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Trends in international sourcing

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International sourcing means shifting business functions to enterprises located abroad. This chapter provides an overview of the results of the 2012 survey on international sourcing and a comparison with the first survey (2007). We found that sourcing behaviour differed only slightly between the two reference periods. The vast majority of 90 percent of the large enterprises did not source internationally between 2009 and 2011. The ones that did mainly chose European destinations. Reduction of labour costs is the main reason for international sourcing. We see a shift from sourcing core functions in 2001–2006 to sourcing support functions in 2009–2011. Sourcing is mainly driven by enterprises in industrial sectors, and by subsidiaries from foreign controlled enterprises. The most likely functions to be moved abroad after the core business function are ICT and administration.

5.1 Introduction

One of the most eye-catching phenomena of globalisation is international sourcing: the relocation of business functions from one country to another. As country borders diminish, trade tariffs are lifted, costs of logistics decline and information and communication technologies are improving, more enterprises organise their activities globally. Access to cheap labour, raw materials, advanced technologies or (fiscal) regulations play a key role in the choices for relocating business functions to the most appropriate place in the world. The increasingly fragmentation of supply and hence value chains leads to an increase in international trade in intermediate goods (Sturgeon & Gereffi, 2009). Developments in telecommunications and information technology, limiting the need for physical proximity of service providers to their customers, caused the international trade in services to expand. For example the rise of IT helpdesks and call centres in Eastern Europe and in India, which provide support services to enterprises in high wage countries. The movement of business functions abroad and the related loss of domestic jobs generate much media attention focusing on the negative effects. As statistics on these phenomena are scarcely available, most discussions are based on anecdotal evidence. Policy makers need hard evidence about international sourcing and its effects on the economy and the labour market. As communicated in the EU's growth strategy for the coming decade, a key challenge for Europe (and of course for the Netherlands) imposed by globalisation is how to secure existing jobs and create new jobs on a sustainable basis (European Commission, 2010).

To provide policy makers, researchers and the public with statistical evidence, twelve European countries launched a survey about international sourcing in 2007. The Netherlands was one of the participating countries. The outcome of this study describes to what extent enterprises move their business functions abroad, their motives deciding to do so, and also the destinations they chose to source their activities (Statistics Denmark, 2008; Alajääskö, 2009). We distinguish outsourcing (outside the enterprise group) from insourcing (within the enterprise group), and look at different enterprise group characteristics. In 2012, fifteen European countries repeated this survey for the period 2009–2011. We will compare several outcomes of the two surveys despite the dramatic change in economic climate from a relative high GDP growth to one of the worst economic crises ever. Is there a change in sourcing behaviour? Do the destinations for international sourcing change? And how about the motives for making decisions on sourcing?

This chapter starts with the definitions and concepts used in this study (5.2). The survey is described in section 5.3. Chapter 5 ends with the main results (5.4), followed by the conclusions (5.5).

5.2 Definitions and concepts

We define international sourcing in this study as the total or partial movement of (core or support) business functions currently performed in-house or domestically sourced by the resident enterprise out of the country to enterprises (within or outside the enterprise group) located abroad. When activities are moved to affiliates abroad, we talk about international insourcing. The international relocation of activities to external suppliers is referred to as international outsourcing.

The two key dimensions of the survey on international sourcing are business functions and geographical area. Business functions are divided into the core and support business functions. The core business function is the primary activity of the enterprise and will, in most cases, be similar to the NACE code of the enterprise. It includes production of final goods or services intended for the market/third parties carried out by the enterprise, and that yield income. Support business functions (ancillary activities) are carried out by the enterprise in order to permit or facilitate production of goods or services intended for the market/third parties. The outputs of these functions themselves are not directly intended for the market/third parties.

We distinguish the following support business functions:

- *Distribution and logistics* consist of transportation activities, warehousing and order processing functions.
- *Marketing, sales and after sales services including help desks and call centres* consist of market research, advertising, direct marketing services (telemarketing), exhibitions, fairs and other marketing or sales services. Call-centre services and aftersales services such as help-desks and other customer supports services are included as well.
- *ICT services* include IT services and telecommunication. IT services consist of hardware and software consultancy, customized software data processing and database services, maintenance and repair, web-hosting, other computer related and information services. Packaged software and hardware are excluded.
- *Administrative and management functions* include legal services, accounting, bookkeeping 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 also included.
- *Research & Development, engineering and related technical services* include R&D, intramural research and experimental development, engineering and related technical consultancy, technical testing, analysis and certification. Design services are included as well.
- *Other support functions* are all other functions not previously mentioned, including manufacturing as a secondary activity for services enterprises.

