Offshoring by manufacturing and service firms in the Netherlands
Offshoring behavior in times of a financial crisis

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1. Introduction

This report includes an overview of the research results regarding the offshore behavior of service and manufacturing firms. The underlying field study is conducted to provide an answer on to the following research question: *What is the offshoring behavior of firms operating from The Netherlands?* It is a follow up to three research studies focused on the offshoring behavior of service firms conducted by Nyenrode during the period 2003-2008[1]. The earlier studies focused on the service industry because of the perceived shift from the production to the service industry. Towards the end of the last century, services became more tradable[2] due to among others advances in information communication technology[3]. At that time especially, the offshoring behavior of service firms was a challenging research field because academic literature, data and statistics were difficult to capture[4]. The underlying study aims at providing insights in the status quo and future of offshoring by firms operating from the Netherlands and includes both manufacturing and service firms. In addition, the aim is to determine a trend line in the offshoring behavior of firms operating from the Netherlands by comparing the results of the studies conducted during the period 2003-2010.

1.1. The sourcing trinity

Both service and manufacturing firms employ global sourcing allowing them to coordinate activities and exploit both competitive (firm-specific) advantages as well as comparative (location-specific) advantages on a global scale[5] [6]. Global sourcing or international sourcing[7] refers to a strategy whereby firms determine which part of the value chain will serve which a particular market and how components/finished goods/services will be produced[8]. Offshoring and outsourcing, although they are related, are two distinct phenomena[9]. Offshoring always involves a foreign location, and in the case of captive offshoring, direct or shared control. This is not the case for outsourcing which can be executed on the domestic market but always involves a

[1] Gorp, Désirée M. van. (2008). *Offshoring in the service sector: an empirical investigation on the offshoring behavior of service firms and its influence on their foreign entry mode choice*. Nyenrode Business Universiteit, Breukelen. ISBN 9789089800091.
[2] UNCTAD, United Conference on Trade and Development. (2004). *World investment report*: *The shift towards services.* UN. New York and Geneva; Erramilli, M.K. and Rao, C.P. (1993). *Service firms' international entry-mode choice: A modified transaction-cost analysis approach*. Journal of Marketing, 57(3): 19-38.
[3] OECD, Organization for Economic Co-operation and Development. (2005). *Growth in services: Fostering employment, productivity and innovation.* Meeting of the OECD Council at Ministerial Level. Paris.
[4] Bunyaratavej, K., Hahn, E.D. and Doh, J.P. (2007). *International offshoring of services: A parity study.* Journal of International Management, 13(1): 7-21; Shamis, G.S., Green, C.M., Sorensen, S.M. and Kyle, D.L. (June, 2005). *Outsourcing, offshoring, nearshoring: What to do?* Journal of Accountancy 199(6): 57-61; Kotabe, M. and Murray, J.Y. (2003). *Global procurement of service activities by service firms.* International Marketing Review, (21)6: 615-633; Gilley, K.M. and Rasheed A. (2000). *Making more by doing less: An analysis of outsourcing and its effects on firm performance.* Journal of Management, 26(4): 763-790.
[5] Dunning, J.H. (1988).*The theory of international production.* International Trade Journal, 3(1): 21-66.
[6] Kotabe, M. and Murray, J.Y. (2004). *Global sourcing strategy and sustainable competitive advantage.* Industrial Marketing Management, 33(1): 7-314.
[7] Kotabe, M. and Murray, J.Y. (1990). *Linking product and process innovations and modes of international sourcing in global competition: A case of foreign multinational firms*. Journal of International Business Studies, 21(3): 383-408.
[8] Cheng, W. and Zhang, D. (2006). *Domestic and global sourcing.* Division of Labor & Transaction Costs, 2(1): 37-53; Murray, J.Y. and Kotabe M. (1999). *Sourcing strategies of U.S. service firms: A modified transaction-cost analysis*. Strategic Management Journal, 20(9): 791-809.
[9] Grossman, G.M. and Rossi-Hansberg, E. (2006). *The rise of offshoring: It's not wine for cloth anymore.* Paper prepared for the symposium: The new economic geography: Effects and policy implications, August 24-26, 2006. Jackson Hole, Wyoming.

third party[10]. Consequently, captive offshoring and offshore outsourcing refer to different foreign market entry modes.

