

International Sourcing

Moving Business Functions Abroad

Statistics Denmark

Statistics Finland

Statistics Netherlands

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Statistics Sweden

International Sourcing

Moving Business Functions Abroad

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Preface

The continuous globalisation of our economies confronts the national statistical offices with new challenges and user demands to measure new phenomena such as international sourcing. The increased fragmentation of the value chain resulting from the sourcing of business functions internationally is an important feature of the globalisation process.

International sourcing – or off-shoring, which is the term the media commonly uses of the process – has attracted considerable policy and media attention particularly due to its perceived impacts on domestic employment. The debate has mainly been based on anecdotal evidence, as statistical evidence measuring the phenomena and its impact has not been available so far.

EUROSTAT, the Statistical Office of the European Communities, and the national statistical offices in the Member States have therefore launched an ad-hoc survey on international sourcing to establish the statistical evidence about the level, patterns and possible impacts of international sourcing for the European economies needed by policy-makers, researchers and other data users.

This joint publication by the national statistical offices of Denmark, Finland, the Netherlands, Norway and Sweden is also evidence of the importance and impact of globalisation. Comparing and analysing the results of the survey on international sourcing adds important value to the national results as it allows users to benchmark the performance of the domestic enterprises.

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Statistics Denmark, June 2008

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Explanation of symbols

- 0 } Less than 0.5 of the unit applied
- 0,0 }
- . Category not applicable
- .. Data too uncertain or disclosed due to confidentiality
- ... Data not available
- Nil

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Summary

In the current debate the phenomenon of international sourcing is referred to with a variety of labels and terms such as off-shoring, near-shoring, delocalisation or outsourcing which are often used without explicit definitions. The somewhat generic heading of international sourcing has been chosen as a term to be used in this project.

The current discussions about the magnitude and impact of international sourcing are mainly based on anecdotal evidence as no harmonised and internationally comparable official statistics are currently available. Therefore EUROSTAT, the Statistical Office of the European Commission, and the national statistical offices in the Member States have launched an ad-hoc survey on international sourcing to establish statistical evidence needed by policy-makers, researchers and other users about the level, patterns and possible impacts of international sourcing for the European economies.

The national statistical offices in Denmark, Finland, the Netherlands, Norway and Sweden have decided to disseminate the national results of the survey on international sourcing in a joint publication. The publication analyses differences across the countries to the extent they have integrated into the newest feature of economic globalisation, namely the increased fragmentation of the value chain allowing for moving business functions of the enterprises abroad totally or in parts in search of lower costs, other efficiency gains and/or access to skilled labour and new market opportunities.

An important feature of the survey is the splitting of the activities carried out by the enterprises into a number of business functions, i.e. into the core business functions of the enterprise, being a primary or secondary activity, and into a number of support business functions.

When comparing the national results one should be careful in analyzing the differences in exact values. The quality and harmonization of the survey across countries however generally allow for more general benchmarking which indicates possible similarities or differences in the reported levels.

The level of international sourcing is relatively similar across the five countries – with the exception of Sweden, partly due to a different survey set-up. The largest share of enterprises having sourced internationally is found in Denmark (19 per cent of all enterprises with 50 or more employees), followed closely by Finland (16 per cent), Norway and the Netherlands (14 per cent).

The main business function sourced abroad is the core functions of the enterprises. This is the case especially for manufacturing enterprises as about 70 per cent of the manufacturing enterprises in Denmark, Finland and the Netherlands having sourced internationally have sourced their core functions abroad. Norwegian manufacturing enterprises showed

the lowest share (60 per cent) of enterprises sourcing their core activity abroad.

The most commonly sourced support function is ICT services which have been sourced by 25-30 per cent of the enterprises having sourced. A characteristic of the sourcing of ICT support functions is that mainly service enterprises source this function abroad.

More than one-half of all international sourcing activities from the five countries take place within the European Union. Denmark is the most active in sourcing to destinations outside the EU, although more than 50 per cent of its sourcing stays within the EU. Another important region for sourcing activities is Asia. One-fourth of all sourcing activities have Asia as destination.

The most frequent destinations for the sourcing of core functions, mainly manufacturing production, are the new EU Member States and Asia. Support functions are generally not moved to very distant locations. The old Member States are the most frequent destinations for enterprises sourcing their support functions abroad.

When carrying out international sourcing enterprises most often choose insourcing as the model, i.e. source business functions abroad within the same enterprise group. Outsourcing of business functions to external suppliers abroad is a less frequent type of international sourcing. The only exception is Denmark where outsourcing and insourcing are almost equally important types of international sourcing.

Future sourcing expected for 2007-2009 is characterised by the growing importance of non-EU destinations. Core functions are expected to increase in importance in international sourcing as about 40 per cent or more of planned international sourcing from the five countries are core functions.

The new Member States together with China score the highest frequencies as expected destinations for future sourcing of core functions in 2007-2009. The most frequently expected sourcing destinations of ICT functions are the old Member States.

In general, efficiency seeking factors such as cost reductions are the main drivers of international sourcing for enterprises in all countries. Reductions in labour costs are most often pursued when shifting functions abroad. Labour cost reductions are most important for enterprises in Denmark, Sweden and the Netherlands, where almost 60 per cent of the enterprises considered labour cost reductions very important.

Strategic decisions taken by the group head are also a key driver for international sourcing in all countries, with the exception of Denmark. Enterprises often also rate access to new markets as an important reason for international sourcing, particularly in Finland and the Netherlands.

Overall, enterprises perceive only rather limited barriers which hamper the international sourcing process. The main barrier for international sourcing reported by enterprises in all countries is that proximity to clients was needed. In addition, concerns of the sourcing operation exceeding benefits are generally considered as an important barrier. There were no major differences experienced across the countries.

Danish enterprises estimate gross job losses due to international sourcing to amount to 25,000 – 35,000 during 2001-2006 or approximately 5,000 jobs lost annually – or less than 1 per cent of the workforce in enterprises with 50 or more employees. On the other hand, the enterprises report job creations constituting 7,000-10,000 jobs during the period 2001-2006 (or approx. 1,400 jobs annually) due to their sourcing of business functions abroad.

Plans to move high skill jobs abroad are much less frequently reported by enterprises when compared with plans to move other types of jobs abroad during the period 2007-2009. In addition, international sourcing is expected to generate more high skill job creation than high skill job losses during 2007-2009.

While international sourcing, on the one hand, causes the movement of high skill jobs abroad less often than other types of jobs, it also generates more often high skill job creation than creation of other types of jobs.

The overall perception of the impacts of international sourcing by enterprises is rather even across the Nordic countries and the Netherlands. Enterprises strongly consider international sourcing to have a major positive impact on their overall competitiveness.

Introduction

Industrial restructuring has been an important factor influencing the economic development within the EU in recent decades. It has especially affected the manufacturing sector, and has led to concerns amongst policy makers about a potential process of deindustrialisation in the EU. A more recent trend, increasing concerns about the future employment opportunities in Europe even further, is the apparent growth in international sourcing of services, especially to countries outside the EU. It has received a great deal of political and media attention, which has mainly been based on anecdotal evidence in the form of individual cases.

The international sourcing of services as a business strategy is being facilitated by technological developments, especially within ICT, allowing companies to codify and transfer information and knowledge globally. Another significant facilitator is the increased globalisation of services markets as a consequence of market deregulation and trade liberalisation.

While manufacturing activities are mainly independent of the location of production, the majority of service functions require a proximity to markets and clients. Therefore the services sourced internationally are mainly back-office functions, e.g. ICT services or finance/accounting services, enabled by the increased use of ICT and Internet connectivity of enterprises worldwide. However, there has also been a development towards moving various service functions that focus on customer contacts, especially call centres.

In the current debate the phenomenon of international sourcing has a variety of labels and terms such as off-shoring, near-shoring, delocalisation or outsourcing, which are often used without explicit definitions. The somewhat generic heading of international sourcing has been chosen as a term to be used in this project.

The definition used for international sourcing is strict in terms of location, as it is limited to events replacing domestic production with foreign production. On the other hand, it is less restrictive with regard to control, as it includes all types of relocation of production of goods or services, irrespective of whether functions are sourced to an affiliated enterprise abroad or contracted out to an unaffiliated supplier abroad. The definition also includes all types of affiliated enterprises, and does not distinguish between greenfield establishments and existing affiliates.

Box 1 Definition of insourcing and outsourcing.

CONTROL	LOCATION	
External production outside the enterprise or enterprise group	Domestic Sourcing (Outsourcing) <i>Production outside the enterprise or group by non-affiliated enterprises but within the compiling country</i>	International Sourcing (Outsourcing) <i>Production outside the enterprise or group and outside the compiling country by non-affiliated enterprises. This involves foreign subcontracting</i>
Internal production within the enterprise group	Domestic Sourcing (Insourcing) <i>Production within the enterprise group to which the enterprise belongs and within the compiling country</i>	International Sourcing (Insourcing) <i>Production within the group to which the enterprise belongs but abroad (by affiliated enterprises)</i>

The survey focuses on the movement of domestic production to producers located abroad (see below for the definition) as a result of a decision taken by a resident producer to reduce or close down production of goods or services domestically. This includes both core and support business functions of the enterprise. This publication focuses on international sourcing and does not address the issue of domestic sourcing.

It is important to emphasize that the expansion of the resident enterprises abroad are carried out in other forms than international sourcing, e.g. expanding existing foreign affiliates or acquisitions of foreign enterprises without moving currently performed business functions abroad. These types of activities are – by definition - not included in the analysis even if the borderlines between international sourcing and other types of expansion abroad must be described as blurred.

International sourcing is not a one-way street only moving business functions abroad. Enterprises in Denmark, Finland, the Netherlands, Norway and Sweden are also part of the global value chain receiving tasks due to sourcing from abroad. The impacts on the economies of these types of activities are not addressed in this publication.

1. Objectives and Scope

As stated above, the current discussions about the magnitude and impact of international sourcing are mainly based on anecdotal evidence as no harmonised and internationally comparable official statistics are currently available. Therefore EUROSTAT, the statistical office of the European Commission, and the national statistical offices in the Member States have launched an ad-hoc survey on international sourcing to establish statistical evidence needed by policy-makers, researchers and other users about the level, patterns and possible impacts of international sourcing for the European economies.

The overall objective of the international sourcing project is to provide decision-makers at the national and European levels with relevant statistical evidence and information about factors driving international sourcing, e.g. the impact on the competitiveness, motivations and perceived benefits and barriers together with possible employment consequences in the Member States.

In order to provide the statistical evidence needed, a survey tool and a methodology for monitoring the factors driving international sourcing have been developed by the national statistical offices, cf. Annexes 1 and 2. The project was launched in 2006 and the survey has been carried out between April and November 2007 in the 13 Member States and EEA countries participating.

2. Survey Coverage and Target Population

The survey on international sourcing is an economy-wide ad-hoc survey as it covers the so called non-financial business economy (NACE sections C to I and K).

The focus of the survey is on large enterprises as the multinational groups of enterprises are considered to be the key players in international sourcing. In terms of employment size class at the European level, a relatively high threshold is established: 100 or more employees. Several statistical offices decided to lower the threshold to enterprises with 50 or more employees as this size class is seen as more relevant for especially smaller economies such as the Nordic countries. The statistical unit is that used in the European Structural Business Statistics framework, i.e. the enterprise.

Box 2 Definition of International Sourcing.

The total or partial movement of business functions (core or support business functions) currently performed in-house or domestically outsourced by the resident enterprise to either non-affiliated (external suppliers) or affiliated enterprises located abroad.

3. Business Functions

The remarkable development in the last decades especially within information and communication technologies has led to an increased fragmentation of the value chain. This relates both the production process and the location for carrying out the tasks involved. In order to understand the development it is necessary to identify a unit of analysis which is smaller than the enterprise – which is the main statistical unit in European structural business statistics. Consequently the concept of business function has been introduced and implemented in this survey on international sourcing, (see below).

Box 3 Definition of Business Functions.**Core business function:**

Production of final goods or services intended for the market/for third parties carried out by the enterprise and yielding income. The core business function equals in most cases the primary activity of the enterprise. It may also include other (secondary) activities if the enterprise considers these to comprise part of their core functions.

Support business function:

Support business functions (ancillary activities) are carried out in order to permit or facilitate production of goods or services intended for the market/for third parties by the enterprise. The outputs of the support business functions are not themselves intended directly for the market/for third parties. The support business functions are in the survey divided into:

Distribution and logistics:

This support function consists of transportation activities, warehousing and order processing functions. In figures and tables "Distribution" is used as an abbreviation for this function.

Marketing, sales and after sales services including help desks and call centres:

This support function consists of market research, advertising, direct marketing services (telemarketing), exhibitions, fairs and other marketing or sales services. Also including call-centre services and after sales services such as help-desks and other customer supports services. In figures and tables "Marketing and sales" is used as an abbreviation for this function.

ICT services:

This support function includes IT-services and telecommunication. IT services consist of hardware and software consultancy, customised software data

processing and database services, maintenance and repair, web-hosting, other computer related and information services. Packaged software and hardware are excluded. In figures and tables "ICT services" is used as an abbreviation for this function.

Administrative and management functions:

This support function includes legal services, accounting, book-keeping and auditing, business management and consultancy, HR management (e.g. training and education, staff recruitment, provision of temporary personnel, payroll management, health and medical services), corporate financial and insurance services. Procurement functions are included as well. In figures and tables "Administration" is used as an abbreviation for this function.

Engineering and related technical services:

This support function includes engineering and related technical consultancy, technical testing, analysis and certification. Design services are included as well. In figures and tables "Engineering" is used as an abbreviation for this function.

Research & Development:

This support function includes intramural research and experimental development. In figures and tables "R&D" is used as an abbreviation for this function.

4. The General Structure of the Questionnaire

The questionnaire on international sourcing is designed as a general survey tool applicable for all economic activities. In addition, the core of the questionnaire is based on a qualitative approach, which is considered to be the most useful basis to provide harmonised data allowing comparisons between the participating countries in this difficult and not well established area.

The survey consists of 6 modules collecting background information together with some general aspects of international sourcing. The focus of the survey is on the international sourcing activity of the enterprise i.e. on the module 3. Module 4 asks information about the international sourcing plans of the enterprises which have not yet sourced. Module 5 tries to estimate the expected impact on employment of the planned international sourcing. Finally, the question on barriers related to international sourcing activity in module 6 is aimed at all enterprises.

Box 4 Structure of the Questionnaire.