The geographical areas distinguished in this study are the *EU-15, EU-12, Russia, Other European countries* (Switzerland, Iceland, Liechtenstein, Norway, Turkey, Belo Russia, Ukraine, the Balkan states), *China, India, Oceania and other Asian countries* (Japan, Korea, Near, Middle and Far-East, Australia and New Zealand), *USA and Canada, Brazil* and *Rest of the world* (Mexico, South and Central America except Brazil, and Africa).¹⁾ With this selection of countries we cover the most important economies in the world, enable BRIC aggregate and restrict response burden for enterprises selected for the survey.

¹⁾ For further details on these country aggregates see Balance of Payments Vademecum, latest update of December 2012 (Eurostat, 2012).

5.3 Survey

The target population of the 2007 and 2012 surveys consists of all enterprises with 100 or more employees in the NACE Rev.2 sections B to N, excluding K (financial services). In 2007 the questionnaire was sent to one third of the target population. In 2012 almost half of the enterprises in the target population were selected. The samples are randomly selected, but stratified. Both times, we applied a mixed mode data collection strategy: starting with online questionnaires, followed by paper questionnaires and finally reminders by telephone. In 2007 the response rate was 65 percent (1002 enterprises); in 2012 it was 63 percent (1370 enterprises). The data we present in this paper is weighted and grossed up to the population according to the strata defined in the sample design.

Differences between the 2007 and 2012 survey

Although the concept of both surveys is similar, there are some differences which limit the possibilities for comparisons. The most important difference was the time span covered. In the 2012 survey it was only three years (2009–2011), while in 2007 it was six years (2001–2006). This makes it impossible to compare absolute figures properly. However, it allows for benchmarking relative figures on subpopulations, for example by breaking down and comparing the enterprises that were engaged in international sourcing. There is also a methodological difference in the question on motives, which shifts the response distribution over the categories. We take this into account when drawing our conclusions. Further, the 2007 support business function *Engineering and other technical services* was merged with *R&D* into one new support business function in 2012. In order to enable comparisons we recalculated the 2007 figures and merged them into a business function, which makes them comparable to the 2012 figures.

Response and stratifications

In both surveys most enterprises in the sample and response are categorised in the section Manufacturing (NACE Rev.2 section C). This represents the real distribution in the target population. In this chapter we apply several types of stratifications. The most important one is by selected aggregates of NACE sections:

- All sectors: NACE Rev.2 Sections B to N, excluding K
- Industry: NACE Rev.2 Sections B, C, D, E
- Other sectors: NACE Rev.2 Sections F, G, H, I, J, L, M, N

We also apply the following types of enterprises for stratifying figures:

- Enterprise group head
- Subsidiary with global head in the Netherlands
- Subsidiary with global head within EU27
- Subsidiary with global head outside EU27
- Not in enterprise group

Furthermore, the seven different business functions (and some aggregates based on these) are used for stratifying the data. See section 5.2 for a description of the business functions.

5.4 Trends in international sourcing

Table 5.4.1 shows the percentages of enterprises engaged in international sourcing during the periods 2001–2006 and 2009–2011. Overall, in 2009–2011, 9.8 percent of the enterprises with more than 100 employees were active in international sourcing. This percentage was lower than the 13.5 percent in the (longer) 2001–2006 period.



Most large enterprises (**90%**) did not source internationally between 2009 and 2011

5.4.1 Enterprises engaged in international sourcing, by type of enterprise group structure

	2001–2006	2009–2011
	%	
Total	13.5	9.8
In enterprise group	18.1	12.5
Not in enterprise group	2.7	1.5
Enterprise group head	14.4	4.5
Subsidiary	19.5	16.7
Subsidiary with global head in the Netherlands	10.3	7.6
Subsidiary with global head within EU27	22.3	23.9
Subsidiary with global head outside EU27	36.8	25.6

Source: Statistics Netherlands.