1.2. Summary results of previous studies

The findings of the previous studies provided insights in the offshore behavior of service firms operating from the Netherlands. In addition, it helped to sharpen the understanding of the strategic logic for the choice between captive offshoring and offshore outsourcing by presenting a decision-making model showing how different determinants in offshoring behavior of service firms interrelate and determined a foreign entry mode choice for relocating their activities. Findings in that research were in line with the trend that service firms split up various business processes and tasks to locate them around the world, allowing them to exploit both their competitive advantages and comparative advantages of various countries as discussed in the literature findings. This implied that they should increasingly move from efficiently attending single offshoring activities to reconfiguring whole processes and value chains in order to realize more value across the whole organization. In doing so, they needed to learn to source, locate and manage human capital and activities on a structural basis anywhere in the world, which is perceived by many firms as a new managerial practice[11].

The developments referred to in the previous paragraph are in contrast with some of the early offshoring literature in which offshoring was perceived as a cost-cutting procurement tool for relocating non-core activities via third parties to so-called low-wage countries, i.e. a method of procurement in search of lowest costs around the globe. The difference with purchasing decisions which simply involve procurement is that offshoring may affect the entire organization and not just the procurement department and often requires a strategic decision. Therefore, the findings in the previous studies implied that service firms are required to take a long-term perspective regardless of which type of offshoring they choose for relocating activities to foreign locations. The reason is that service firms often engage in offshoring in long-term commitments for making investments and long-term agreements with third-party offshore providers. Furthermore, a long-term perspective is required for seamless alignment with activities at the domestic market. These studies also implied that service firms consider the lessons learned from those with prior offshoring experience and especially the level at which they have achieved their objectives, because this is one of the determinants regarding their choice for a foreign entry mode.

Further implications also concerned national policies, which are complicated by the fact that offshoring is as much a political as an economical item on the agenda of governments. Notwithstanding the fact that there is no proven connection between offshoring and high unemployment rates, governments must deal with the public concern primarily focused on the negative labor market effects of threatening

[10] Kotabe, M. and Murray, J.Y. (2004). *Global sourcing strategy and sustainable competitive advantage*. Industrial Marketing Management, 33(1): 7-14.
[11] Lewin, A.Y. and Peeters, C. (2006). *Offshoring work: Business hype or the onset of fundamental transformation*. Long Range Planning, 39(3): 221-239; Jagersma, P.K. and Van Gorp, D.M. (2002). *International HRM: The Dutch experience*. Journal of General Management, 28(2): 75-87.

unemployment rather than on the benefits of, for example, job creation, growing productivity as a result of gained experience and skills due to the presence of offshoring activity in a country[12] [13]. Focus on negative effects of offshoring can influence the electoral cycle, enhancing the demand for political measures to restrict offshoring initiatives as was the case in both the United States and the European Union[14].

Furthermore, the previous studies showed the importance of monitoring services offshoring[15]. It is apparent that although lagging behind in internationalization compared to non-service activities, over the years cross-border trade and FDIs in services have augmented and a shift from manufacturing to services offshoring took place at the turn of the last century when service firms started to source part of their service activities from abroad by configuring and coordinating different sourcing activities around the world. Given the growing weight of services in economies as well as the increased mobility of services and capital, it is recommended that governments increase efforts to become or continue to be an attractive offshore location for those service firms who employ offshoring by exploiting the comparative locational advantages of various countries. Although differences in comparative locational advantages have always played a role in the internationalization of firms, today's developments in the service sector happen at a much more rapid pace than was the case in the manufacturing industry[16].