Module 1: General information (for all enterprises)

Module 2: Sourcing activity of the enterprise (for all enterprises)

Module 3: Sourcing activity of the enterprise carried out internationally during 2001-2006 (for enterprises already carrying out international sourcing in 2001-2006)

Module 4: Plans for international sourcing 2007-2009 (for enterprises with no prior international sourcing activity)

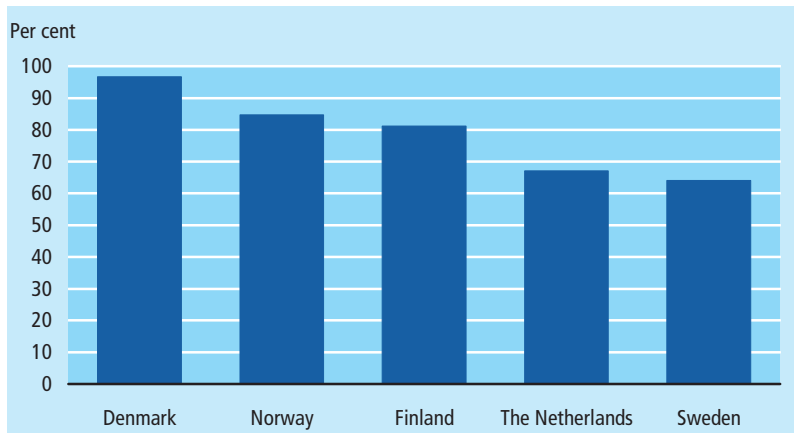
Module 5: Future impact on employment (for enterprises with international sourcing during 2001-2006 and/or plans for international sourcing during 2007-2009)

Module 6: Barriers on international sourcing (for all enterprises)

For more details about the questionnaire and the survey methodology used, see Annexes 1 and 2.

The questionnaire seems to have functioned well and the response rates are relatively high for an ad hoc survey which only in Denmark and Finland was carried out as mandatory surveys.

Figure 1 **Survey Response Rates.**



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

5. Survey Results

The national statistical offices in Denmark, Finland, the Netherlands, Norway and Sweden have decided to disseminate the national results of the survey on international sourcing in a joint publication. In order to put the results into perspective, it has been considered valuable for the users to produce comparable results across the countries which are characterised by being small, open economies in the Northern part of Europe. Also the business structures are relatively similar, allowing for analysis of differences across the countries to the extent they have integrated into the newest feature of economic globalisation; the increased fragmentation of the value chain allowing for moving all or parts of the business functions of the enterprises abroad in the search of

lower costs, other efficiency gains and/or access to skilled labour and new market opportunities.

When analyzing the results of the survey on international sourcing, it is important to understand that this is a pilot project introducing new concepts in a statistical framework. The issue is rather complex to measure as movement of business functions is an on-going process for which it might be difficult to take stock at a given point in time. It is also impossible to draw a strict line between international sourcing of functions currently performed in-house and other types of expansion abroad, e.g. establishing a plant on a totally new market such as China or South America.

The survey operates deliberately with a design mainly asking relatively simple questions which can be answered by tick marking an answer. Furthermore, as the survey was only mandatory in Denmark and Finland, the response rates in the other countries might influence the quality of the results and the possibilities for detailed breakdowns.

Due to differences in the survey methodology used, not all the information collected in the national surveys has been considered of a quality allowing for cross-country analysis. When comparing the national results one should be careful in analyzing the differences in exact values, but the quality and harmonization of the survey across countries usually allow for more general benchmarking indicating possible similarities or differences in the reported levels, see Annex 1 for applied national methodologies.

1. Level and Pattern of International Sourcing

Box 1.1 Main findings:

- The level of international sourcing is relatively similar across the five countries – with the exception of Sweden. The largest share of enterprises having sourced internationally is found in Denmark (19 per cent of all enterprises with 50 or more employees), followed closely by Finland (16 per cent), Norway and the Netherlands (14 per cent). In Sweden the share stands at 4 per cent, see the Methodology annex for a different Swedish survey set-up and its possible impact on the level of international sourcing in Sweden.
- The main business function sourced abroad is the core business of the enterprises. This is the case especially for manufacturing enterprises as about 70 per cent of the manufacturing enterprises in Denmark, Finland and the Netherlands having sourced internationally have sourced their core functions abroad. Norwegian manufacturing enterprises showed the lowest share (60 per cent) of enterprises sourcing their core activity abroad.
- The most commonly sourced support function is ICT services which have been sourced by 25-30 per cent of the enterprises having sourced. A characteristic of the sourcing of ICT support functions is that mainly service enterprises source this function abroad.

1.1 Business Structure

The frequency of international sourcing in a country depends on a number of factors, e.g. the regulatory framework, openness of the economy, geographical location or the national business structure. The business structure is important in understanding the national levels of international sourcing as manufacturing enterprises – due to their limited dependency on proximity to suppliers or clients – can move production across borders more easily. This partly explains why manufacturing enterprises have been sourcing their production internationally for decades; especially the textile industry has been an early mover in adopting international sourcing as a business model. The textile industry began intensive international sourcing as early as in the 1970's and 1980's. This chapter compares the business structures of the five countries in order to identify possible differences which can be explanatory factors for differences in the level of international sourcing across the countries.

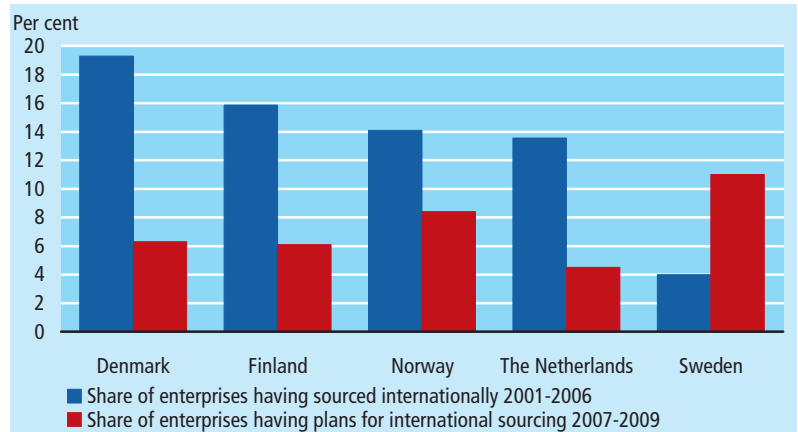
In general, the five countries can be described as having rather similar business structures. It should, however, be noted that in Finland 42 per cent of all enterprises with 50 or more employees operate in the manufacturing sector, cf. Annex Table 1.1. By contrast, the manufacturing sector in Norway only makes up 30 per cent, and the share of high tech manufacturing enterprises is especially low.

Another sector which potentially could use international sourcing as a frequent business model is the knowledge intensive business services (KIBS) sector, which includes the ICT sector. Especially the rapid development of information and communication technologies has been a factor driving recent international sourcing of services. This applies especially to digital services which easily can be transported across huge distances. The KIBS sector is equally important across the five countries.

1.2 Level of International Sourcing

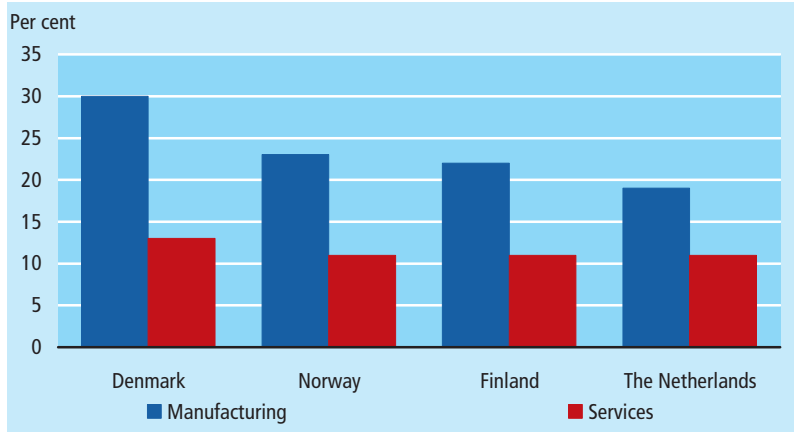
The level of international sourcing is relatively even across the examined countries; varying from 19 to 14 per cent of all enterprises having sourced internationally – except for Sweden (only 4 per cent, see Annex 1 for explanation). Denmark has the largest share and the Netherlands the lowest, cf. Figure 1.2.1. It should be noted that the Dutch results only comprise enterprises with 100 or more employees. As larger enterprises are more likely to source internationally than smaller ones; the Dutch level must be interpreted as relatively smaller. In Denmark, 25 per cent of all enterprises with 100 or more employees have sourced internationally, and the shares of this largest size class are 22 per cent in Finland, 17 per cent in Norway and 6 per cent in Sweden.

Figure 1.2.1 Level of international sourcing 2001-2006 and planned international sourcing 2007-2009.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006.

Figure 1.2.2 Enterprises having sourced internationally - broken down by sector.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

The shares of enterprises in each of the five countries that have planned international sourcing for the period 2007 to 2009 vary between 5 and 11 per cent. Sweden shows the highest share of enterprises with planned sourcing and the Netherlands the lowest. See chapter 3 for a more detailed analysis of the plans for future international sourcing.

If the reported plans are all implemented as stated in the survey, this would indicate that- roughly estimated - at least 25 per cent of the Danish enterprises will have sourced internationally in 2009, followed by the Finnish enterprises (22 per cent), Dutch (19 per cent), Norwegian (18 per cent) and finally Swedish enterprises (15 per cent).

International sourcing in the four Nordic countries and the Netherlands shares to some extent the same patterns when broken down by business functions (see Annex Table 1.2). The core business functions are most frequently sourced in all the five countries. In Sweden (82 per cent), Finland (58 per cent), the Netherlands (55 per cent) and Denmark (52 per cent), the majority of enterprises with international sourcing have sourced their core business functions in parts or totally abroad. Only in Norway, the share of enterprises which have sourced their core business functions abroad is less than one-half. There are many possible reasons for this, but core business functions are vital for enterprises to stay competitive. The opportunity for manufacturing enterprises in particular to lower their production costs by moving the production to e.g. one of the new Member States or China is an important driver for international sourcing (see also Chapter 4).

ICT support functions make up the most frequently sourced support function in the five countries. 28 per cent of the Norwegian enterprises have sourced their ICT support functions abroad in parts or totally, followed by Danish (27 per cent), Dutch (26 per cent), Finnish (25 per cent) and finally Swedish enterprises (22 per cent).

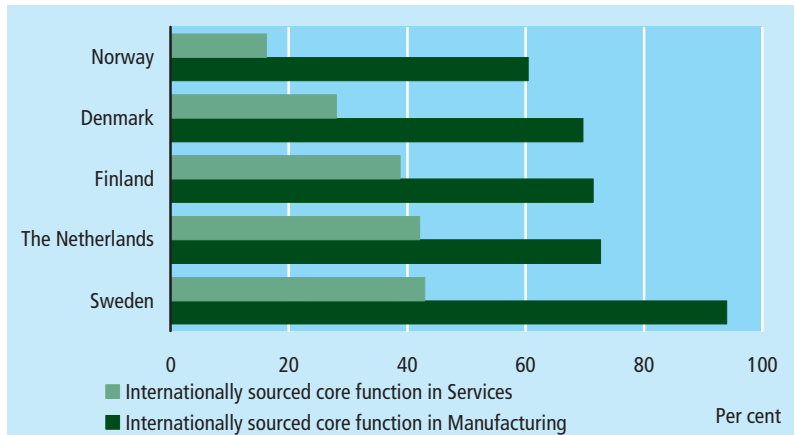
1.3 Sectoral Comparison of International Sourcing

This Chapter will present international sourcing in the five participating countries broken down into two main categories, *Manufacturing* (NACE D) and *Services* (here defined as the remaining non-financial business economy). As mentioned above, the preconditions for international sourcing are very different for manufacturing and services enterprises.

Core business functions are the most frequently sourced function by enterprises in the manufacturing industry (see Figure 1.3.1). The shares for the Dutch, Finnish and Danish manufacturing enterprises are relatively similar – around 70 per cent of all manufacturing enterprises having sourced internationally have sourced their core activities abroad in part or totally. Finally, the Norwegian manufacturing enterprises came out with only 60 per cent of the enterprises sourcing their core activities internationally.

Not surprisingly, services enterprises source their core functions internationally to a much lesser extent. This is valid for all five countries, as around 40 per cent of the Swedish, Dutch and Finnish enterprises which have sourced internationally in 2001-2006 have sourced their core functions abroad during this period. There is a large gap to Denmark (28 per cent) and Norway where only 16 per cent of services enterprises have sourced their core activity abroad.

Figure 1.3.1 **International sourcing of core business functions broken down by sector.**
Share of enterprises carrying out international sourcing.



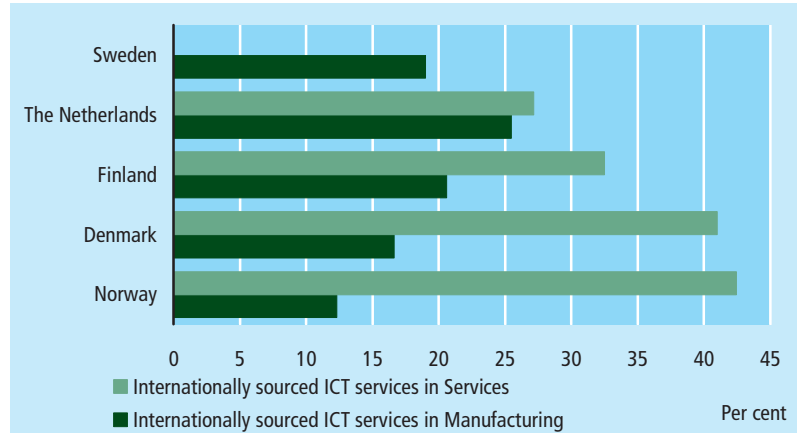
Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

ICT support functions are the most frequently sourced support function in the five countries, cf. Annex Table 1.2. Especially the Dutch manufacturing enterprises (25 per cent of all manufacturing enterprises having sourced internationally) are frequent sourcers of ICT support functions, followed by the Finnish and Swedish manufacturing enter-

prises (around 20 per cent). The Norwegian manufacturing enterprises show a considerable lower level with only 12 per cent, cf. Figure 1.3.2.

The international sourcing of ICT support functions is characterized by the fact that in all five countries the services enterprises source their ICT support functions abroad to a larger extent than manufacturing enterprises – only the Dutch services and manufacturing enterprises show a similar level for both sectors (see Figure 1.3.2).

Figure 1.3.2 **International sourcing of ICT support functions broken down by sector.**
Share of enterprises carrying out international sourcing.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. The Swedish data for international sourcing in Services are too uncertain to be published.

Opposite to sourcing of core functions, manufacturing enterprises score clearly lower frequencies for international sourcing of support functions compared to services. Distribution and logistics functions are quite frequently sourced by manufacturing as well as the services enterprises making no major difference between the two sectors.

Particularly services enterprises have sourced administrative functions frequently ranging from 37 per cent of enterprises in Norway to 25 per cent in the Netherlands. In manufacturing this was less frequent as only around 15 per cent of enterprises sourced administrative functions, most often in Sweden (23 %) and the Netherlands (19 %).

In addition, marketing functions are sourced internationally especially by services enterprises. Almost 30 per cent of services enterprises in Finland and Norway have done so which exceeds clearly the levels of manufacturing sector.

Box 1.2 Country profiles: Sourcing patterns.**Denmark:**

- International sourcing (2001-2006): 19 per cent of enterprises with 50 or more employees have sourced internationally. The most commonly sourced function is core business functions with a share of 52 per cent of all enterprises having sourced abroad. In Manufacturing the most commonly sourced function is the core business functions with a share of 70 per cent. In Services the most commonly sourced activity is ICT support functions with a share of 41 per cent.
- Planned international sourcing (2007-2009): share of enterprises which plan international sourcing is 6 per cent.