The types of enterprises engaged in international sourcing during the two periods are also presented in table 5.4.1. In 2009–2011, 12.5 percent of the enterprises belonging to an enterprise group were active in international sourcing. This percentage was higher in the period 2001–2006. Despite of the latter period being shorter, we can clearly see a big difference in enterprise group heads. In 2009–2011 only 4.5 percent was engaged in international sourcing compared to 14.4 percent in 2001–2006. The difference between the two periods was smaller among subsidiaries. Only the subsidiaries with a global head outside EU27 were clearly more often engaged in international sourcing in 2001–2006 (36.8 percent) than in 2009–2011 (25.6 percent). There is a notably larger percentage of subsidiaries with global head within EU27 that sourced internationally in 2009–2011. An important conclusion from this table is that foreign controlled enterprises are much more often involved in international sourcing than Dutch controlled enterprises. This is perhaps because they are less sensitive to social and political pressure to save domestic jobs. Also, by definition they have affiliates in other countries and may therefore face lower thresholds when moving functions abroad. Subsidiaries with a Dutch head may be part of a fully Dutch group without experience with international sourcing, so they are likely to face higher thresholds when they consider relocating activities abroad.

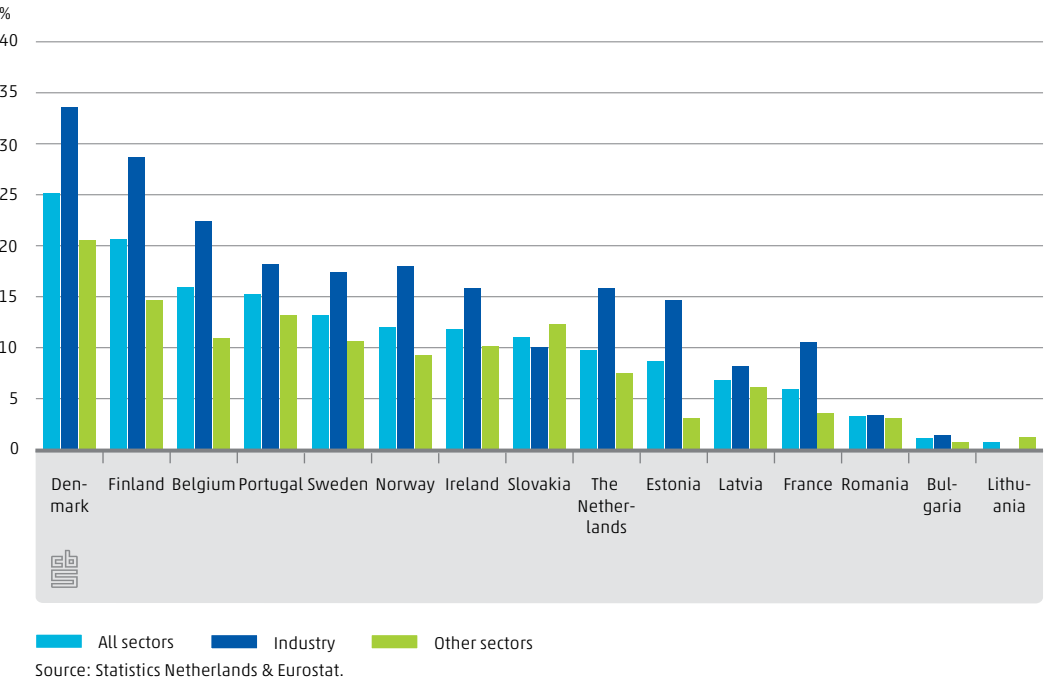
International sourcing in a European perspective

The main outcomes of the international sourcing survey are presented in figure 5.4.2. All participating countries reported the percentages of enterprises

engaged in international sourcing for the industrial sectors, other sectors and all sectors in 2009–2011.

We see that Denmark is the participating country with the most international sourcing – approximately one in four enterprises was engaged in it. In the industrial sectors it was even over one third. Finland, Belgium and Portugal have a relatively high share of enterprises active in international sourcing. The Netherlands is in the middle group (9.8 percent), while international sourcing occurred the least in Lithuania and Bulgaria in 2009–2011. It seems that most activities are moved abroad from the old EU-member states with high labour costs, while the new member states show lower international sourcing rates.