Comparative locational advantages based on cost advantages are often short-lived in this context, especially if they are built on low wages solely, which is relatively quickly subject to change, because countries offering even lower costs develop at a relatively rapid pace[17]. In addition, research showed that a country is more likely to be a destination of services offshoring as the average wage of a country is increasing, i.e. firms locate offshoring facilities in destinations that are closer on wages to the home country[18]. This research indicated that high educational levels and cultural similarity, not to be confused with geographical closeness, are more important comparative advantages than cost advantages are. Also issues regarding the protection of intellectual property are important indicators for service firms when relocating their activities to offshore locations and deciding on whether to make a FDI in or relocate activities via a third party to a specific country. Thus in order to respond to any negative effects of offshoring, such as unemployment, and exploit the possibilities

[12] Amiti, M. and Wei, S.J. (2005). *Fear of service outsourcing: Is it justified?* Economic Policy, 20(42): 308-347; Drezner, D.W. (2004). *The outsourcing bogeyman*. Foreign Affairs, 83(3): 22-34.
[13] Samuelson, P.A. (2004). *Where Ricardo and Mill rebut and confirm arguments of mainstream economists supporting globalization*. Journal of Economic Perspectives, 18(3): 135-146.
[14] Kshetri, N. (2007). *Institutional factors affecting offshore business process and information technology outsourcing*. Journal of International Management, 13(1): 38-56; Mankiw, G.N. and Swagel, P. (2006). *The politics and economics of offshore outsourcing*. Journal of Monetary Economics, 53(5): 1027-1056.
[15] Eurostat. (2007). *Europe in figures*: Eurostat Yearbook 2006 – 07.; OECD, OECD, Organisation for Economic Co-operation and Development. (2007). *Offshoring and employment: Trends and impacts*. OECD. Paris.
[16] UNCTAD, United Conference on Trade and Development. (2004). *World investment report: The shift towards services* UN. New York and Geneva.
[17] Lewin, A.Y. and Peeters, C. (2006). *Offshoring work: Business hype or the onset of fundamental transformation*. Long Range Planning, 39(3): 221-239; Levy, D.L. (2005). *Offshoring in the new global political economy*. Journal of Management Studies, 42(3): 685-693; Kotabe, M. and Murray, J.Y. (2004). *Global sourcing strategy and sustainable competitive advantage*. Industrial Marketing Management, 33(1): 7-14.
[18] Bunyaratavej, K., Hahn, E.D. and Doh, J.P. (2007). *International offshoring of services: A parity study*. Journal of International Management, 13(1): 7-21.

regarding service offshoring, countries must create sustainable comparative locational advantages for the longer term.

As research results in the previous studies indicated, offshoring is not just about costs and low skilled labor, but increasingly about the availability of highly-skilled employees and management implying that the competitiveness of countries takes place on the labor market to a considerable extent; in terms of both numbers and skills. The Dutch economy is largely dependent on the service sector, its labor work force, legal and regulatory framework and productivity are under pressure due to offshoring of services[19]. These developments require, apart from monitoring, special attention for an adequately skilled and trained labor force. Whereas many developing countries were competing on cost and especially low wages, to date they compete on highly-skilled labor and innovation as well. This has triggered several countries to initiate protective measures[20]. However, instead of fearing a powerful economic force and requesting for protective measures, it may be more advantageous to join forces and jointly explore opportunities to create comparative advantages between countries.

[19] WEF, World Economic Forum. (2004). *The global competitiveness report, 2004, 2005*. WEF Geneva.
[20] Mankiw, G.N. and Swagel, P. (2006). *The politics and economics of offshore outsourcing.* Journal of Monetary Economics, 53(5): 1027-1056.

2. Research study 2009/2010

This research study is meant to:

1. provide insights in the status quo and future of offshoring by firms operating from the Netherlands; and
2. determine a trend line for the offshoring behavior of firms operating from the Netherlands.

2.1. Sample

The sample used for this research study includes both service and manufacturing firms operating from the Netherlands and representing the following categories:

- Manufacturing
- Water supply, sewerage, waste management, and remediation activities
- Electricity, gas, steam and air-conditioning supply
- Mining and quarrying
- Consultancy, research and other business service activities
- Financial institutions
- Information and communication technology
- Renting and trading in real estate and movable property

A total sample of 6,652 service and manufacturing firms is drawn per September 2009. Firms with a sole proprietor were excluded from the sample. In addition, of those firms with multiple establishments in the Netherlands (e.g. supermarkets) only the headquarters were invited to participate in the research. The sample of respondents is described in section 4: Describing the Sample of Respondents.