Finland:

- International sourcing (2001-2006): 16 per cent of enterprises with 50 or more employees have sourced internationally. The most commonly sourced function is core business functions with a share of 58 per cent of all enterprises having sourced abroad. In Manufacturing the most commonly sourced function is the core business functions with a share of 71 per cent. In Services as well the most commonly sourced function is the core business functions with a share of 39 per cent.
- Planned international sourcing (2007-2009): share of enterprises which plan international sourcing is 6 per cent.

The Netherlands:

- International sourcing (2001-2006): 14 per cent of enterprises with 100 or more employees have sourced internationally. The most commonly sourced function internationally is the core business functions with a share of 55 per cent of all enterprises having sourced abroad. In Manufacturing the most commonly sourced function is the core business functions with a share of 73 per cent. In Services as well the most commonly sourced function is the core business functions with a share of 42 per cent.
- Planned international sourcing (2007-2009): share of enterprises which plan international sourcing is 5 per cent.

Norway:

- International sourcing (2001-2006): 14 per cent of enterprises with 50 or more employees have sourced internationally. The most commonly sourced function internationally is the core business functions with a share of 40 per cent of all enterprises having sourced abroad. In Manufacturing the most commonly sourced function is the core business functions with a share of 60 per cent. In Services the most commonly sourced function is the ICT services with a share of 42 per cent.
- Planned international sourcing (2007-2009): share of enterprises which plan international sourcing is 8 per cent, cf. Annex 1 for methodology.

Sweden:

- International sourcing (2001-2006): 4 per cent of enterprises with 50 or more employees have sourced internationally (see also Methodology Annex). The most commonly sourced function internationally is the core business functions with a share of 82 per cent of all enterprises having sourced abroad. In Manufacturing the most commonly sourced function is the core business functions with a share of 94 per cent. In Services as well the most commonly sourced function is the core business functions with a share of 43 per cent.
- Planned international sourcing (2007-2009): share of enterprises which plan international sourcing is 11 per cent.

Annex Table 1.1.
Business structure 2005.
Number of enterprises with 50 or more employees. Percentages.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Manufacturing high tech	13	15	10	8	15
Manufacturing medium and low tech	24	28	20	22	23
Construction	9	8	10	8	7
Wholesale trade	14	7	13	9	9
Other trade	9	10	10	14	10
Transport	9	8	10	9	9
Knowledge intensive business services (KIBS)	11	12	10	10	12
Other sectors	10	13	16	20	14
Total	100	100	100	100	100

Annex Table 1.2
Business functions sourced internationally 2001-2006.
Share of enterprises carrying out international sourcing.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Core business functions	52	58	55	40	82
Distribution	23	19	23	10	26
Marketing and sales	17	25	12	21	17
ICT services	27	25	26	28	22
Administration	18	20	23	24	26
Engineering	20	10	6	14	..
R & D	15	15	13	7	18
Other functions	5	5	3	17	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Annex Table 1.3
Business functions sourced internationally 2001-2006. Manufacturing.
Share of enterprises carrying out international sourcing.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Core business functions	70	71	73	60	94
Distribution	20	21	17	13	24
Marketing and sales	12	23	15	13	..
ICT services	17	21	25	12	19
Administration	9	14	19	11	23
Engineering	22	11	7	17	..
R & D	14	10	15	7	22
Other functions	5	2	2	20	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Annex Table 1.4
Business Functions sourced internationally 2001-2006. Services.
Share of enterprises carrying out international sourcing.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Core business functions	28	39	42	16	43
Distribution	28	18	27	7	..
Marketing and sales	24	28	10	27	..
ICT services	41	33	27	42	..
Administration	30	30	25	37	..
Engineering	17	9	4	11	-
R & D	17	21	11	7	..
Other functions	6	10	3	12	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

2. Destinations and Types of Business Patterns for International Sourcing

Box 2.1 Main findings:

- More than one-half of all international sourcing activities from the five countries take place within the European Union. Denmark is the most active in sourcing to destinations outside the EU, although more than 50 per cent of its sourcing stays within the EU.
- Another important region for sourcing activities is Asia. One-fourth of all sourcing activities have Asia as destination.
- The most frequent destinations for the sourcing of core functions are new EU Member States and Asia.
- Support functions are not transferred to very distant locations. The old Member States are the most frequent destinations.
- Insourcing, i.e. sourcing within an enterprise group, is the most preferred foreign entry mode, outsourcing, i.e. sourcing to external suppliers, is less preferred.

2.1 Destinations for International Sourcing

The choice of destination for international sourcing is a decision influenced by different factors such as the availability of cheap or specialised labour, the economic infrastructure in the region chosen, the possible network of affiliated enterprises or external suppliers or demand aspects. See Chapter 4 for analyses of the motivations for international sourcing.

In the period 2001-2006 the international sourcing from the five countries is characterised by the fact that the EU Member States make up the main destinations – ranging from 70 per cent in Sweden to just over 50 per cent in Denmark, cf. Figure 2.1.1. Obvious advantages of sourcing within the European Union are the short distance to producers as well as clients and the fact that the EU constitutes a free market for the movement of persons, goods and services with an institutionalised regulatory framework, which eliminates some of the traditional risks associated with sourcing abroad.

Box 2.2 Destinations for international sourcing within the European Union.

The survey operates with the following groupings of destinations for international sourcing within the EU:

Old Member States:

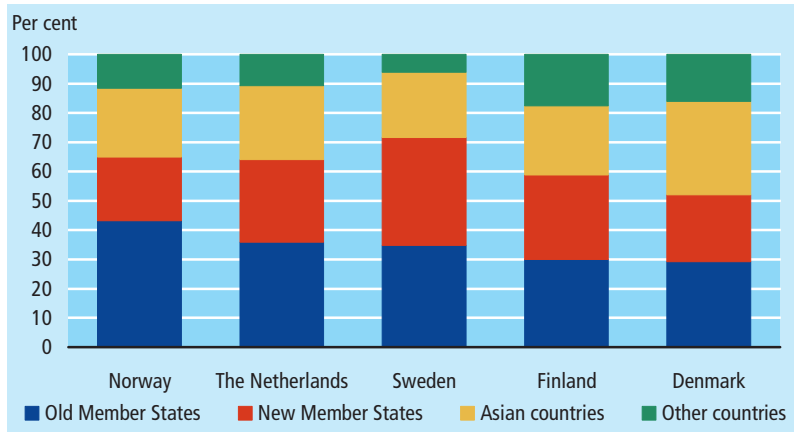
Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, The Netherlands, Austria, Portugal, Finland, Sweden, United Kingdom

New Member States:

Czech Republic, Estonia, Cyprus, Latvia, Lithuania, Hungary, Malta, Poland, Slovenia, Slovak Republic, Bulgaria, Romania

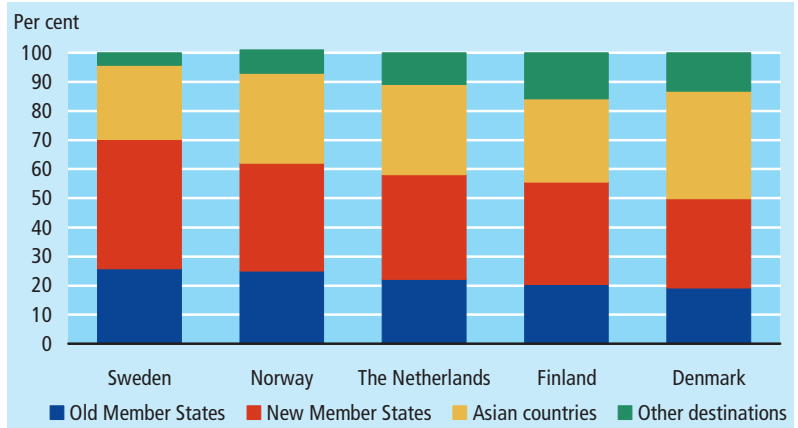
A glance at the individual countries shows some interesting differences, (see Figure 2.1.1). Norway, The Netherlands and Finland have the old Member States as the most frequent destination for international sourcing, while Sweden have a preference for sourcing to the new Member States. The Danish enterprises distinguish themselves by having a non-European destination, namely Asia, as the most frequent single sourcing destination. On the other hand, Denmark shows the smallest share (23 per cent) of sourcing going to the new Member States, which constitute the destination for 37 per cent of the international sourcing from Swedish enterprises.

Figure 2.1.1 Destinations for international sourcing. Core and/or support functions.



The type of function sourced also influences the choice of destination, cf. Figure 2.1.2. In Sweden, Norway, the Netherlands and Finland the new EU Member States are the most frequent destinations for core functions, while the Asian countries are the most frequent destination for Danish enterprises.

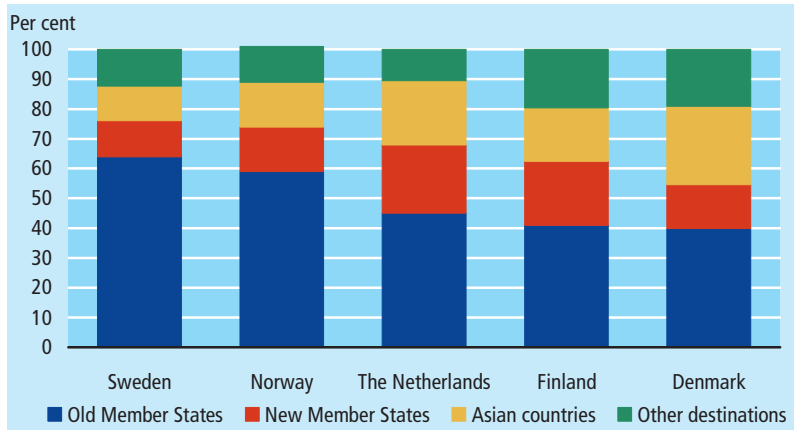
Figure 2.1.2 Sourcing of core functions. Broken down by destinations.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Support functions are sourced within the EU more often than core functions, cf. Figure 2.1.3. Sweden takes the lead with 76 per cent. The old EU Member States are the most frequent destination for support functions for all countries. This pattern of the old Member States being the most frequent destination can be found for all the support functions reported in the survey.

Figure 2.1.3 Sourcing of support functions. Broken down by destinations.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

The second most popular destination for sourcing ICT functions from Denmark, Finland and the Netherlands is Asia. On the other hand, distribution and logistics support functions are rarely sourced to Asia; they stay in Europe which constitute the main exports market for the five countries.

Another way of looking at sourcing patterns is to take a sectoral approach i.e. are manufacturing enterprises preferring other countries for sourcing than services enterprises? Based on the data from Denmark, Finland, the Netherlands and Norway this appears to be the case, see Table 2.1.1.

Table 2.1.1 **Geographical breakdown of core functions sourced internationally 2001-2006. Share of total number of functions sourced.**

	DK		FI		NL		N		S	
	Manu- factu- ring	Ser- vices	Manu- factu- ring	Ser- vices	Manu- factu- ring	Ser- vices	Manu- factu- ring	Ser- vices	Manu- factu- ring	Ser- vices
Old member states . . .	17	25	20	24	22	23	21	36	..	..
New member states . .	34	21	34	39	41	29	40	29	..	..
China	24	16	21	8	11	15	23	..	..	..
India	4	9	7	9	3	14	..	17	..	..
Other countries	21	29	19	21	22	19	15	18	..	..
Within EU	51	46	53	63	63	52	61	64	..	..
Outside EU	49	54	47	37	37	48	39	36	..	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

The core functions of manufacturing enterprises are most frequently sourced within the EU, particularly to new Member States ranging from a share of 34 per cent for Denmark and Finland up to 41 per cent for Dutch enterprises. China is the second most important destination for Finnish and Danish enterprises attracting over 20 per cent of the enterprises, while old Member States were somewhat less important. India accounts for only some 5 per cent of the total sourcing of manufacturing core functions, but a somewhat larger share of core functions sourced from services enterprises.

The core functions of services sector are most frequently sourced within EU with the exception of Denmark. The highest shares of sourcing of core functions in services sector within EU were in Norway (64 per cent) and Finland (63 per cent), while 46 per cent of sourcing of core functions in Danish enterprises had a destination within EU.

Box 2.3 Country profiles: Destinations for international sourcing.

Denmark:

- One-half of the international sourcing activities have destinations outside the EU. Asia is an important region for Denmark, because one-third of all sourced functions find their way to Asia.
- Asia is the most important destination for sourcing core functions. China is the most frequent destination within Asia.
- The old Member States are the most important destination for sourcing support functions.

Finland:

- The geographical distribution of all sourcing destinations is rather even.
- Finland has the highest share of destinations other than the EU and Asia. Finland source 11 per cent of functions to European countries outside the EU¹, especially to Russia.

The Netherlands:

- More than 60 per cent of all international sourcing activities stay within the EU.
- Dutch enterprises source their core functions mainly to the new Member States and Asia.
- Only one-third of all support functions are sourced outside the EU by Dutch enterprises.

Norway:

- More than 60 per cent of all international sourcing from Norway is directed at the EU.
- The most important destinations for sourcing core functions are the new Member States (37 per cent) and Asia (31 per cent).
- Support functions mainly go to the old Member States having a share close to 60 per cent.

Sweden:

- Three-quarters of the sourcing from Sweden is going to the EU. The volume is equally divided between old and new Member States.
- Core functions are, in the first place, sourced to the new Member States (44 per cent), but the old Member States and Asia take one-fourth of the international sourcing activities each.
- Sweden is the lead country in sourcing support functions to the old Member States.

¹ European countries outside the EU: Switzerland, Norway, Turkey, Russia, Belarus, Ukraine and the Balkan states.

2.2 Business Patterns for International Sourcing

Generally two types of sourcing can be distinguished, (see also Introduction). The first is international insourcing. In this type of sourcing the business functions are moved abroad but kept within the existing enterprise group. This is a form of high-control and equity-based entry mode. Core or support business functions are moved to affiliated enterprises such as existing foreign enterprises of the same enterprise group or new foreign enterprises of the same group. The magnitude of ownership may vary. A foreign enterprise can be a totally owned subsidiary or a joint venture with 50% or more ownership. The mode of acquiring ownership can be a greenfield operation in which a foreign enterprise is newly created. It is also possible to acquire a foreign enterprise, e.g. an enterprise group purchases an existing production plant in China to move production from the Netherlands to China.