5.4.2 Enterprises engaged in international sourcing, by country and by aggregated sector (2009-2011)



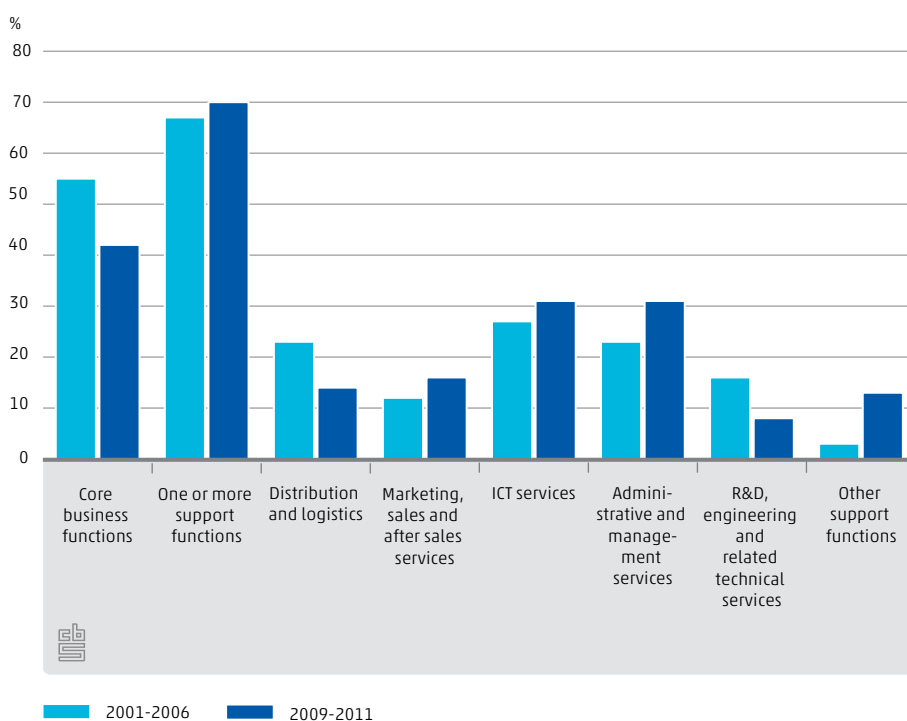
In most countries the percentages of enterprises that sourced internationally were higher in industrial sectors than in the other sectors. The only exceptions to this rule are Slovakia and Lithuania. For industrial sectors as well as for other sectors international sourcing occurred the most in Denmark, followed by Finland. Of all participating countries the Netherlands is in the middle group when it comes to the industrial sectors, where 15.8 percent of the enterprises was engaged in

international sourcing in 2009–2011 compared to 7.5 percent in the other sectors. So international sourcing is mainly driven by enterprises in the industrial sectors.

International sourcing of business functions

Figure 5.4.3 shows that relatively less core business functions, but slightly more support business functions were sourced internationally in 2009–2011 than in 2001–2006. It indicates that enterprises tend to focus their limited resources more on their core business, and source their support functions. Another explanation, especially for industrial enterprises, is that relocating core business functions – which are often production facilities – requires a great deal of investment. In most cases international sourcing concern insourcing, which means that production lines have to be (re)build. Sourcing support functions is much more flexible, since it requires only an office environment in most cases.

5.4.3 International sourcing by business functions and by aggregated sector, as a percentage of enterprises engaged in international sourcing



In this figure we also distinguish the six different types of support functions, apart from the core business, and aggregate of all support business functions. Most internationally sourced were ICT services: 27 percent of enterprises engaged in international sourcing did so. Next came the administrative and management services, and distribution and logistics. In 2001–2006 both stood at 23 percent. In 2009–2011 administrative and management services played an even greater role with a percentage equal to that of ICT services (31 percent). Marketing, sales and after sales services (16 percent) was the third most frequently internationally sourced activity in that period.

Compared to 2001–2006, enterprises sourced distribution and logistics less frequently in 2009–2011. This decrease was mainly attributable to the other sectors (see 5.4.4). Remarkable is the decrease in the international sourcing of R&D activities in 2009–2011. These knowledge-intensive high value added generating support business functions seem to be sourced less often internationally. Take into account that this only concerns enterprises which have R&D as a support activity, and not the ones with R&D as their primary task.

The international sourced business functions are broken down by aggregated sector in table 5.4.4. We see that industrial enterprises internationally sourced their core business functions more frequently (54 percent) than enterprises in the other sectors (32 percent) in 2009–2011. It was the other way around with support functions. Approximately three-quarter of the enterprises in the other sectors engaged in international sourcing, sourced one or more support functions. For industrial enterprises this share was 62 percent. In 2001–2006, the shares differed even more.

