highest value of foreign acquisitions compared to other Nordic countries, but it seems like all countries except Iceland had a peak in the value of foreign acquisitions during 1999 to 2000.

Table 12 Number of foreign controlled enterprises by year of entry and mode of entry into Sweden.

Year	Acquisition	Merger	Joint venture	Greenfield	Other	No answer	Total
<1990	362	19	17	480	6	58	942
1990-1991	163	7	3	93	4	14	284
1992-1993	196		2	151	2	16	367
1994-1995	349	21		142	2	26	540
1996-1997	501	14	6	218	6	36	781
1998-1999	997	83	6	383	10	58	1537
2000-2001	1283	49	13	470	26	49	1890
2002-2003	649	13	3	173	18	21	877
No answer	134	3	3	117	3	1966	2226
Grand Total	4634	209	53	2227	77	2244	9444

Source: ITPS, *International Business*. Note: No answer in the column refers to year of entry and includes the answer don't know. No answer in the row refers to mode of entry.

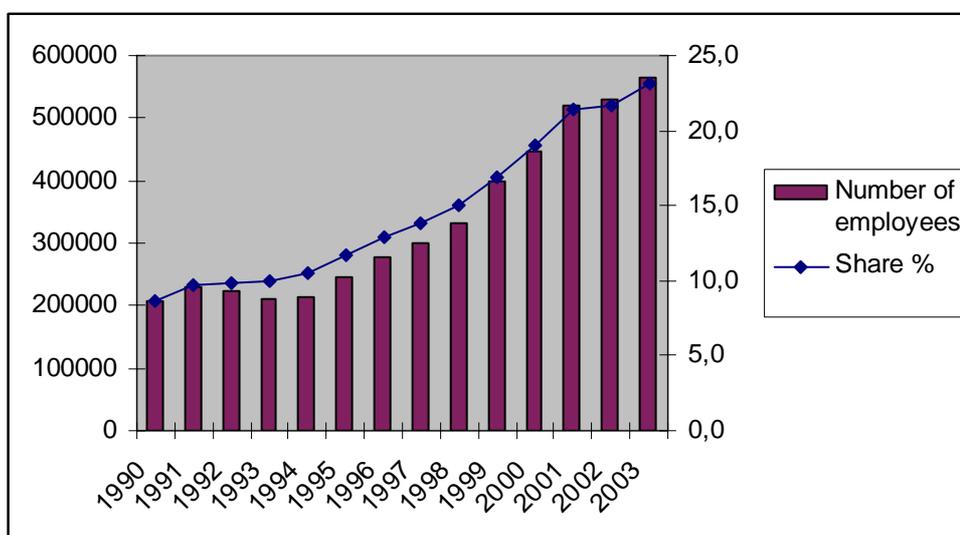
⁸⁴ Helsinki School of Economics has a database, which include data on merger & acquisitions, but due to confidentiality it is only available for researchers at this school and could not be used in this project.

Increased number of employees in foreign controlled enterprises

The Nordic countries have experienced a large increase in inward foreign direct investment since mid 1990's.

At the end of 2003 was recorded the highest level of foreign control in Sweden ever. There were about 10 000 foreign controlled enterprises with 564 200 employees in Sweden. This corresponds to 23 per cent of the total employment in Swedish business sector.

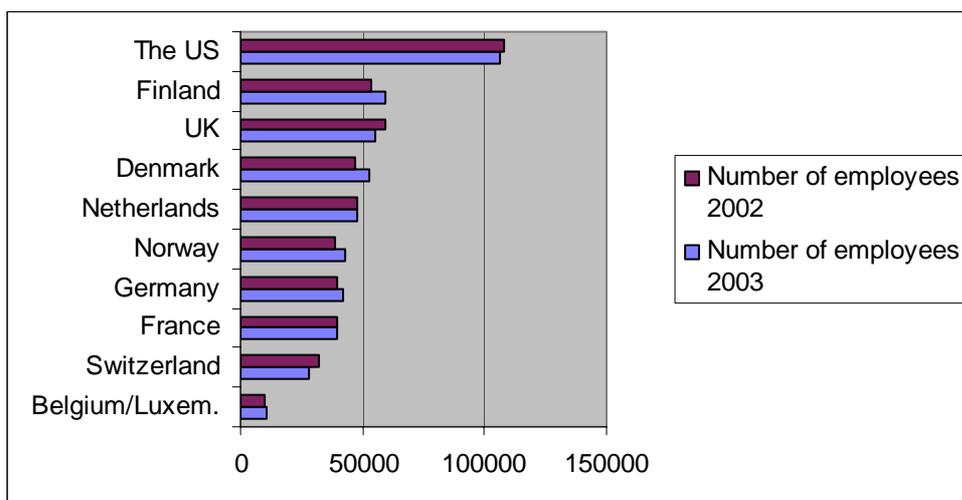
Figure 5 Number of employees in foreign controlled enterprises and their share of total employment in the business sector in Sweden 1990-2003.