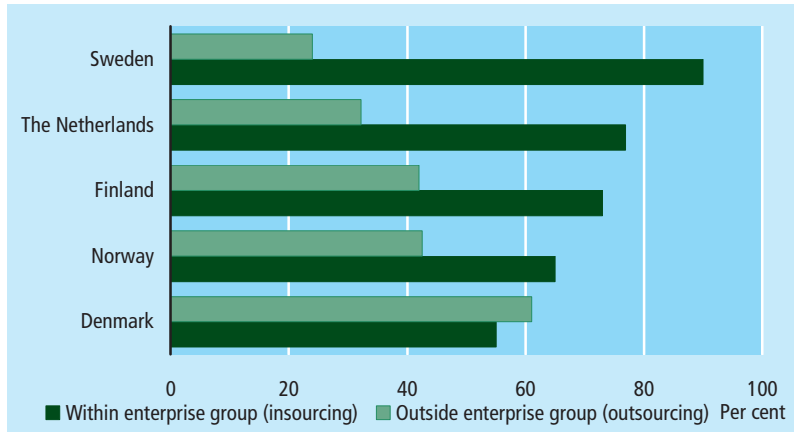
The second type is international outsourcing in which the functions move outside the enterprise or enterprise group to non-affiliated enterprises. This involves foreign subcontracting and does not secure the same level of control for the sourcing enterprise as insourcing does, e.g. ICT services to a foreign external provider or subcontracting of research to a foreign laboratory.

The choice between keeping the production and functions within the existing firm boundaries or outsourcing them to a third party on a contractual basis is a strategic decision. It is assumed that a higher level of equity and greater ownership result in greater control. On the other hand, it can also be attractive to lay the risk in the hands of a third party. Subcontracting to a foreign enterprise also means utilising the expertise and knowledge of this enterprise, which might not be available within the sourcing enterprise or its affiliates.

Insourcing is the most preferred foreign entry mode (see Figure 2.2.1). It is also possible for an enterprise to switch between different entry modes and choose a combination of insourcing and outsourcing. An example could be: Sourcing a function to two different countries. The approach can differ by country of destination. It is possible that in the first country the sourcing is realised by insourcing and in the second country by outsourcing. That is the reason why the sum of insourcing and outsourcing is more than 100 per cent in Figure 2.2.1.

The preference for insourcing is greatest in Sweden. The enterprises in the Netherlands, Finland and Norway also most often choose insourcing. In Denmark the pattern is somewhat different, as insourcing is as frequent as outsourcing.

Figure 2.2.1 International sourcing broken down by business partner.

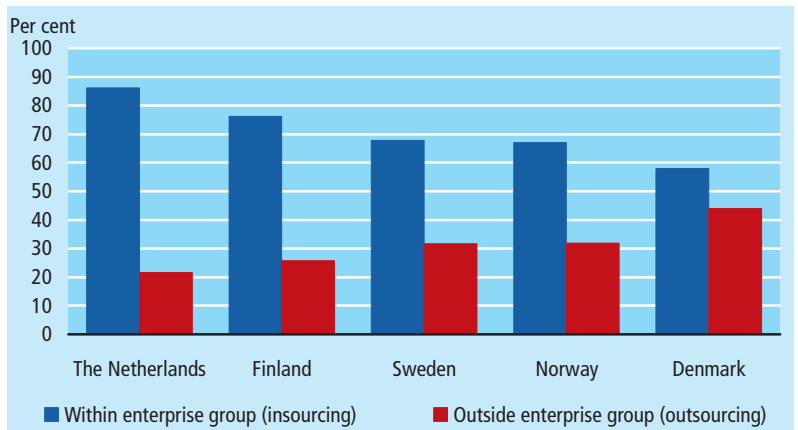


Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

This picture does not really change if we only look at the sourcing of core functions. Again, the Swedish enterprises mainly use insourcing as the mode of international sourcing and the Danish enterprises show a very different pattern with an even position between the two modes.

When considering the sourcing of support business functions in the Nordic countries and the Netherlands, it is obvious that insourcing is preferred for all functions. There are, however, some differences between the individual functions. Engineering and related technical services are functions which are not very often sourced, but if they are, the mode selected is relatively often outsourcing. This trend is the same in the individual countries. Marketing, sales and after sales services (including help desks and call centres) and also administrative and management functions are activities which are the least subcontracted to foreign firms.

Figure 2.2.2 International sourcing of ICT services broken down by business partner.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

ICT functions as well as R&D functions are often seen as strategic factors enabling the enterprises to keep or improve their competitiveness. Therefore it is not surprising that the majority of sourcing is taking place within the enterprise group (insourcing) and not to an external supplier. In large multinational enterprises provision of these types of functions are often centralised in one or a few locations within the enterprise group in order to guarantee efficiency gains or protect intellectual property rights.

Almost 70 per cent of the enterprises in the Netherlands, Finland, Sweden and Norway are sourcing ICT functions within the enterprise group (see Figure 2.2.2). In these countries, 30 per cent or fewer enterprises report sourcing ICT functions to an external services provider. However, Danish enterprises source more frequently to external providers (44 per cent) and less often within the group compared to the other countries. This pattern was observed also for sourcing of R&D functions.

Box 2.4 Country profiles: Business patterns for international sourcing.**Denmark:**

- The only country where outsourcing occurs as often as insourcing.
- Sourcing of core functions and support functions such as engineering and related technical services, and research and development all take place both within and outside the enterprise group.
- Sourcing of the support functions marketing, sales and after sales services and administrative and management functions mainly stay within the enterprise group.

Finland:

- Insourcing is more frequent than outsourcing among Finnish enterprises.
- The most frequently outsourced support function is engineering and related technical services.
- The support functions marketing, sales and after sales services and administrative and management functions are mostly kept under control of the enterprise group.

The Netherlands:

- Insourcing is more frequent than outsourcing among Dutch enterprises.
- Sourcing of the core functions stays within the enterprise group in three quarters of the cases.
- Sourcing of all types of business support functions stays within the enterprise group even more often than core functions.

Norway:

- Insourcing is more frequent than outsourcing for core function and even more for business support functions.

Sweden:

- Nearly all functions which are moved abroad stay within the enterprise group. This applies to core functions as well as support business functions.
- Sourcing of ICT services is the function most often subcontracted, but still two thirds of the ICT functions sourced stay within the enterprise group.

3. Plans for International Sourcing

Box 3.1 Main findings:

- Future sourcing is characterised by the growing importance of non-EU destinations.
- Core functions are expected to constitute the largest share of planned international sourcing in all five countries.
- The new Member States together with China score the highest frequencies as expected destinations for future sourcing of core functions in 2007-2009.
- The most frequently expected sourcing destinations of ICT functions are the old Member States.

The survey has been carried out to provide policy makers with evidence-based information about the increasingly important issue of international sourcing and its impacts on the domestic economies. To establish more informative and as up-to-date as possible material for future policy-shaping, the historical evidence of international sourcing in the period 2001-2006 is supplemented with indications of the future pattern of international sourcing for the period 2007-2009.

The enterprises were asked about their plans for future international sourcing in the period 2007-2009. It is important to underline that only the enterprises not having sourced in the period 2001-2006 are asked about their future plans, except for Norway which have also included the enterprises with sourcing activities in 2001-2006. Consequently, it is not possible to measure directly the development in the total international sourcing activities of the enterprises but only to benchmark the plans of the new sourcing enterprises against the pattern of the existing sourcing activities.

It could be expected that many of the enterprises already sourced parts of their core or support business functions abroad in the period 2001-2006 also would source internationally in the future. Consequently the results are underestimating the future level of international sourcing. This statement is supported by the Danish and Norwegian survey results. The Danish survey results are showing a share of 16 per cent of enterprises having plans to source internationally if all enterprises are included and 6 per cent if only enterprises without previous international sourcing are included. The same figure for Norway is 8 per cent respectively 4 per cent.

3.1 Structure of Future International Sourcing

The future planned international sourcing is characterised by the fact that mainly core functions will be sourced internationally. This pattern can be found across all countries; around 40 per cent of the functions sourced are core functions, cf. Table 3.1.1. This pattern is also reflected

in the current structure of international sourcing, where core functions constitute the most frequently sourced business functions. For the planned sourcing activities, the share of core functions is expected to increase in all five countries.

Table 3.1.1 **Breakdown of the functions planned for international sourcing 2007-2009.**

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Core Function	41	38	50	43	40
Distribution	11	13	8	8	11
Marketing and sales	8	14	12	8	9
ICT services	7	11	10	10	17
Administration	8	7	13	9	10
Engineering	18	9	2	16	7
R&D	6	8	5	6	7
TOTAL	100	100	100	100	100

Note: enterprises with 50 or more employees - except for the Netherlands covering 100 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006.

The other functions frequently planned to be sourced internationally in the period 2007-2009 are distribution and ICT support functions. Engineering functions are relatively important for Danish (18 per cent) and Norwegian (16 per cent) enterprises, while the Finnish ones intend to source marketing and sales functions more frequently than the others. This closely follows the pattern of the current sourcing structure, but both distribution and especially ICT services are expected to account for smaller shares in the future sourcing activities. Finally it can be mentioned that R&D functions constitute around 7 per cent of the planned functions to be sourced internationally in all countries.

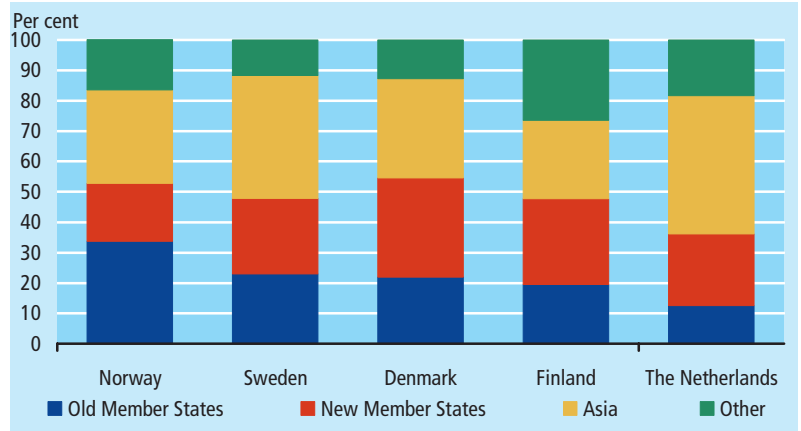
3.2 Destinations for Future International Sourcing

A major trend in the planned future international sourcing is that sourcing outside of the EU is gaining more importance, cf. Figure 3.2.1. In the Netherlands, Sweden and Finland, the majority of the enterprises introducing international sourcing in the period 2007-2009 intend to source outside the EU.

For the Finnish enterprises particularly Russia is expected to be of major interest as a target country for future international sourcing. Around 20 per cent of the international sourcing of Finnish enterprises will aim at other European countries, while these attract only less than 10 per cent from the other Nordic countries and the Netherlands.

In Denmark and Norway the enterprises mainly intend to source within the EU. The future planned sourcing of Denmark is characterised by a large share of sourcing going to the new Member States – almost one-third of the total functions intended for international sourcing. The future importance of the new Member States is worth mentioning especially in the case of Denmark, as the Danish enterprises were clearly the ones having sourced least frequently to the new Member States in the period 2001-2006.

Figure 3.2.1 **Destinations of planned international sourcing (core and/or support functions) 2007-2009.**



Note: enterprises with 50 or more employees - except for the Netherlands covering 100 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006.

3.3 Destinations for Future International Sourcing by Business Function

The sourcing decision is a strategic decision which takes a number of factors – e.g. cost reductions, location of customers, standardisation issues – into account, cf. also Chapter 4. These factors influence the choice of destination for the sourcing activity, and may differ between sourcing a manufacturing core function or a services support function. Therefore, this subchapter breaks down the geographical destination by type of function sourced.

The planned international sourcing of core functions for the period 2007-2009 is still characterised by the importance of the closest destinations, i.e. the EU Member States. This is especially the case in Denmark, where more than one-half of the Danish enterprises planning to source mention the other EU countries as a target destination. EU countries can expect to receive around 40 per cent of core functions sourced from the other Nordic countries and the Netherlands. However, when future expectations are compared with sourcing which has taken place 2001-2006, it is obvious that the old Member States are perceived

as a clearly less attractive target area for future sourcing of core functions.

Sourcing of core functions is mainly carried out by manufacturing enterprises which source the total manufacturing production process or parts thereof. Therefore, it is not surprising that the new Member States together with China score the highest frequencies as expected destinations for future sourcing in 2007-2009, as especially the labour cost issue is seen as a driving factor for sourcing the core activities (see Table 3.3.1). In relative terms, the new Member States were most important for Danish enterprises and least important for the Norwegian ones.

Overall, around one-third of planned international sourcing cases will be assigned to the new Member States. China attracts around 20 per cent of sourcing of core functions with no major differences across the Nordic countries and the Netherlands. It is worth noticing that China is mentioned more frequently than the old EU Member States as a future destination by enterprises in all the five countries. India is mentioned less frequently as a destination country of sourcing core functions.

Table 3.3.1 **Breakdown of planned destinations for international sourcing of core functions 2007-2009.**

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Old member states ...	13	14	9	19	12
New member states ...	40	26	32	19	29
China	17	19	19	22	27
India	10	15	10	8	10
Other countries	20	26	30	32	22
Total	100	100	100	100	100
Within EU	53	40	41	38	41
Outside EU	47	60	59	62	59

Note: enterprises with 50 or more employees - except for the Netherlands covering 100 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006.

The EU destinations, especially the old Member States, are the most frequent ones for the planned sourcing of ICT functions as well, except for Norway (see Table 3.3.2). One explanation might be that when European enterprise groups are streamlining their operations, they often prefer to centralise their ICT functions close to their head office. Overall, EU-countries attract two-thirds or more of the sourcing of ICT functions.

Table 3.3.2 **Breakdown of planned destinations for international sourcing of ICT functions 2007-2009.**

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Old member states	48	38	..	62	51
New member states	29	29	..	24	20
China	0	5	..	..	..
India	13	12	..	..	22
Other countries	10	17	..	..	..
Total	100	100	..	100	100
Within EU	77	67	..	86	70
Outside EU	23	33	..	14	30

Note: enterprises with 50 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006.

The new Member States are the priority area for sourcing distribution and logistics functions. This is probably due to lower wage and other costs in these closely located countries, resulting in the sourcing of many production plants to these countries. Consequently, the distribution support functions are expected to be sourced as well.

The old and new Member States are clearly the most frequently expected target area for sourcing administrative functions, while plans to source to China or India are very limited.

The most frequently expected target region for sourcing engineering functions consists of the new Member States. This is probably linked with the plans for sourcing the core production function to these countries. However, the old Member States as well as India and China are almost equally important.

Europe in general is seen as attractive for marketing and sales functions in the future. China and India appear to have some importance for Danish enterprises, which is perhaps related to plans for developing new markets in the Asian countries.

It is remarkable that R&D, which is considered a very strategic activity and critical for the future competitiveness of many enterprises, is to a large extent sourced out of the EU. An important destination for Danish and Norwegian enterprises is India. Within the EU, the old Member States are still the preferred destination for the sourcing of R&D functions.

Box 3.2 Country profiles: Plans for international sourcing.**Denmark:**

- Danish enterprises mainly intend to source within EU, particularly to new Member States.
- Engineering functions account for 18 per cent of all functions planned to be sourced by Danish enterprises.

Finland:

- Core functions account for the lowest share of planned international sourcing in Finland (38 per cent).
- Russia is expected to be of major interest for future international sourcing for Finnish enterprises.

The Netherlands:

- Core functions make up half of the future plans to source internationally.
- Asia will be the most popular destination for future international sourcing for Dutch enterprises.