The reason for these differences probably lies with proximity to the customers which is more important for service than for manufacturing core business functions. Therefore, the enterprises in the other sectors rather seek their gains in the international sourcing of support business functions. Also, core functions in industrial enterprises tend to be more low-skilled labour intensive than core functions in services, which are more knowledge-intensive. Knowledge-intensive labour is more difficult to substitute than low-skilled labour.

5.4.4 International sourcing by business functions and by aggregated sector, as percentage of enterprises engaged in international sourcing

	2001–2006			2009–2011		
	all sectors	industry	other sectors	all sectors	industry	other sectors
	%					
Core business functions	55	73	42	42	54	32
One or more support functions of which	67	55	76	70	62	77
distribution and logistics	23	17	27	14	14	14
marketing, sales and after sales services	12	15	10	16	17	15
ICT services	27	25	27	31	31	31
administrative and management services	23	19	26	31	25	36
R&D, engineering and related technical services	16	19	13	8	12	4
other support functions	3	2	3	13	9	17

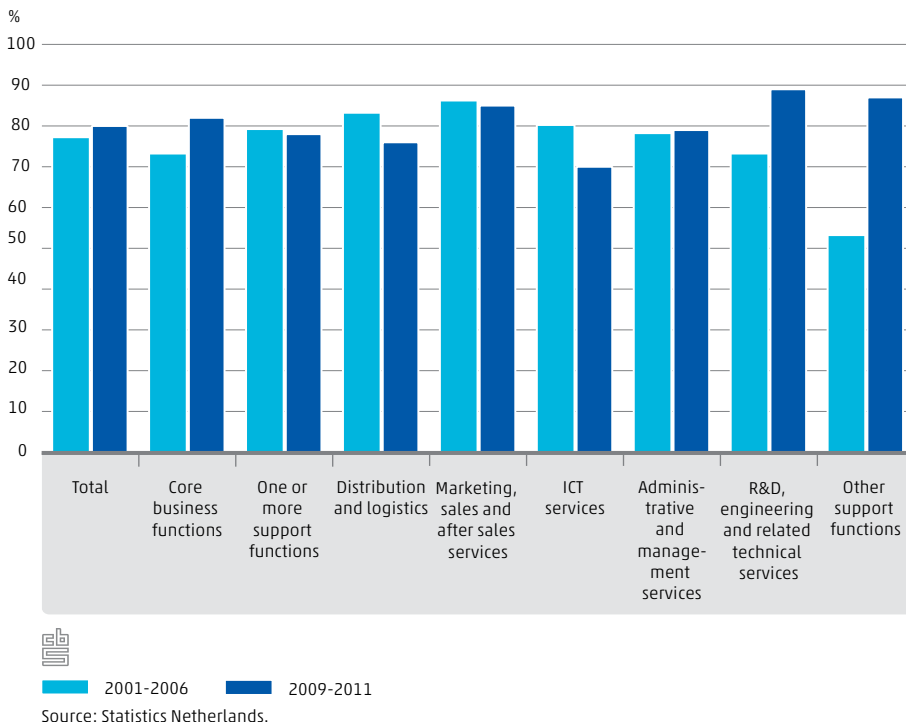
Source: Statistics Netherlands.

International insourcing versus international outsourcing

International sourcing can be done within or outside the enterprise group. Figure 5.4.5 shows that 80 percent of all international sourcing was within the enterprise group in 2009–2011. In this period international insourcing involved relatively more core than support functions. In 2001–2006 enterprises sourced relatively more support than core business functions within the enterprise group. We see a decrease in the international insourcing of ICT support functions, making it the least sourced within the group.

International insourcing occurs much more often than international outsourcing for all types of activities. Especially multinational enterprise groups are often involved in moving business functions abroad (see also table 5.4.1). This suggests that their internal, cross border relocation activities cause a large part of the observed international sourcing phenomenon. In 2009–2011 enterprises sourced R&D, engineering and related technical services (89 percent) and other support functions (87 percent) mostly within the enterprise group. R&D activities are knowledge intensive, and usually enterprises are very protective of them. It seems that, in 2009–2011, even more than in 2001–2006, enterprises keep sensitive knowledge within the enterprise group and hence under their own control.