Source: ITPS, *International Business*.

In 2003, 316 000 persons in Sweden were employed in enterprises controlled by EU-countries, 156 000 in enterprises from the Nordic countries and 106 000 persons in enterprises from the US. The number of employees increased most in enterprises controlled by the Nordic countries between 2002 and 2003.

Figure 6 Number of employees in foreign controlled enterprises in Sweden by country of origin 2003 and 2002.



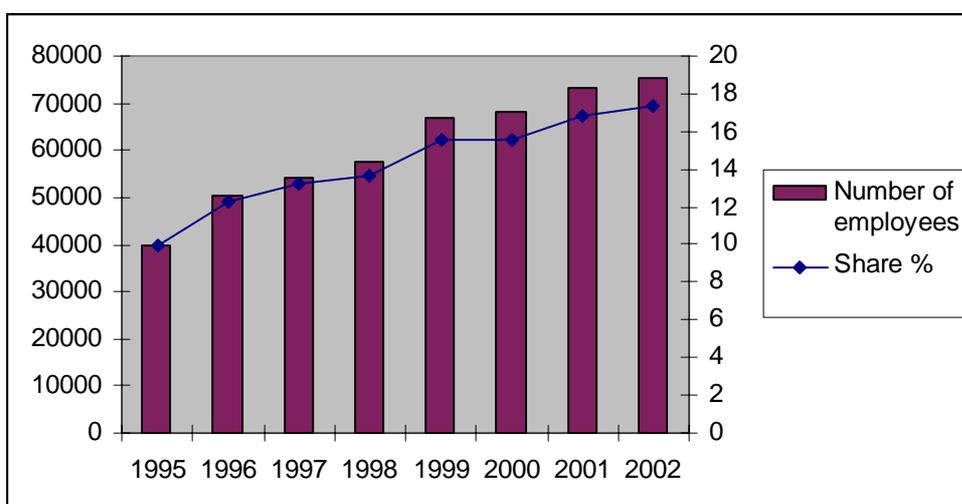
Source: ITPS, international Business.

The number of employees in foreign controlled enterprises has also increased in Finland from mid 1990's. Finland had the highest level of foreign control in 2002 measured as number of employees. There were 2 100 foreign controlled enterprises with 185 200 employees in 2002. This corresponds to about 14 per cent of the total employment in the Finnish business sector. The share of turnover was higher, i.e. almost 18 per cent.

The higher share in employment in comparison with turnover in foreign controlled enterprises is a familiar pattern found other EU-countries which delivers statistics on foreign affiliates to Eurostat.

Foreign controlled enterprises' share of number of employees in manufacturing was above average for the whole business sector, i.e. almost 18 per cent.