Norway:

- Core functions make up more than half of the future plans for international sourcing.
- Old Member States and Asia will be the most frequent destinations for planned international sourcing for Norwegian enterprises.

Sweden:

- ICT services will be more frequently sourced internationally by Swedish enterprises than by enterprises in the other countries.
- Asia is expected to be an important destination region for Swedish enterprises.

Tabel 3.3.3 **Breakdown of planned destinations for international sourcing of R&D functions 2007-2009.**

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Old member states	28	27	..	20	42
New member states	24	20	..	16	..
China	10	13	..	..	..
India	24	7	..	38	..
Other countries	14	33	..	20	..
Total	100	100		100	100
Within EU	52	47	..	35	63
Outside EU	48	53	..	65	37

Note: enterprises with 50 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006. Data for Norway based on few observations only.

Annex Table 3.1 **Destinations for planned international sourcing during 2007-2009.**

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Old member states	22	20	13	34	23
New member states	33	28	24	19	25
Other European countries	8	19	7	8	8
China	15	14	12	13	20
India	13	11	22	9	13
Other Asian countries	5	1	12	9	8
USA and Canada	3	5	4	5	..
South and Central America	1	2	2	2	..
Africa	0	0	5	..	..
Total	100	100	100	100	100

Note: enterprises with 50 or more employees - except for the Netherlands covering 100 or more employees. Enterprises with plans 2007-2009 only include enterprises not having sourced internationally in the previous period 2001-2006, except for Norway also including enterprises with sourcing activities 2001-2006.

4. Motivations and Barriers for International Sourcing

Box 4.1 Main findings:

- In general, efficiency seeking factors such as cost reductions are the main drivers of international sourcing for enterprises in all countries.
- Reductions in labour costs are most often pursued when shifting functions abroad. Labour cost reductions are most important for enterprises in Denmark, Sweden and the Netherlands.
- Perceived impacts on actual reduction of labour costs in enterprises match well with the cost reduction motivations for carrying out international sourcing.
- Reductions of labour costs are expected as often in the enterprises planning to source internationally as in the ones having already done so.
- Strategic decisions taken by the group head are also a key driver for international sourcing in all countries, with the exception of Denmark.
- The main barrier for international sourcing reported in all countries is that proximity to clients was needed.
- Overall costs of the sourcing operation exceeding benefits are generally considered as an important barrier.

The decision taken by the enterprise to source internationally can be based on different motivations. The literature identifies four main groupings of drivers (efficiency seeking, market seeking, resource seeking and strategic factors) which are reflected in nine explicitly specified motivation factors in the survey questionnaire, cf. Box 4.2.

As an integrated part of the decision-making on whether the enterprise should source internationally is an analysis of the possible risks associated with moving production abroad totally or in part. The survey has addressed the risk factor by asking the enterprises – both the ones having sourced internationally and the ones without international sourcing – about the perceived barriers for international sourcing.

Enterprises were asked to assess the importance of the motivation factors or drivers for carrying out international sourcing. These were asked separately from the enterprises which had already carried out international sourcing during 2001-2006 and from the ones planning to do so in 2007-2009. Chapter 4.1 deals with the ones having carried out international sourcing. Chapter 4.2 covers the enterprises which have not yet carried out international sourcing but which have plans to do so in the period 2007-2009.

The perceived barriers to carrying out international sourcing are analysed in Chapter 4.3. The focus is on the barriers reported by the enterprises carrying out international sourcing as they can assess the importance of the factors based on their actual experiences.

4.1 Motivations for International Sourcing

In this Chapter the focus of the analysis is on the most important factors identified in Box 4.2. The overall importance of these factors for all countries is presented in Annex Table 4.1.

Box 4.2 Motivations for International Sourcing.

1. Efficiency seeking factors:

- Reduction of labour costs
- Reduction of costs other than labour costs
- Focus on core business

2. Market seeking factors:

- Access to new markets

3. Resource seeking factors:

- Access to specialised knowledge/technologies

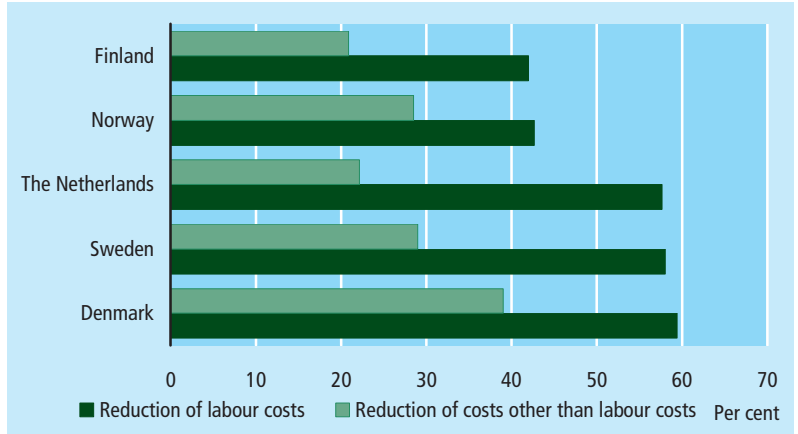
4. Strategic factors:

- Following the behaviour/the example of competitors / clients
- Improved quality or introduction of new products
- Strategic decisions taken by the group head
- Tax or other financial incentives

Efficiency seeking factors, such as reduction of costs, are often referred to as a key driver for sourcing production or support functions abroad. The survey results clearly support this perception. Particularly reductions in labour costs are most often pursued when shifting functions abroad, cf. Figure 4.1.1.

The importance of reductions in labour costs differs somewhat across the Nordic countries and the Netherlands. In Denmark, Sweden and the Netherlands enterprises more often aimed at labour cost savings when sourcing internationally; more than one-half the enterprises in these countries assessed this motivation factor as being very important compared to around 40 per cent of the enterprises in Finland and Norway.

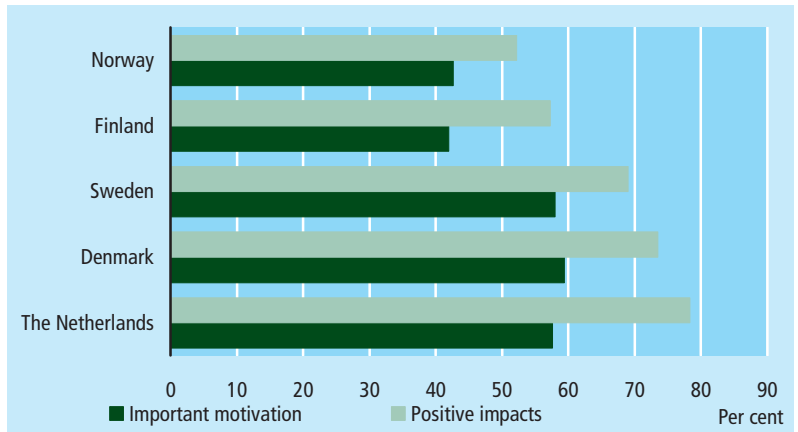
Figure 4.1.1 Importance of cost reductions as a driver for international sourcing. Share of enterprises with international sourcing reporting the factor as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Cost reductions other than labour costs also motivate international sourcing but not to the same extent as labour cost reductions. The overall cost reduction aspect appears to be the strongest motivation factor for Danish enterprises when compared with the other countries.

Figure 4.1.2 Reduction of labour costs as a motivation and perceived impact of this factor. Share of enterprises with international sourcing reporting the factor as very important/having a positive impact.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

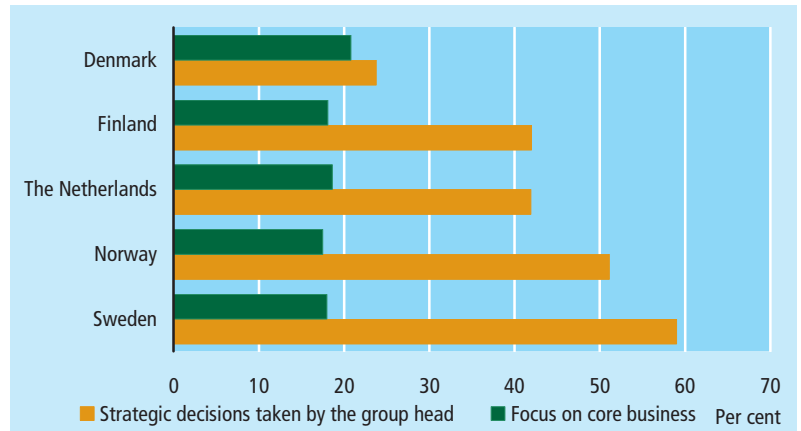
The data reveal that the perceived reduction of labour costs in enterprises match well with the cost reduction motivations for carrying out international sourcing. Figure 4.1.2 compares the share of enterprises that considered reduction of labour costs an important driver for

sourcing internationally and the perceived or reported positive impacts on labour costs reduction. It is obvious that in all countries the pattern is similar and the share of enterprises reporting positive impacts on labour costs is higher than the share considering this as very important reason for sourcing internationally.

About a fifth of the enterprises in all 5 countries consider focus on core business as being an important driver for international sourcing, cf. Figure 4.1.3.

The decisions of sourcing functions internationally are often strategic from the enterprise's point of view. Quite often these decisions are taken by the group head implying that the enterprise concerned did not have the autonomy to make the sourcing decisions itself. The ownership structure is reflected in this observation as well, and very often enterprises in Finland (42 per cent), the Netherlands (42 per cent), Norway (51 per cent) and Sweden (59 per cent) report that strategic decisions are taken by the group head. The only exception is Denmark, where only 24 per cent of enterprises report this factor as very important.

Figure 4.1.3 **Other key drivers for international sourcing. Share of enterprises with international sourcing reporting the factor as very important.**

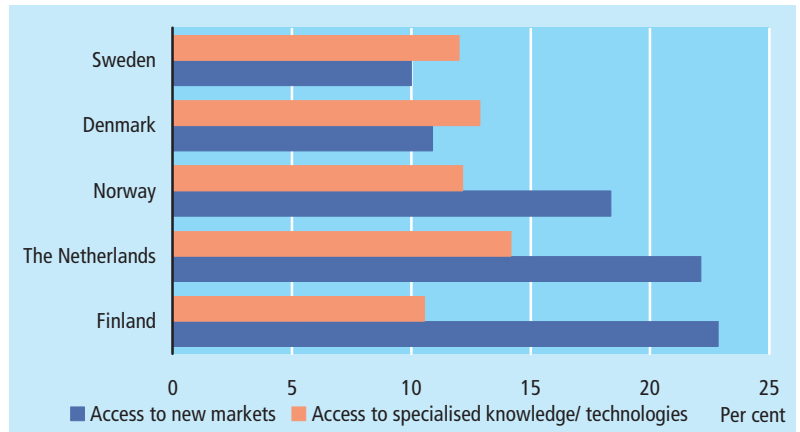


Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Furthermore, the survey shows that the enterprises across all countries considered tax and other fiscal incentives as having the least importance in making international sourcing decisions.

Currently, around 10 per cent of the enterprises have indicated access to specialised knowledge or technologies to be a very important driver for international sourcing. This pattern was fairly similar across all the countries, cf. Figure 4.1.4.

Figure 4.1.4 **Other key drivers for international sourcing. Share of enterprises with international sourcing reporting the factor as very important.**



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

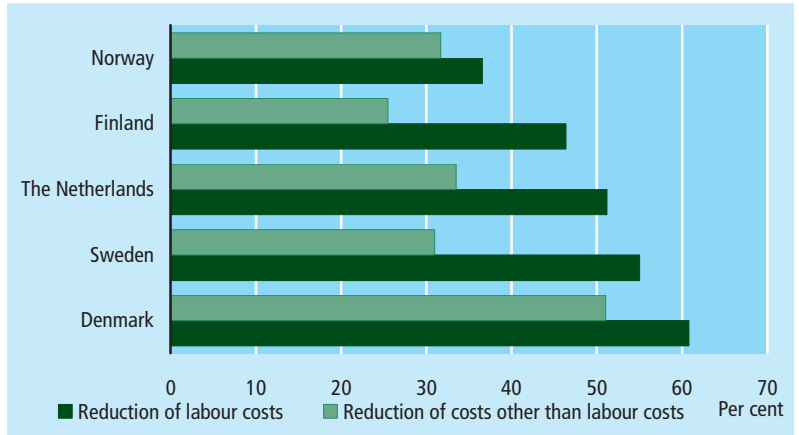
Quite often the Finnish, Dutch and to a somewhat smaller extent also Norwegian enterprises consider international sourcing to be an important channel for accessing new markets. Swedish and Danish enterprises share this view less frequently.

4.2 Motivations for Future International Sourcing

The enterprises planning to source functions internationally have a somewhat different perception of the reasons than the ones already sourcing. However, cost reductions in general scores high as a motivation also for the ones planning for international sourcing in 2007-2009.

Reductions of labour costs are expected as often by the enterprises planning to source internationally as the ones already doing so. However, the enterprises planning for international sourcing in all countries consider reduction of other costs than labour costs a more important reason than the ones already sourcing internationally, cf. 4.2.1.

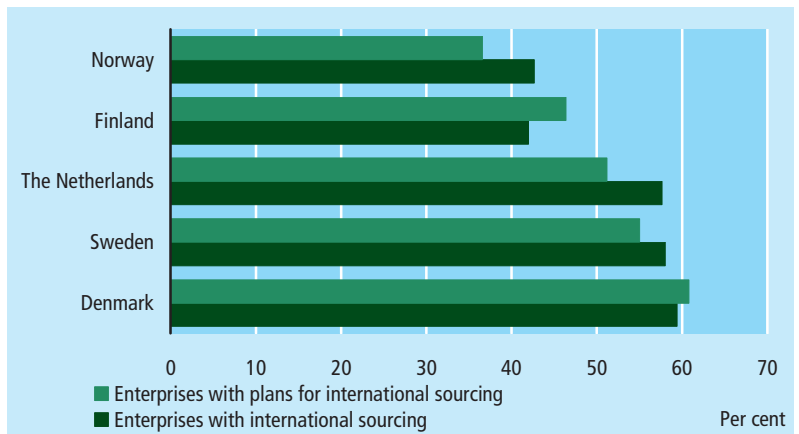
Figure 4.2.1 The importance of cost reductions as a driver for planned international sourcing.
Share of enterprises with planned international sourcing reporting the factor as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Reduction of labour costs as a motivation factor is compared between the enterprises having sourced internationally and the ones planning to do so in the period 2007-2009 (see Figure 4.2.2). The enterprises planning to source internationally in Sweden, Denmark and the Netherlands – where labour cost savings have been the main driver for international sourcing already carried out – more often also assess labour cost savings as very important when compared with enterprises in Finland or Norway.

Figure 4.2.2 Reduction of labour costs as a driver for international sourcing.
Share of enterprises with international sourcing plans reporting the factor as very important.