5.4.5 International sourcing within the enterprise group, by business function, as a percentage of enterprises engaged in international sourcing

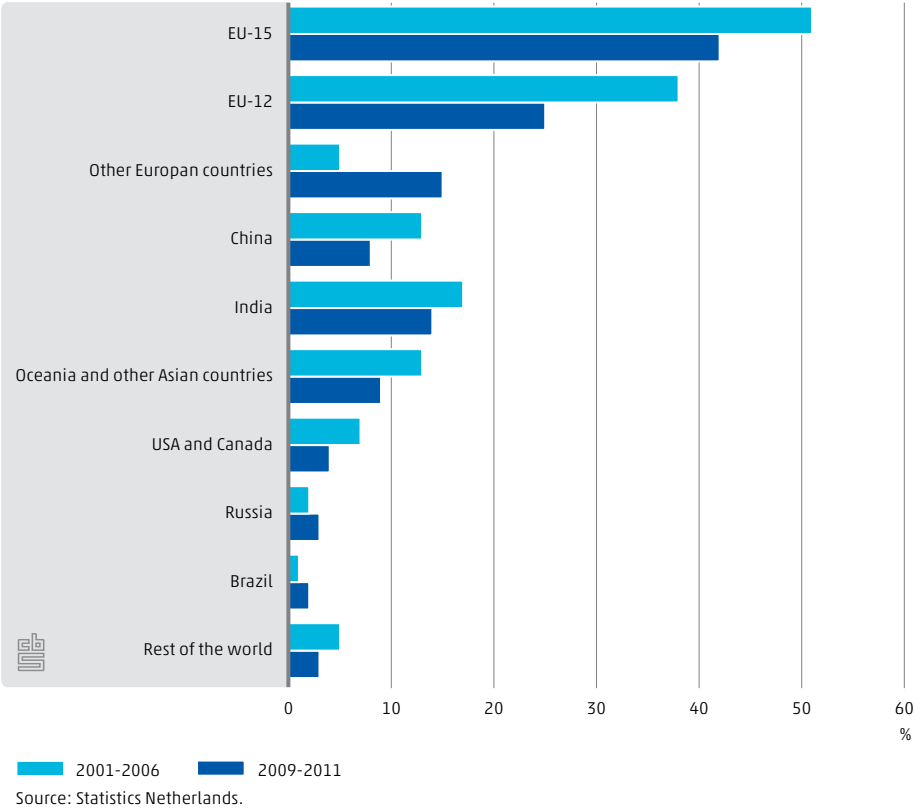


Sourcing destinations

In figure 5.4.6 international sourcing is categorised by destination. If we compare the destinations in 2009–2011 with those in 2001–2006, we see that enterprises sourced relatively more to the 'other European countries' (+10 percent point), Russia and Brazil (both +1 percent point). Other European countries are non-EU member states, like some of the Balkan states, Ukraine, Turkey and the EFTA countries (Norway, Switzerland, Iceland and Liechtenstein). The shares to all other destinations were lower. Between 2001–2006 and 2009–2011, sourcing to the EU-12 and EU-15 countries declined most with 13 and 9 percent respectively. Despite these decreases, the EU-countries remained the main destinations for Dutch international sourcing (67 percent), indicating that activities are not massively moved to far away destinations like China and India. Just as with international trade and foreign direct investments, enterprises seem to choose nearby countries. They do this, because they are more familiar with the (similar) languages, cultures and legal systems in those countries. Furthermore, travel distance and transport

costs play a role. In addition, it is easier to exert influence and keep control on nearby facilities.

5.4.6 Destinations of international sourcing, as a percentage of enterprises engaged in international sourcing



The international sourcing destinations broken down by business functions are presented in table 5.4.7. We see that the EU-15, EU-12 and 'other European countries' were the most important destinations for core business functions in 2009–2011. Support functions were mainly sourced to EU-15 (36 percent), followed by the EU-12 (16 percent) and India (12 percent). Compared with 2001–2006, the EU-12 countries have lost their position as main destination for core business functions. It seems that, in some cases, enterprises preferred the 'other European countries' as destinations for their core business functions. In 2009–2011, the share of these countries in international sourcing of core business functions was 8 percent point higher than in 2001–2006. Since the 'other European countries' is quite a diverse group of countries, it is difficult to identify

reasons for the popularity of these destinations. One could think of lower labour costs in countries like Ukraine, Albania and Turkey. However, other countries in this group have higher labour costs (Norway, Switzerland). Another remarkable observation is that India attracts mainly support functions, while core functions are relatively more sourced to China. This pattern is visible in both reference periods. An explanation for this is that China is probably a more appropriate destination for production activities, while India is more appropriate for services, e.g. because English is the second official language of India (Lacity and Rottman, 2008).