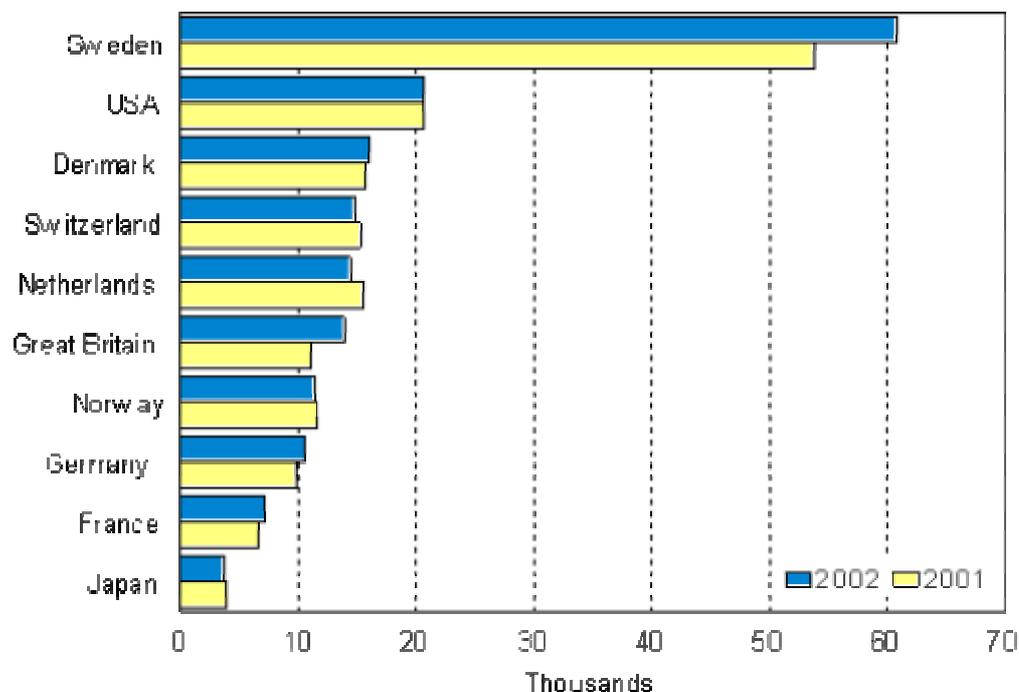
Figure 7 Number of employees in foreign controlled manufacturing enterprises in Finland 1995-2002.



Source: Statistics Finland.

Sweden dominated as investor in Finland 2002 and 2001, measured as number of employees. The US was the second biggest country of origin followed by Denmark, Switzerland and the Netherlands. Norway also belonged to the 10 biggest investors in Finland.

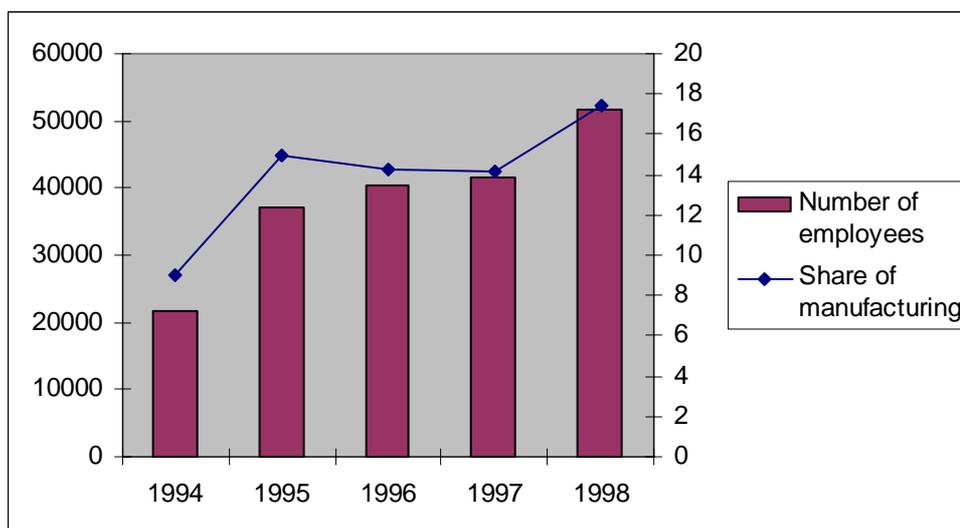
Figure 8 Number of employees in foreign controlled enterprises in Finland by country of origin 2002 and 2001.



Source: Statistics Finland

The number of employees also increased in foreign controlled enterprises in Norway, but not as much as in Sweden and Finland.

Figure 9 Number of employees in foreign controlled manufacturing enterprises in Norway.