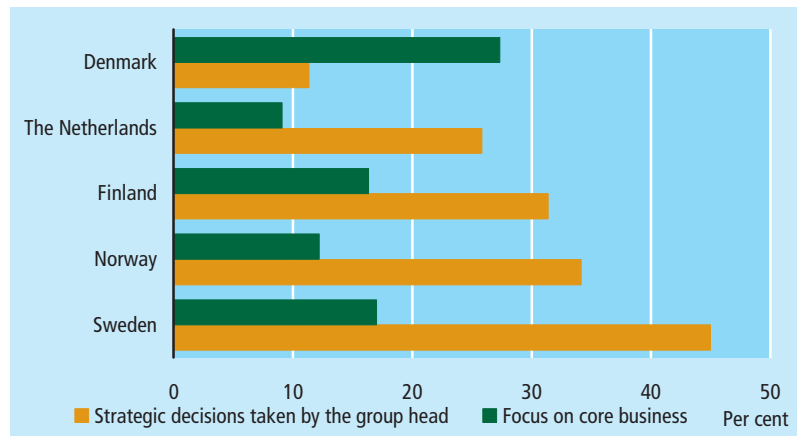
Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

The strategic factor of the sourcing decision taken by the group head was relatively frequently mentioned by the enterprises as a motivation factor for the sourcing activities already carried out, except for the Danish ones. This pattern is also recognised for the enterprises planning to source internationally in 2007-2009, cf. Figure 4.2.3. Still, this factor is apparently expected to play a smaller role for the future sourcing activities. This is probably related to the importance of the large multinational enterprise groups as main drivers of international sourcing in the previous years.

Figure 4.2.3

Other key drivers for planned international sourcing.

Share of enterprises with planned international sourcing reporting the factor as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Data for Norway based on a few observations only.

Box 4.3

Country profiles:

motivations for current and planned international sourcing.

Denmark:

- Cost reductions (both those related to labour and other costs) are the most important motivation factors for Danish enterprises.
- Strategic decisions taken by the group head are far less frequent in Denmark than in the other countries.
- Access to new markets scores rather low as a reason for international sourcing.
- Danish enterprises planning to source internationally expect cost gains even more frequently than the ones already sourcing.

Finland:

- Cost factors are not regarded as particularly important drivers for international sourcing by Finnish enterprises. Strategic decisions made by the group head are as important as reductions in labour costs.

- Reductions of other costs than labour costs are regarded as a less important reason when compared with the other countries.
- The strategic factor of following the example of competitors is of particular importance for Finnish enterprises.
- Finnish enterprises rate also access to new markets as an important reason for international sourcing.

The Netherlands:

- Reduction in labour costs is considered an important factor for Dutch enterprises, reduction in the other costs less important.
- Strategic decisions made by the group head are a relatively frequent motivation for international sourcing in the Netherlands. However this type of motivation is indicated as a less important reason by the ones planning to source internationally.
- Access to new markets is quite important for Dutch enterprises, particularly for the ones planning to source internationally.

Norway:

- Strategic decisions made by the group head are the most important reason for international sourcing for Norwegian enterprises.
- Cost reductions are a less important factor when compared to other countries except Finland.
- Access to new markets is also an important driver for Norwegian enterprises.

Sweden:

- Reduction of labour costs and strategic decisions made by the group head are the most important factors for international sourcing for Swedish enterprises.
- Also cost reductions related to other costs than labour costs are an important factor for Swedish enterprises.
- Access to new markets is not regarded as an important driver for international sourcing by Swedish enterprises.

4.3 Barriers to International Sourcing

As mentioned in the introduction to this chapter, both enterprises having sourced internationally and the ones without international sourcing have been surveyed concerning their assessment of different perceived barriers for international sourcing, cf. Box 4.4. The focus is on the barriers reported by the enterprises carrying out international sourcing as they are judged in a position to assess the importance of the factors based on their actual experiences.

Box 4.4 Barriers to International Sourcing.

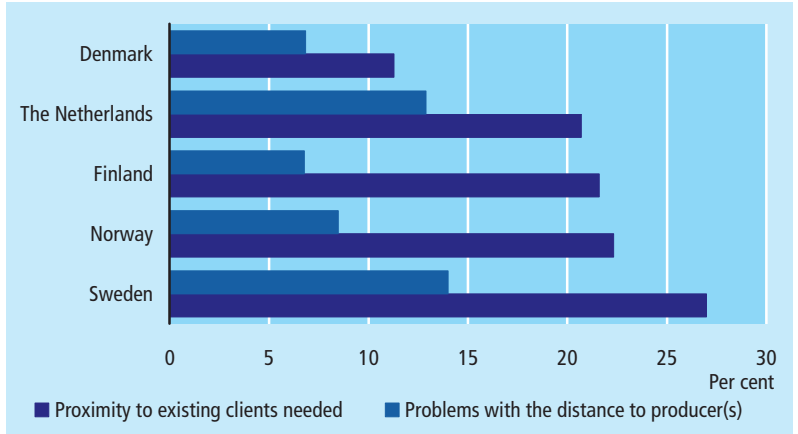
- Legal or administrative barriers
- Taxation issues
- Trade Tariffs
- Uncertainty of international standards
- Concerns of the employees (including the Trade Unions)
- Concern of violation of patents and/or Intellectual Property Rights
- Conflicting with social values of the company
- Problems with the distance to producer(s)
- Proximity to existing clients needed
- Linguistic or cultural barriers
- Difficulties in identifying potential/suitable providers abroad
- Overall concerns of the sourcing operation exceeding expected benefits

As a considerable number of mainly large enterprises are familiar with operating on a global market, a relatively small share of the enterprises indicate barriers being of decisive importance for carrying out international sourcing. The most important barrier mentioned for moving functions abroad is the necessary proximity to the clients, cf. Figure 4.3.1. This is reported to be the major barrier in all countries. A core function of e.g. a cleaning enterprise – or many other services enterprises – cannot be shifted to another country and provided from there. In a number of cases this may be valid for support functions as well.

In Sweden, Norway, Finland and the Netherlands more than 20 per cent of enterprises consider the need for proximity to existing clients a major hampering factor for international sourcing. However, in Denmark the client proximity issue is far less frequently seen as a major hampering factor, only by some 11 per cent of the sourcing enterprises regarded it as such.

In addition, a number of enterprises in all countries report problems with distant producers as an important barrier, although the importance of this barrier is clearly smaller than the need for client proximity.

Figure 4.3.1 The distance to producers/clients as a barrier for international sourcing. Share of enterprises with international sourcing reporting the barrier as very important.

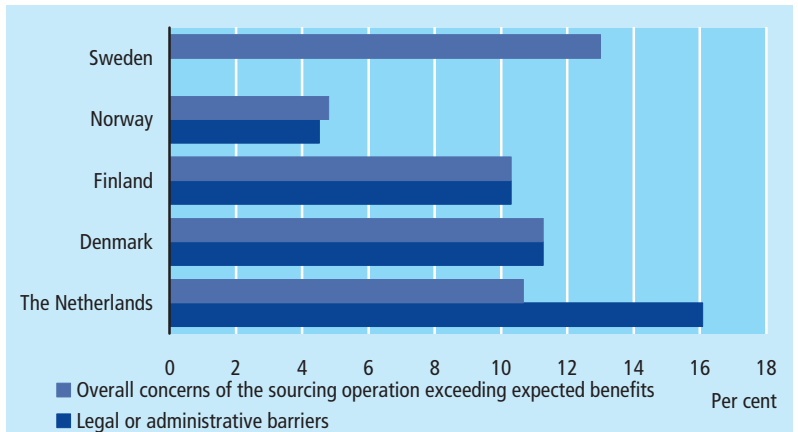


Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

The view of overall concerns of the sourcing operations exceeding benefits is shared by many enterprises. Around one in ten enterprises thought this is a key issue hampering international sourcing activities (see Figure 4.3.2). However, in Norway these concerns are shared rarely, only by some 5 per cent of enterprises.

Legal and administrative barriers are particularly important in the Netherlands, where these are ranked the second most important barrier. Legal and administrative barriers are considered as being of some importance in Finland and Denmark as well.

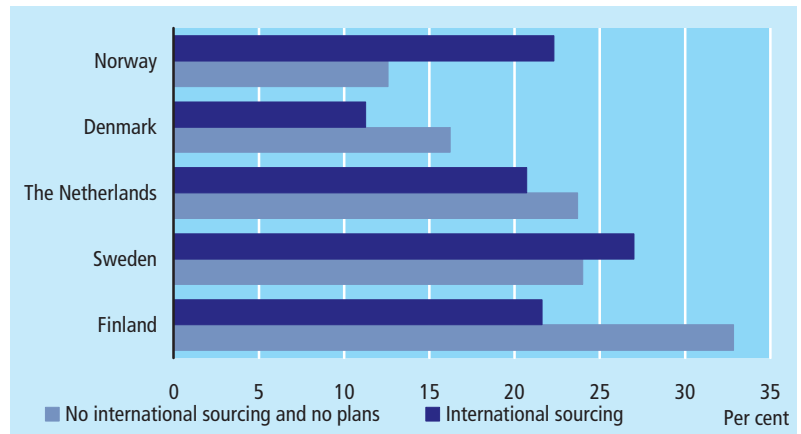
Figure 4.3.2 Other barriers for international sourcing. Share of enterprises with international sourcing reporting the barrier as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Data for Norway based on few observations only; Swedish data for Legal or adm. barriers are too uncertain to be published.

The perception of need for client proximity varies to some extent when looking at the enterprises having sourced internationally and those which have not, cf. Figure 4.3.3. Particularly in Finland client proximity requirement appears to be hampering the entrance to sourcing internationally. In Norway we see an opposite picture, as the proximity to client requirement seems not to be a barrier blocking enterprises from international sourcing in general but appears to have been a hampering factor for the ones already carried out international sourcing.

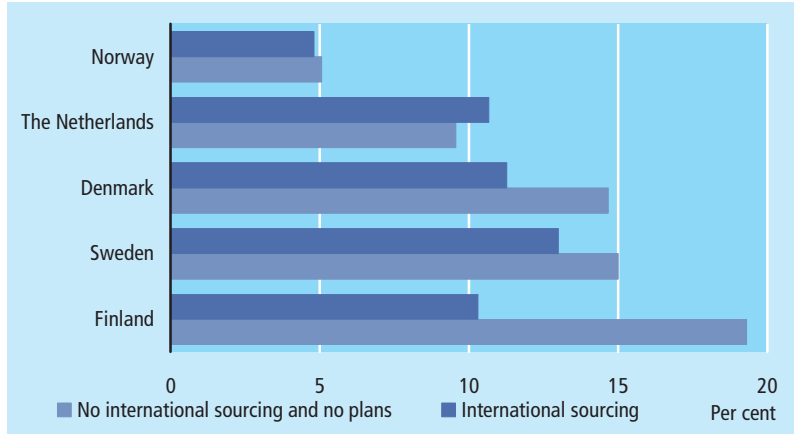
Figure 4.3.3 **Proximity to clients needed.**
Share of enterprises with international sourcing respectively no international sourcing reporting the barrier as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Data for Norway based on few observations only.

The overall concerns of the sourcing operation exceeding benefits are quite generally considered as a barrier, cf. Figure 4.3.4. Not surprisingly, the enterprises having already sourced internationally assess the barrier as being of less importance than the ones without international sourcing. In Finland, Sweden and Denmark the enterprises with no international sourcing frequently expect that costs would exceed benefits.

Figure 4.3.4 Overall concerns about costs exceeding benefits. Share of enterprises with international sourcing respectively no international sourcing reporting the barrier as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Data for Norway based on few observations only.

Box 4.5 Country profiles: Barriers to international sourcing.

Denmark:

- The overall perception of barriers to international sourcing is low by the Danish enterprises.
- Need for proximity to existing clients is the most important barrier indicated by the Danish enterprises, although far less important than in the other countries.
- Overall costs of sourcing operation exceeding benefits, legal or administrative and linguistic and cultural barriers are in general perceived as important barriers to international sourcing.

Finland:

- Need for proximity to existing clients is clearly the most important barrier indicated by the Finnish enterprises.
- Overall costs of the sourcing operation exceeding benefits, legal or administrative and linguistic and cultural barriers are in general perceived as important barriers to international sourcing by Finnish enterprises.
- Finnish enterprises not having sourced internationally considered the distance to producers a major obstacle.

The Netherlands:

- Need for proximity to existing clients the most important barrier for Dutch enterprises.
- Legal or administrative barriers, taxation issues, trade tariffs and distance to producers are in general perceived as important barriers to international sourcing by Dutch enterprises.

- The Dutch enterprises not having sourced internationally perceive overall concerns of the sourcing operation exceeding expected benefits and legal or administrative barriers in addition to proximity to existing clients needed as important barriers.

Norway:

- Need for proximity to existing clients the most important barrier for Norwegian enterprises.
- Problems with distance to producers, concerns of employees and linguistic and cultural barriers are in general perceived as important barriers to international sourcing by Norwegian enterprises.
- Norwegian enterprises having sourced internationally consider the listed barriers far less important than the ones with international sourcing.

Sweden:

- Need for proximity to existing clients is the most important barrier for Swedish enterprises.
- Problems with distance to producers, overall concerns of costs exceeding benefits and linguistic and cultural barriers are in general perceived as important barriers to international sourcing by Swedish enterprises.

Annex Table 4.1 : Importance of motivation factors for international sourcing. Share of enterprises having sourced internationally 2001-2006 and reporting very important for the motivation factor concerned.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Reduction of labour costs	59	42	58	43	58
Reduction of costs other than labour costs	39	21	22	29	29
Access to new markets	11	23	22	18	10
Following the behaviour / the example of competitors / clients	4	30	20	8	..
Improved quality or introduction of new products	9	7	11	9	..
Strategic decisions taken by the group head	24	42	42	51	59
Focus on core business	21	18	19	18	18
Access to specialised knowledge/ technologies	13	11	14	12	12
Tax or other financial incentives	2	2	7	4	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Annex Table 4.2 : Importance of motivation factors for international sourcing. Share of enterprises planning to source internationally 2007-2009 and reporting very important for the motivation factor concerned.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Reduction of labour costs	61	46	51	37	55
Reduction of costs other than labour costs	51	25	33	32	..
Access to new markets	18	28	31	23	..
Following the behaviour / the example of competitors / clients	5	31	20	17	..
Improved quality or introduction of new products	10	3	8	10	..
Strategic decisions taken by the group head	11	31	26	34	..
Focus on core business	27	16	9	12	..
Access to specialised knowledge/ technologies	12	6	2	11	..
Tax or other financial incentives	2	6	7	..	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

**Annex Table 4.3 : Importance of barriers for international sourcing.
Share of enterprises having sourced internationally 2001-2006 and reporting
very important for the barriers concerned.**

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Legal or administrative barriers	11	10	16	5	..
Taxation issues	6	7	15	5	..
Trade Tariffs	8	7	13	4	..
Uncertainty of international standards	4	2	3	..	..
Concerns of the employees (including the Trade Unions)	5	8	7	6	..
Concern of violation of patents and/ or Intellectual Property Rights	4	7	7	..	..
Conflicting with social values of your company (e.g. corporate social responsibility issues)	4	2	4	5	..
Problems with the distance to producer(s)	7	7	13	8	14
Proximity to existing clients needed	11	22	21	22	27
Linguistic or cultural barriers	9	9	9	6	..
Difficulties in identifying potential/suitable providers abroad ..	7	8	9	..	..
Overall concerns of the sourcing operation exceeding expected benefits	11	10	11	5	13
Other reasons	1	5	4	..	..

Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

5. Impacts of International Sourcing

Box 5.1 Main findings:

- It is challenging and difficult to measure the level of job losses and creation due to international sourcing in a comparable way. Only the Danish survey has been able to measure the levels of job losses and creations due to a high response rate.
- Danish enterprises estimate gross job losses due to international sourcing to amount to 25,000-35,000 during 2001-2006 or approximately 5,000 jobs lost annually (less than 1 per cent of the workforce in enterprises with 50 or more employees). On the other hand, the enterprises report job creations levelling to 7,000-10,000 jobs during the period 2001-2006 due to their sourcing of business functions abroad.
- Plans to move high skill jobs are much less frequently reported by enterprises when compared with plans to move other types of jobs abroad during 2007-2009.
- While international sourcing, on the one hand, causes the movement of high skill jobs abroad less often than other types of jobs, it also generates more high skill job creation than creation of other types of jobs.
- The overall perception of the impacts of international sourcing by enterprises is rather even across the Nordic countries and the Netherlands.
- Labour cost reductions due to international sourcing have been particularly gained by Dutch, Danish and Swedish enterprises.
- Enterprises strongly consider international sourcing to have a major positive impact on their overall competitiveness.

The previous chapter showed that the sourcing process is mainly driven by motivation factors such as cost efficiency (mainly reduced labour costs) or access to new markets. When moving production abroad, e.g. in order to lower labour costs, a direct consequence is the movement across borders of the jobs concerned.

Therefore this issue of job losses has gained a lot of media and policy attention and flavoured the concept of international sourcing with a negative perception in the public opinion. It is important to emphasize that the public debate has been mainly based on anecdotal evidence in terms of individual cases of mass lay-offs reported by the media. An important reason for launching the survey on international sourcing was explicitly to establish well-founded statistical knowledge about international sourcing and its consequences for the European economy to serve as a basis for future evidence-based policy-shaping. Consequently, the survey addresses the issue of impacts of international sourcing for enterprises and employees.

It is important to underline that international sourcing is a complex phenomenon inducing multiple impacts for enterprises and employees

involved in this process at the micro level and for the European and national economies at the macro level.

International sourcing is – as mentioned previously – most often associated with job losses taking place when moving functions abroad. However, it is often neglected that in fact the impacts of international sourcing operate on two dimensions; firstly the direct and usually immediate and visible impact in terms of domestic job losses, and secondly the more indirect, often long-term and more invisible impact of improving the competitiveness of the enterprises concerned, protecting existing jobs and often generating new and higher value added jobs in the countries sourcing the jobs internationally. Consequently, the survey includes questions on both job losses and creations due to international sourcing, as well as other impacts caused by the sourcing process.

However, the ambition of this exercise of measuring international sourcing to establish a reliable and internationally comparable measurement of job losses and creation has not been fully achieved. In order to not draw any misleading conclusions about the level of job losses, it has been decided by the editorial group not to utilise the information obtained via the survey in these analyses. However, as the issue is at the centre of the public debate on international sourcing, it has been decided to use the case of Denmark for illustrating the magnitude and patterns of job losses and gains due to international sourcing, cf. Box 5.2.²

Due to the fact that internationally comparable data on employment impacts of international sourcing are very limited, Chapter 5.1 analyses only the expected impacts on job losses and creation during 2007-2009, when the data appear to have better consistency across the countries. The enterprises were also asked about their perception of other impacts, which are presented in Chapter 5.2.

5.1 Employment Impacts

As mentioned above, the survey results concerning the employment effects of international sourcing in terms of job creations and losses have been evaluated as having a quality and consistency across countries not allowing for international comparisons, and consequently only the Danish results are used as an illustration of the employment effects, cf. Box 5.2.

² The Danish survey was mandatory and had a very high response rate. Furthermore, the enterprises appear to have answered the questions related to job losses and gains very openly. Consequently, the Danish data on this issue are validated as having a quality allowing for publishing.

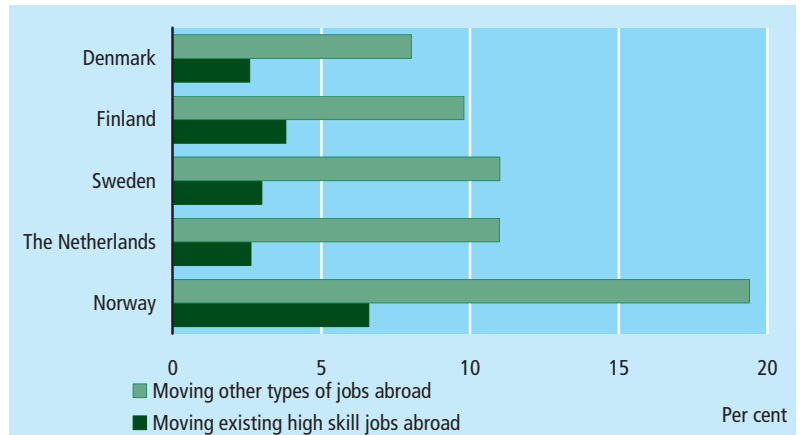
**Box 5.2 Employment impacts of international sourcing 2001-2006.
The Danish case.**

- The Danish survey shows that the gross job losses due to international sourcing account for 25,000-35,000 jobs in total or approximately 5,000 jobs annually in the period 2001-2006; equivalent to an annual loss of less than 1 per cent of the workforce employed in enterprises with 50 or more employees.
- The jobs moved abroad are mainly non-skilled jobs (two-thirds of all job losses). This is especially the case within the manufacturing sector (more than 75 per cent).
- The international sourcing process also generates new jobs – in the case of Denmark enterprises reported a total creation of 7,000-10,000 jobs for the period 2001-2006 or approx. 1,400 job creations annually in the observed period – indicating a relatively low level of net loss of jobs (around 3,600 jobs annually).
- Furthermore, the jobs created in Denmark due to the international sourcing activities of the enterprises are, to a large extent, highly skilled jobs (35 per cent of the jobs created).

In this Chapter employment impacts are analysed based on the expectations of the enterprises for 2007-2009 concerning job losses and creation due to international sourcing. Figure 5.1.1 on job losses and Figure 5.1.2 on job creation show the share of enterprises - including the ones already sourcing internationally and the ones planning to do so - expecting substantial impacts during the period.

Traditionally, the international sourcing process, which mainly has been carried out by manufacturing enterprises, has been characterised by the movement of lower skilled jobs as indicated also by the Danish survey results. This pattern is also found for the future international sourcing as plans to move high skill jobs are much less frequently reported compared to plans moving other types of jobs abroad. This overall structure of job losses appears fairly similar across the countries.

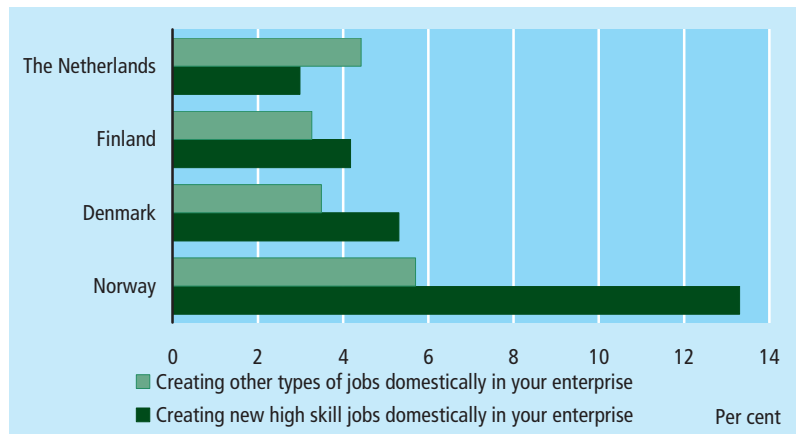
Figure 5.1.1 Share of enterprises expecting substantial impacts on domestic job losses in 2007-2009 due to international sourcing.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Around 10 per cent of the surveyed enterprises in Finland, Sweden and the Netherlands expected to move other types of jobs abroad in the period 2007-2009, cf. Figure 5.1.1. In Denmark this was expected less frequently and in Norway clearly more often. On the other hand, notably fewer enterprises in all countries expected to move high skill jobs abroad, only some 3-4 per cent in general.

Figure 5.1.2 Share of enterprises expecting substantial domestic job creation in 2007-2009 due to international sourcing.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. The Swedish data are too uncertain to be published.

When looking at the expected job creation due to future international sourcing, the opposite pattern can be found. Enterprises in Norway, Denmark and Finland more frequently expect to generate high skill than other jobs domestically, cf. Figure 5.1.2. Only the Dutch enterprises

reported expectations of creation of other types of jobs exceeding that of high skill jobs.

The international sourcing process can be characterised as an element adding to the creation of a more knowledge-based domestic labour market in the five countries as the enterprises expect to generate a larger number of skilled jobs than other jobs due to their future international sourcing.

5.2 Other Impacts

Enterprises were asked to assess the perceived impacts of international sourcing, cf. Box 5.3.

Box 5.3 Impacts of international sourcing.

1. Efficiency seeking impacts:

- Reduction of labour costs
- Reduction of costs other than labour costs
- Competitiveness

2. Market seeking factors:

- Access to new markets
- Logistics

3. Resource seeking factors:

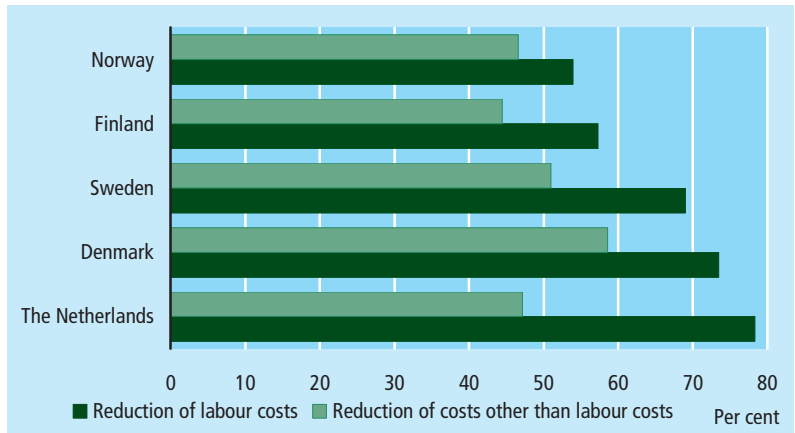
- Access to specialised knowledge/ technologies
- In-house know-how

4. Strategic factors:

- Improved quality or introduction of new products

Enterprises often consider international sourcing to have a major positive impact on their overall competitiveness. In all countries the majority of the enterprises shared this view; the percentages range from 64 per cent for Finnish enterprises to 55 per cent in the Swedish ones. However, competitiveness is a rather generic concept comprising a number of factors - such as reduction of costs or access to specialised knowledge - and was asked separately in the survey (see Box 5.3).

Figure 5.2.1 **The perceived positive impacts of international sourcing on cost reductions. Share of enterprises with international sourcing.**



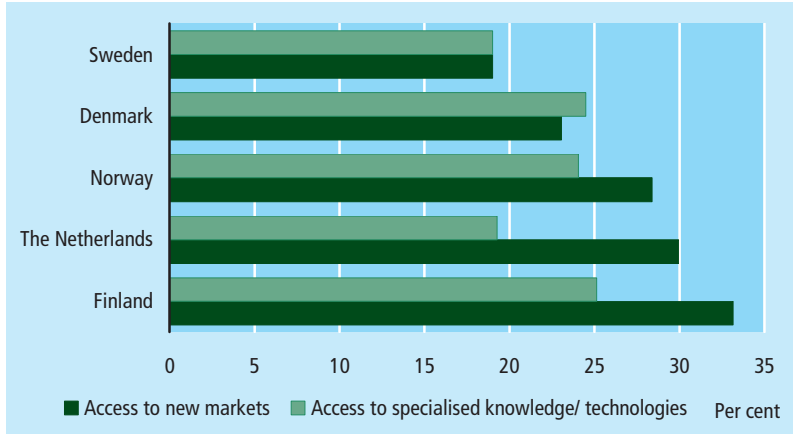
Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Reductions of labour and other costs are also fairly frequently perceived to have actually been achieved by the enterprises. The international sourcing process has resulted in labour cost reductions particularly in the Dutch, Danish and Swedish enterprises while the impacts on other costs are more evenly distributed across the countries, cf. Figure 5.2.1.

Around 25 per cent of enterprises reported about positive impacts of accessing new markets. The Dutch and Finnish enterprises did so most frequently, about a third of the enterprises have experienced positive impacts on market access due to international sourcing.

The perceived positive impacts on access to specialised knowledge or technologies were almost equally important for Danish, Finnish and Norwegian enterprises, cf. Figure 5.2.2. However, no major differences across countries can be identified.

Figure 5.2.2 **The perceived positive impacts of international sourcing on access to new markets, specialised knowledge or technologies.**
Share of enterprises with international sourcing.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

Box 5.4 Country profiles: Impacts of international sourcing.

Denmark:

- Danish enterprises estimate gross job losses due to international sourcing to amount to 25,000-35,000 during 2001-2006 or approximately 5,000 jobs lost annually (less than 1 per cent of the workforce in enterprises with 50 or more employees).
- Danish enterprises estimate job creations due to international sourcing to constitute 7,000-10,000 jobs during 2001-2006 or approx. 1,400 jobs created annually.
- Danish enterprises expect least frequently to have substantial shifts of both high skill and other types of jobs abroad during 2007-2009.
- Reductions of labour and other costs are often perceived by Danish enterprises as an impact of international sourcing.

Finland:

- Finnish enterprises are close to the average of all countries in the frequency of both job losses and job creation during 2007-2009.
- Finnish enterprises most frequently perceive positive impacts on access to new markets as an impact of international sourcing.

The Netherlands:

- Dutch enterprises expect to move high skill jobs much less frequently than other types of jobs abroad during 2007-2009.
- Dutch enterprises often perceive reductions of labour costs as an impact of international sourcing.

Norway:

- Norwegian enterprises most frequently expect to have substantial shifts of both skilled and other types of jobs abroad during 2007-2009.
- Enterprises in Norway expect high skill job creation much more often than in the other countries.
- Norwegian enterprises least often perceive reductions of labour costs as an impact of international sourcing.

Sweden:

- Reduction of labour and other costs are often perceived by Swedish enterprises as an impact of international sourcing.
- Compared to other participating countries Swedish enterprises least often report access to new markets and specialised knowledge/technologies as an impact of international sourcing.

Annex Table 5.1 : Enterprises reporting positive impacts of international sourcing, percentage share.

	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Reduction of labour costs	73	57	78	52	69
Reduction of costs other than labour costs	59	44	47	45	51
Logistics	18	23	25	18	22
Access to new markets	23	33	30	28	19
Improved quality or introduction of new products	19	20	14	..	15
Competitiveness	62	64	59	58	55
In-house know-how	20	28	19	29	16
Access to specialised knowledge/ technologies	24	25	19	24	19
Other impacts	3	2	2	3	..