5.4.7 Destinations of international sourcing, by business function, as percentage of enterprises engaged in international sourcing

	2001–2006			2009–2011		
	total	core business functions	one or more support functions	total	core business functions	one or more support functions
	%					
EU-15	51	17	42	42	12	36
EU-12	38	27	18	25	10	16
Other European countries	5	1	4	15	9	8
China	13	11	4	8	7	2
India	17	7	11	14	4	12
Oceania and other Asian countries	13	8	7	9	4	5
USA and Canada	7	3	4	4	1	3
Russia	2	1	1	3	1	1
Brazil	1	1	0	2	1	1
Rest of the world	5	4	1	3	2	2

Source: Statistics Netherlands.

Motivations

Table 5.4.8 shows that reduction of labour costs and strategic decisions taken by the group head were the most important motivations for international sourcing in 2009–2011. Reduction of costs other than labour costs came in third place. These were also the most important motivations in 2001–2006. Unfortunately because of a methodological difference between the questions in both surveys (see section 5.3.1) the results of this survey cannot be compared directly with those from the previous one. The lower percentages in 2009–2011 are the result of this methodological difference. However, we see that strategic decisions taken by the group head have become more important over time. This was the only motivation that had a higher frequency than in 2001–2006. Take into account that only daughter enterprises can give this motivation. Note also that it is not a real

motivation. There should be another motivation behind a 'strategical' decision, for example reduction of labour costs.

5.4.8 Motivations for international sourcing, as percentage of enterprises engaged in international sourcing

	2001–2006	2009–2011
	% indicating motivation as important	
Reduction of labour costs	83	69
Strategic decisions taken by the group head	67	69
Reduction of costs other than labour costs	67	51
Focus on core business	42	29
Access to specialised knowledge/technologies	37	18
Improved quality or introduction of new products	31	16
Access to new markets	40	16
Lack of qualified labour	26	13
Less regulation affecting the enterprise, e.g. less environmental regulation	17	6

Source: Statistics Netherlands.

5.5 Conclusions

When it comes to international sourcing, the Netherlands is not among the frontrunners within Europe. Denmark, Finland, Belgium and Portugal reported higher shares in 2009–2011. In the Netherlands, only 9.8 percent of the enterprises with more than 100 employees were active in international sourcing during this period, so the overwhelming majority of 90 percent was not. In 2001–2006 the engagement of the Netherlands was higher (13.5 percent) than in 2009–2011. International sourcing is mainly driven by enterprises in industrial sectors, and these enterprises increasingly source their support functions.

Although the period covered by the second survey was shorter than in the first, there is a big difference concerning enterprise group heads. In 2009–2011 only 4.5 percent was engaged in international sourcing compared to 14.4 percent in 2001–2006. Enterprises that are part of a group are more often engaged in international sourcing, and subsidiaries source much more often than group heads. Subsidiaries with a foreign group head show a much higher sourcing rate than their Dutch controlled counterparts, as they seem to have lower thresholds for moving activities abroad. (see also Bongard (2010) and Fortanier & Van de Ven (2009)).

Enterprises insourced their business activities more often than that they outsourced them. Especially R&D, engineering and related technical services are sourced within the enterprise group. R&D activities are often knowledge-intensive and strategically important for enterprises. Enterprises want to keep these business functions under control and hence not source them to external suppliers. ICT support functions are most likely to be sourced outside the group.

Proximity is a key factor in sourcing. The EU-countries remained the main destinations for Dutch international sourcing (67 percent) in 2009–2011. However, compared to 2001–2006, the share of sourcing to the European Union declined, while 'other European countries' gained in popularity. Business functions are not massively sourced to far away destinations like China and India. Just as with international trade and foreign direct investments, enterprises seem to prefer nearby destinations.

Reduction of labour costs and strategic decisions taken by the group head were the most important motivations for international sourcing in both 2001–2006 and 2009–2011.

In general the observed differences in international sourcing between the two periods studied are small. The overwhelming majority of the large enterprises is not involved in international sourcing. International sourcing did not start in this century: enterprises may already have sourced activities abroad in the twentieth century. By only studying international sourcing in a certain period, we do not cover the expansion of activities abroad which were sourced in earlier periods. Further research could shed light on this aspect. Another important field for further research is effects of international sourcing on employment and performance of enterprise. Chapter 8 in the 2011 edition of the Internationalisation Monitor already covers this topic (Bongard, 2011), but still some questions remain unanswered.