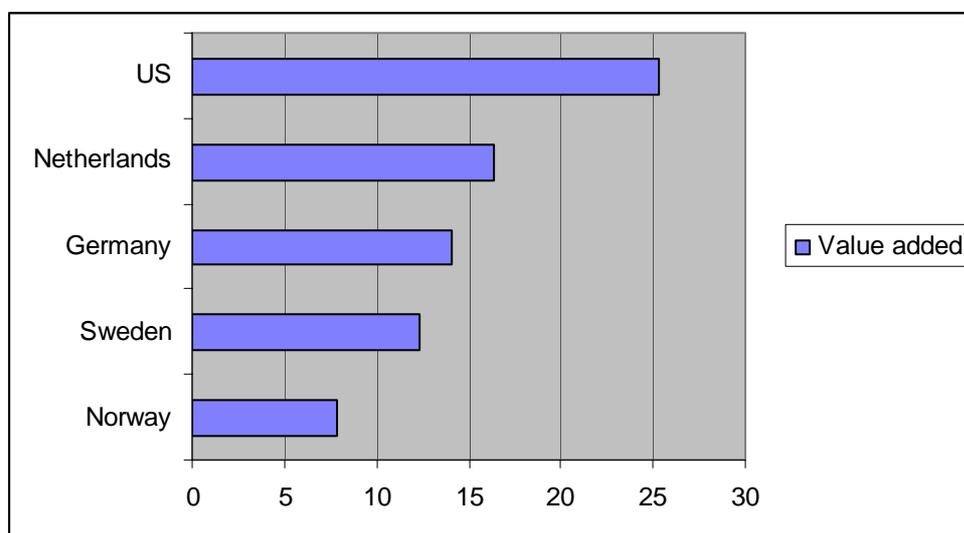
Source: OECD.

The three largest countries in direct control (immediate control, not country of origin) as regards number of employees in Norway are: Sweden, Denmark and the Netherlands.

The high ranking of the Netherlands may be due to holding companies located in that country while the ultimate control is held by companies in other unknown countries. According to a survey by Eurostat, the difference between immediate and ultimate control gives an overestimation of the Netherlands and underestimation of the US as countries of origin.

In Denmark foreign controlled enterprises' share of employment in the business sector was about 7 per cent in 1999⁸⁵. Their share of turnover was 11 per cent.

Figure 10 Top five controlling countries in Denmark by share of value added in the business sector 1999 (%).



Source: Eurostat, *Statistics in Focus, Theme 4, 3/2003. Increased global presence*

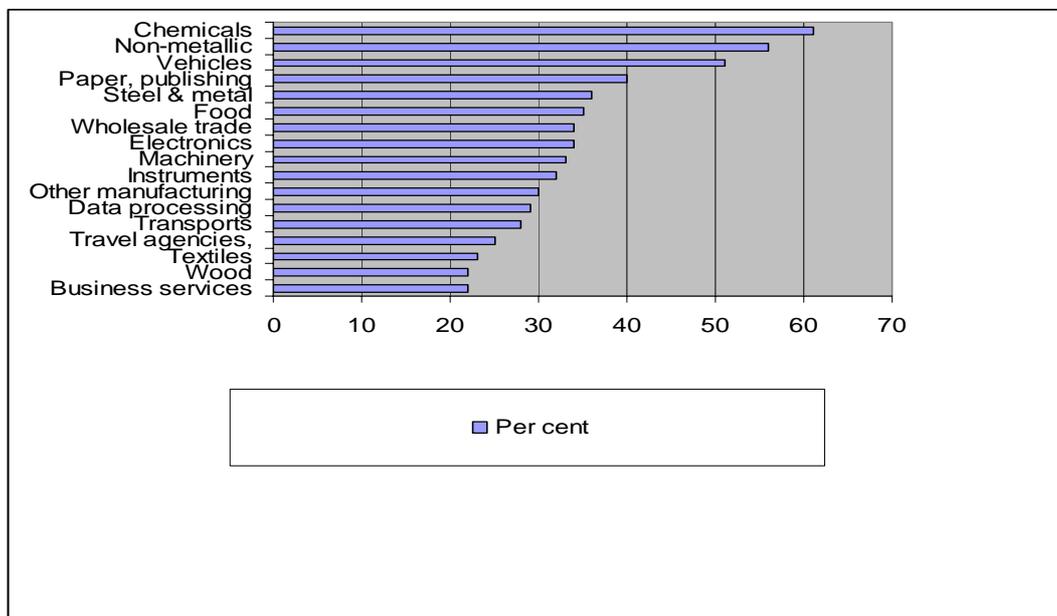
According to Swedish statistics, enterprises in services as well as small and medium sized enterprises have increased their global presence in the 1990's and early 2000's. More than half of all employees in foreign controlled enterprises in Sweden, totalling 298 000, were employed in service industries, predominately in business services and wholesale trade in 2003. About 235 000 were employed in the manufacturing industry, predominately in manufacturing of vehicles and chemicals.