Note: enterprises with 50 or more employees - except for the Netherlands covering 100 or more employees.

6. Special Feature: International Sourcing to Asia

Box 6.1 Main findings:

- The Asian destinations receive roughly 30 per cent of the core functions sourced by the Nordic and Dutch enterprises. By comparison, 6-10 per cent of the exports from these countries go to Asia.
- In the case of manufacturing the majority of enterprises in all countries having sourced to Asia have sourced their core functions and to a lesser degree also support functions.
- The pattern for service enterprises is different as they have mainly sourced their support functions to Asia.
- Especially the Norwegian enterprises expect to increase their sourcing to Asia in 2007-2009. Also the Dutch and Swedish manufacturing enterprises expect a major increase in sourcing to Asia.
- For enterprises having sourced to Asia in 2001-2006 the cost motive - both labour and other costs - is a very important driver.
- In the case of Asia as a destination for sourcing, legal/administrative barriers and trade tariffs are considered very important barriers influencing the decision to source to these destinations.

6.1 Introduction

A feature characterising the on-going globalisation of the economies is the key role played by China and India in this process. The traditional internationalisation of the economies – measured by foreign trade – shows the huge importance of the closest markets. The Nordic countries and the Netherlands are all characterised by the dominance of the old EU Member States as destinations for exports of goods (cf. Table 6.1.1).

Table 6.1.1 Exports of goods broken down by destination 2007.

Share of total exports of goods (Per cent)	Den- mark	Fin- land	The Nether- lands	Nor- way	Swe- den
Old Member States	63	49	70	78	55
New Member States	5	8	5	3	6
Asia	7	9	8	6	10
Other destinations	25	34	17	14	29

International sourcing, which has grown in importance with the emerging integration of especially the Asian countries into the world economy and the global value chain, is consequently characterised by the remarkable relative importance of the Asian countries as destinations for the sourcing from Nordic and Dutch enterprises. The Asian destinations receive roughly 30 per cent of the core functions sourced

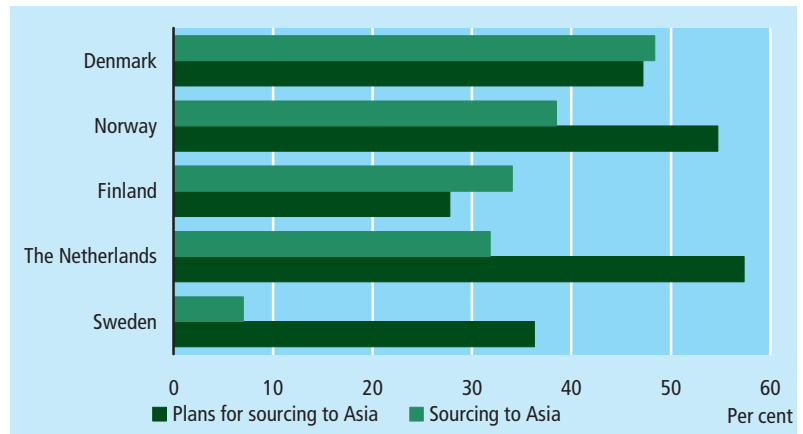
by the Nordic and Dutch enterprises. By comparison, 6-10 per cent of the exports from these countries go to Asia.

Due to the importance of the Asian countries as destinations for the sourcing from the Nordic and Dutch enterprises, this Chapter analyses the sourcing to Asia in more detail. The Chapter focuses on sourcing done in 2001-2006 and the motivations for choosing these countries as destinations, as well as the perceived barriers for sourcing to Asia. The number of responses does not allow for detailed breakdowns at destination country level i.e. China and India. Instead the following groups of destinations identified in the survey: China, India and Other Asian countries have been aggregated to one major destination Asia.

6.2 Sourcing to Asia

The share of enterprises having sourced at least one function (core function or support function) to Asia shows large differences between the countries; the shares range from less than 10 per cent for Swedish manufacturing enterprises to nearly 50 per cent of all Danish manufacturing enterprises having sourced internationally.

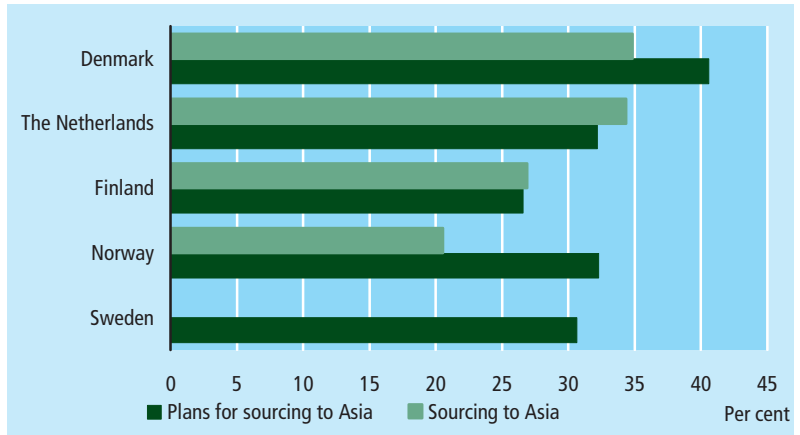
Figure 6.2.1 **International sourcing to Asia. Share of enterprises having sourced 2001-2006 or planning to source 2007-2009. Manufacturing.**



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees.

In general the shares are higher in manufacturing than in services, partly due to the fact that the core function of manufacturing, i.e. the production of goods, is more feasible to be sourced internationally. Another reason is that especially reduction in labour costs is a driving motivation for international sourcing – especially for manufacturing enterprises – and such reductions can be accomplished with moving labour intensive production to Asia, see also Figure 6.2.5.

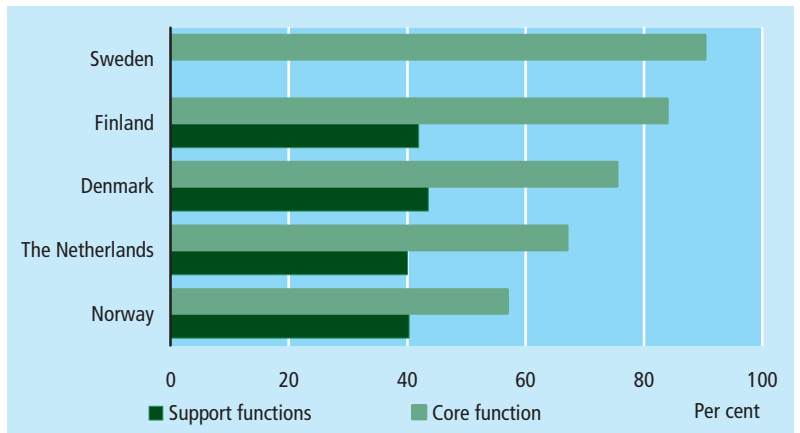
Figure 6.2.2 International sourcing to Asia. Share of enterprises having sourced 2001-2006 or planning to source 2007-2009. Services.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. The Swedish data for sourcing to Asia is too uncertain to be published.

As regards the plans for 2007-2009, especially the Norwegian enterprises expect to increase their sourcing to Asia – both manufacturing and services enterprises, cf. Figures 6.2.1 and 6.2.2. Also the Dutch and Swedish manufacturing enterprises expect a major increase in sourcing to Asia.

Figure 6.2.3 Manufacturing enterprises with sourcing to Asia. Core functions and support functions. Shares of enterprises having sourced to Asia.

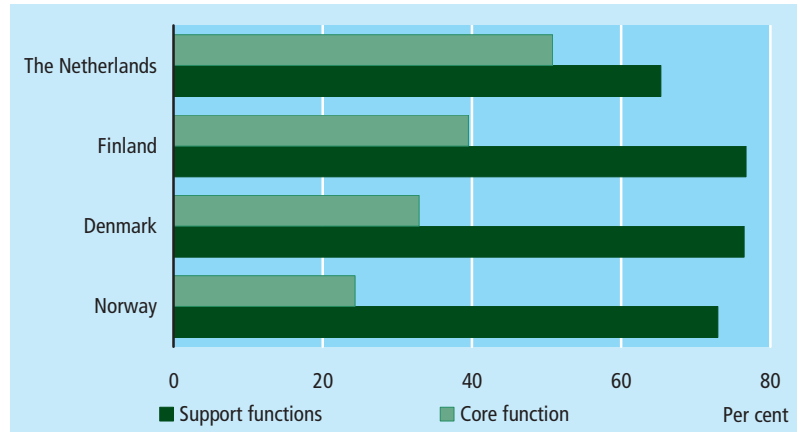


Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. The Swedish data for sourcing of support functions is too uncertain to be published.

As stated in Chapter 1, international sourcing is mainly carried out by manufacturing enterprises sourcing their core production in parts or totally to countries with lower labour costs such as Asian countries.

A comparison of the sourcing patterns for manufacturing and services reveals a very clear difference. In the case of manufacturing the majority of enterprises in all countries having sourced to Asia have sourced their core functions and to a lesser degree also support functions (cf. Figure 6.2.3). This is the case for all four countries where data are available.

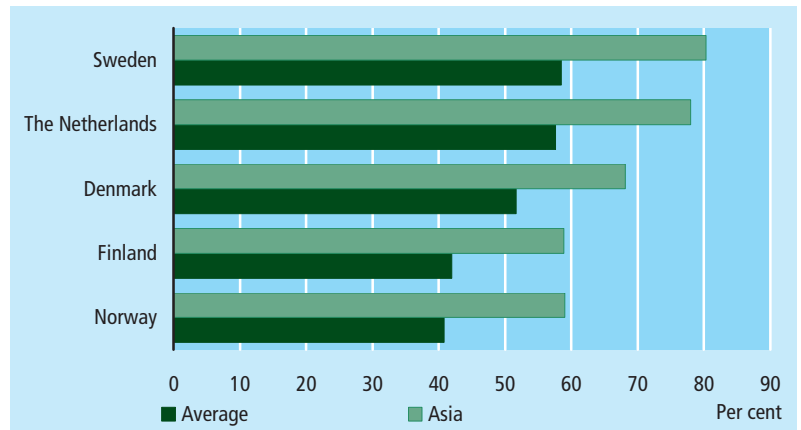
Figure 6.2.4 Services enterprises with sourcing to Asia. Core functions and support functions.
Shares of enterprises having sourced to Asia.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Data for Norway based on a few observations only. The Swedish data for service enterprises are too uncertain to be published.

In the case of services enterprises the pattern is the reverse from that for manufacturing enterprises, as services enterprises in all four countries included mainly have sourced their support functions to Asia (cf. Figure 6.2.4).

Figure 6.2.5 Reduction of labour costs as a motivation factors for sourcing internationally 2001-2006.
Share of enterprises with international sourcing reporting this factor as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Norwegian data are uncertain.

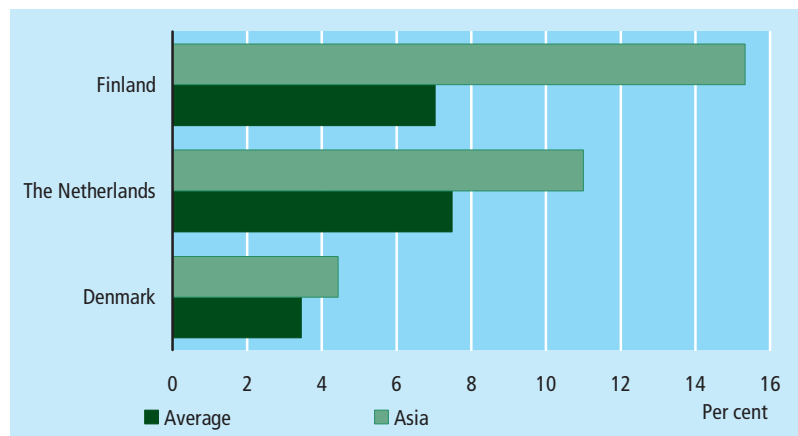
For enterprises having sourced to Asia in 2001-2006 the cost motive is a very important driver (cf. Figure 6.2.5). Both labour costs and other costs are judged to be very important motivation factors by a considerable share of the enterprises having sourced to Asia. A higher share of enterprises having sourced to Asia judges the labour cost motives as very important than the average for all enterprises having sourced internationally.

Asia is a distant geographical location for enterprises located in the Northern part of Europe but at the same time it is a growing market. Therefore, access to these new markets is expected to be an important driver for sourcing to Asia as well. The results of this survey support this view, although the access to new markets is not considered as important as the cost factors discussed above. The share of enterprises judging access factor to be very important varies from 14 per cent (Sweden) to 37 per cent (Norway).

In the case of Asia as a destination for sourcing, legal/administrative barriers and trade tariffs are considered very important barriers influencing the decision to source. Compared to the average level of importance indicated by the sourcing enterprises, the two barriers are judged relatively more important for the Asian destinations, except by Finland (legal/administrative barriers) and the Netherlands (trade tariffs barriers).

Because the distance between Asia and enterprises located in the Northern part of Europe is considerable, the sourcing decision may be hampered by a fear of losing clients in the dominating European markets. The shares of enterprises judging proximity to existing clients as a very important barrier for sourcing range from 8 per cent for Dutch enterprises up to over 30 per cent for Norwegian enterprises.

Figure 6.2.6 Concern of violation of patents and/or intellectual property rights as a barrier to international sourcing.
Share of enterprises with international sourcing reporting this factor as very important.



Note: Enterprises with 50 or more employees – except for the Netherlands covering 100 or more employees. Data for Sweden and Norway are too uncertain to be published.

Finally the concern of violation of patents and/or intellectual property rights (IPR) is a potential barrier to sourcing internationally. The results of the survey confirm that this is the case, but it is not seen as equally important as legal or administrative barriers or proximity to existing clients, cf. Figure 6.2.6. For all countries the share is higher when Asia is the destination as on average.

Box 6.2 Country profiles: Sourcing to Asia.

Denmark:

- Danish enterprises show the highest share of sourcing to Asia in 2001-2006 in both manufacturing and services.
- Especially Danish services enterprises plan to source to Asia in the period 2007-2009.

Finland:

- The patterns of sourcing in 2001-2006 and the plans for 2007-2009 are basically identical.
- More than 80 per cent of the Finnish manufacturing enterprises sourcing to Asia have sourced their core function compared to 40 per cent of the Finnish services enterprises.

The Netherlands:

- Dutch enterprises show a relatively high share of sourcing to Asia in 2001-2006 and the importance of the Asian countries as future destinations for international sourcing 2007-2009 is expected to increase considerably.
- Trade tariffs and proximity to existing clients are more important barriers for Dutch enterprises sourcing internationally in general than for the enterprises sourcing to Asia.

Norway:

- A relatively high share of manufacturing enterprises having sourced internationally have sourced to Asia, but only a relatively moderate share of the services enterprises.
- The Norwegian enterprises sourcing to Asia report reduction of labour costs as a very important factor more frequently than enterprises in the other countries.

Sweden:

- Swedish enterprises show the lowest share of sourcing to Asia in 2001-2006, but a relatively high share regarding the plans for 2007-2009.
- A very large majority of Swedish manufacturing enterprises having sourced to Asia have sourced their core function.