In the pharmaceutical industry, which is the dominating part of the chemical industry, 88 per cent were employed in foreign controlled enterprises. In the ICT sector 231 000 were employed in foreign controlled enterprises in 2003, which corresponds to 29 per cent of the total ICT sector in Sweden. Consultancy in systems and programming employed most persons in the

⁸⁵ Statistics Denmark was not able to provide more updated data in time for this report. The source used for Denmark is Eurostat, *Statistics in Focus, Theme 4, 3/2003*.

ICT sector, which corresponded to 27 per cent of all employed in the ICT sector in Sweden 2003.

Figure 11 Share of foreign controlled enterprises' employment in total industries in Sweden 2003. (figure in not nice, should be replaced to be more in line with the previous ones)

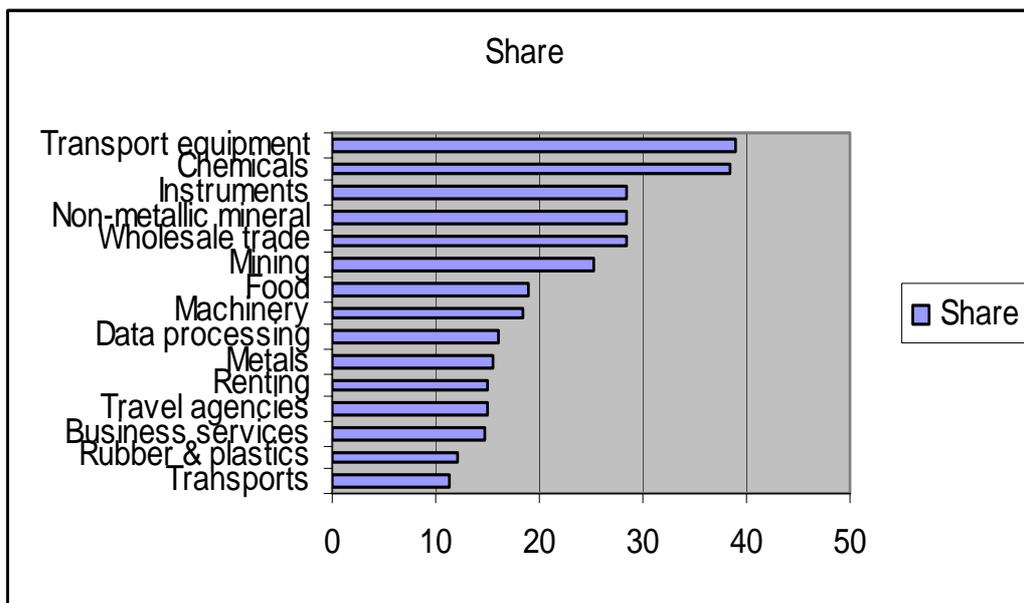


Source: ITPS, *International Business*.

In Finland 75 000 persons were employed in foreign controlled manufacturing enterprise in 2002, which corresponds to 40 per cent of all employees in the manufacturing industry. The foreign controlled enterprises had more employees in the service sector, i.e. more than 85 000 persons. That means that about 45 per cent of all employees in the service sector were employed in foreign controlled enterprises, predominately in wholesale trade and business services.

In Figure 12 one can see that the highest shares of employment in foreign controlled enterprises in Finland were in manufacturing of transport equipment as well as in manufacturing of chemicals including pharmaceuticals, followed by manufacturing of instruments.

Figure 12 Share of foreign controlled enterprises' employment in total industries in Finland 2002. Per cent. (This figure is not that nice either)

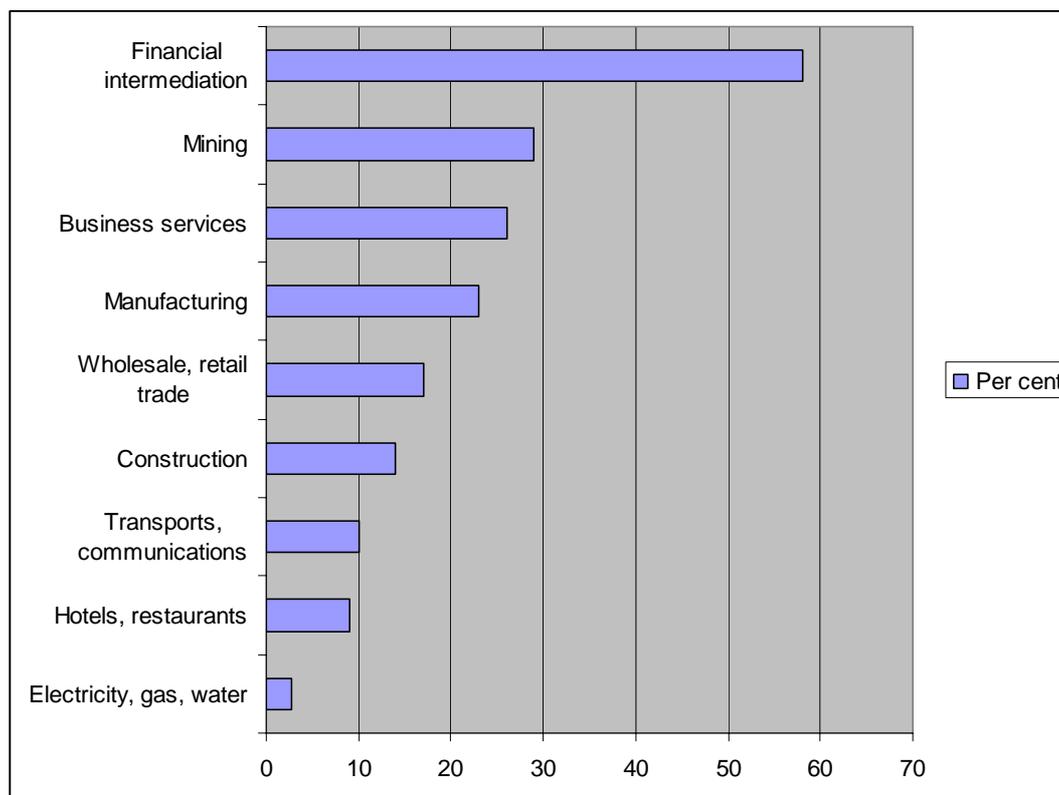


Source: Statistics Finland.

The three largest sectors as regards employment in foreign controlled enterprises in Norway are: manufacturing, business services, wholesale and retail trade. The total number of employees in foreign controlled enterprises in the sectors C-K⁸⁶ amounted to 243 000 persons in 2001. The financial industry had the highest share of employees in foreign controlled enterprises, almost 60 per cent.

⁸⁶ C=Mining, D=Manufacturing, E=Electricity, gas and water supply, F=Construction, G=Wholesale and retail trade, H=Hotels and restaurants, I=Transports, storage and communications, J=Financial intermediation, K=Real estate, renting and business services.

Figure 13 Share of foreign controlled enterprises' employment in total industries in Norway 2001.



Source: Statistics Norway. Preliminary data.

In Denmark 60 per cent of the employees in foreign controlled enterprises were employed in the service sector 1999 and 40 per cent in the manufacturing industry⁸⁷.

Foreign controlled enterprises generate most value added in medium high-tech industries

In Denmark, Finland and Sweden foreign controlled enterprises generate most value added in medium-high-tech manufacturing industries. The nationally controlled enterprises (domestic multinational and uninationaI enterprises) generate on average most value added in low-tech industries according to Eurostat's survey in nine member states for the reference year 2000.⁸⁸ According to Eurostat this relation is not surprising, because foreign controlled enterprises tend to be larger and it can be seen from Statistics in Focus, *High-tech industries in the EU*⁸⁹, that high-tech manufacturing is dominated by large companies. The share of value added generated by

⁸⁷ Eurostat, Statistics in Focus, Foreign-controlled enterprises in high-tech manufacturing and services. Theme 4, 15/2004.

⁸⁸ Eurostat, Statistics in Focus, Foreign-controlled enterprises in high-tech manufacturing and services. Theme 4, 15/2004.

⁸⁹ European Communities, Theme 4-11/2003, page 4.

foreign controlled enterprises in high-tech manufacturing varied widely between participating countries, from 7,7 per cent in the Netherlands to 35,4 per cent in Ireland.

In Denmark and Sweden, foreign controlled enterprises generated higher value added in high-tech industries than nationally controlled enterprises. The share of value added in high-tech was 20 respectively 14 per cent. In Finland nationally controlled enterprises had a much higher share of value added in high-tech industries than foreign controlled enterprises, 25 respectively 17 per cent..

Table 13 Value added in the manufacturing industry by level of technological intensity in Denmark 2000, per cent.

Denmark	High-tech	Medium-high-tech	Medium-low-tech	Low-tech
Foreign-controlled	20	36.2	25.8	18.1
Nationally-controlled	13.7	20.8	20.8	44.7

Source: Eurostat, *Statistics in Focus, Theme 4, 15/2004*. Note: Nationally controlled includes domestic controlled multinationals and uninationa enterprises.

Table 14 Value added in the manufacturing industry by level of technological intensity in Finland 2000, per cent.

Finland	High-tech	Medium-high-tech	Medium-low-tech	Low-tech
Foreign-controlled	16.5	46	23.2	14.2
Nationally-controlled	24.9	14.2	19.4	41.5

Source: Eurostat, *Statistics in Focus, Theme 4, 15/2004*. Note: Nationally controlled includes domestic controlled multinationals and uninationa enterprises.

Table 15 Value added in the manufacturing industry by level of technological intensity in Sweden 2000, per cent.

Sweden	High-tech	Medium-high-tech	Medium-low-tech	Low-tech
Foreign-controlled	19.7	45.1	13.2	21.9
Nationally-controlled	13.9	26.4	23.0	36.6

Source: Eurostat, *Statistics in Focus, Theme 4, 15/2004*. Note: Nationally controlled includes domestic controlled multinationals and uninationa enterprises.

Between 25,2 per cent in Spain and 59,1 per cent in Ireland of the services sector value added by enterprises under foreign control was generated in knowledge-intensive services. In nationally controlled enterprises this was between 22,3 per cent in France and 46,7 per cent in United Kingdom.

As one can see in table 6, only Sweden had a higher share of value added in foreign controlled enterprises in knowledge-intensive services than in nationally controlled enterprises as regards the comparison between the Nordic countries.

Table 16 Share of value added in service sector generated in knowledge-intensive services 2000, per cent.

Country	Foreign-controlled	Nationally controlled
Denmark	28.4	45.9
Finland	32.7	44.2
Sweden	37.9	25.1

Source: Eurostat, Statistics in Focus, Theme 4, 15/2004. Note: Nationally controlled includes domestic controlled multinationals and uninationaI enterprises.

Table 17 Definition of technological intensity

Technological intensity	Nace Rev.1	Industries
High-tech manufacturing	24.4, 30, 32, 33, 35.3	Pharmaceuticals, computers, tele products, instruments, aircrafts
Medium-high-tech manufacturing	24-24.4, 29, 31, 34, 35.2, 35.4, 35.5	Chemicals, machinery, electronics, vehicles, railway, motorcycles
Medium-low-tech manufacturing	23,25-28, 35.1	Petroleum, rubber & plastics, shipyards
Low-tech manufacturing	15-22, 36, 37	Food, textiles, leather, wood, pulp & paper, printing, furniture, recycling
Knowledge-intensive services	61, 62, 64, 70-74	Sea transport, air transport, post & telecommunication, real estate, renting, computer processing, R&D, business services

Highest productivity in foreign controlled enterprises

According to Swedish statistics on international enterprises, i.e. domestic multinational enterprises with subsidiaries abroad and foreign controlled enterprises in Sweden, have on average a higher value added per employee than uninational enterprises with no subsidiaries abroad.

Of the international enterprises, foreign controlled enterprises had the highest labour productivity (SEK 639 000) on average in 2002 and 2001. There are some differences in productivity by industries, but there is a big gap between international and uninational enterprises in all industries. In the ICT sector in Sweden the value added per employee amounted to SEK 622 000 in foreign controlled and to SEK 529 000 in nationally controlled enterprises in 2002.

Table 18 Enterprises' productivity in Sweden 2002 and 2000.

Category of enterprises	Value added per employee, SEK 2002	Value added per employee, SEK 2001
Total business sector	541 000	521 000
Domestic multinational enterprises	595 000	555 000
Foreign controlled enterprises	639 000	618 000
Uninational enterprises	462 000	452 000

Source: ITPS, International Business. Note: Exclusive financial enterprises.

Conclusions

Foreign takeovers have become more and more frequent in the Nordic countries. It seems like that the pattern of globalisation is about the same in the Nordic countries as in the other EU countries and in the US.

In the European Union, Luxembourg and Ireland are very special as regards foreign controlled enterprises. The main reason is probably tax reliefs and regional incentives available for foreign controlled enterprises in these countries.

Sweden followed by Finland have got most employees in foreign controlled enterprises compared to other Nordic countries, 564 000 (2003) respectively 185 000 (2002) employees. In the majority of Nordic countries, the country of origin among the biggest investors has been another Nordic country.

Enterprises from the US are also important investors in the Nordic countries as well as in the EU.

Table 19 The three biggest countries of origin investing in Nordic countries by number of employees.

Host country	Country of origin 1.	Country of origin 2.	Country of origin 3.
Denmark 1999*	The US	The Netherlands	Germany
Finland 2002	Sweden	The US	Denmark
Norway 2002	Sweden	Denmark	The Netherlands
Sweden 2002	The US	UK	Finland

*Source: Eurostat for Denmark, Statistics Finland, Statistics Norway and ITPS for Sweden. Note: * Data for Denmark are based on foreign controlled enterprises' share of value added in the business sector 1999.*

In Denmark, Finland and Sweden foreign controlled enterprises generate most value added in the medium-high-tech industries and nationally controlled enterprises in the low-tech manufacturing industries.

The share of value added in services generated in knowledge-intensive services is higher in nationally controlled enterprises in Denmark and Finland, but is higher in foreign controlled enterprises compared to nationally controlled enterprises in Sweden.

According to Swedish statistics, foreign controlled enterprises have higher productivity on average than nationally controlled enterprises. The biggest gap in productivity in all industries is between international and uninationl enterprises.

There are some controversial issues, which are difficult to cover by existent statistics and it is obvious that statistics have to be combined with analysis in order to answer complex questions.

Some examples of complex questions:

- How to explain differences in productivity among foreign and nationally controlled enterprises?
- How to define relocation of businesses?
- How to measure cross-border relocation of businesses?
- How to measure the impact on the national economy by different entry modes such as acquisitions and greenfield investment?

Before it becomes possible to analyse complex questions, statistics on globalisation of companies will have to be improved. This can only be achieved by international cooperation between users and producers. There is a need for continuous work on harmonisation of definitions and variables. There is also an increasing demand among politicians to get more up to date international comparisons. Below are some examples on possible improvements of statistics, which are based on Swedish experience.

Improvement of statistics

There is a need to

- Encourage more countries to provide basic harmonised data on globalisation such as number of employees by industry and by country of origin/location
- Reduce the time-lag in producing statistics
- Reduce the big amount of different thresholds in statistics and aim for better and harmonised coverage
- Improve data on services
- Improve data on size-classes
- Improve data on enterprise groups
- Combine production of statistics with analyses and encourage more users to participate in international meetings at Eurostat and OECD