2.2. Data collection

The sample of 6,652 service firms received an invitation, in English and Dutch, to participate in the underlying research. In order to increase the willingness of service firms to participate in this research study and provide information, which most firms consider as (politically) sensitive, guarantees were provided that the information would be treated anonymously. The invitation to participate in this research was sent to CEOs and high-level management involved in the decision-making and implementation processes. Participants in the research were asked to respond by completing the questionnaire online. They received a unique link to an online survey per e-mail, which could only be used once. Approximately two weeks after sending out the invitation, those who had not responded yet received a reminder per e-mail. This resulted in additional respondents. Subsequently, a follow-up per telephone was executed for those who had not responded to the reminder. Participants were at this stage invited again to participate in the research by completing the questionnaire online. Some respondents mentioned that they were interested in participating but mostly due to time pressure, they preferred to complete the questionnaire by being interviewed by telephone.

Subsequently, a follow up per telephone was executed for firms that had not responded to the reminder. They were provided with the possibility to complete the questionnaire by being interviewed over the telephone. After the tele-enquiry the non-respondents received a final reminder by email to participate in the offshoring research study resulting in a total number of 882 respondents. The response rate (RR) equals 13,26% (882/6,652*100%). This response rate is normal for field studies using an online survey for collecting data[21] and inviting the upper echelon in the firms hierarchy to participate in the research study[22]. The number of 882 respondents included 183 respondents representing firms not belonging to one of the firm categories mentioned in the previous paragraph and18 non-completes that were deducted. Therefore, the total number of respondents taken into account for further analysis is 681.

The survey for this field study was conducted during the period September-December 2009. A questionnaire and invitation letter were designed using online survey tools and techniques. The questionnaire included 25 questions and one so-called selection question (S1) to ascertain whether those who were invited to participate in the research had been or were currently involved in relocating activities to foreign locations or in the decision-making process. Also those who have been involved in the decision to refrain from offshoring were explicitly invited to participate in the research and were assigned to a specific set of questions. The design of the questionnaire took place on the basis of the research findings of the previous Nyenrode offshoring studies.

The questionnaire included four general questions about the main characteristics of the specific service firm followed by a question whether or not the firm had experience in offshoring. The latter had three pre-selected answers: (A) Yes; (B) No, but we plan to relocate activities within the next twelve months; and (C) No and neither do we plan to relocate activities within the next twelve months. Based on the answer to this question, respondents were placed either in track A, B or C, respectively. Every track consisted of a unique set of general and track-specific questions that were developed based on the empirical findings in the studies referred to earlier. Table 1 provides an overview of the data collection.

[21] *"We found that managers are more likely to agree to be interviewed, rather than complete a questionnaire, especially where the topic is seen to be interesting and relevant to their current work."* in Saunders, M., Lewis, P. and Thornhill, A. (2003, third edition). *Research Methods for Students*, Pearson Education Limited: 159.
[22] Blomstermo, A., Deo Sharma, D. and Sallis, J. (2006). *Choice of foreign market entry mode in service firms*. International Marketing Review, 23(2): 221-229.

Table 1: Overview of the data collection

OVERVIEW OF DATA COLLECTION SAMPLE SURVEY	2009
Start of data collection in the field	22-9-2009
Total sample	6,652
Total number of non-respondents	5,770
Total number of respondents	882
Non-completes	18
Respondents not included in one of the categories in the industry classification used for this research	183
Total of completed questionnaires taken into account for data analysis	681
Response rate	13.26%
Completed questionnaires per telephone	461
Completed questionnaires online	220
Completed questionnaires in Track A referring to respondents that have offshored activities	197
Completed questionnaires in Track B referring to respondents planning to offshore activities for the first time within the next twelve months	41
Completed questionnaires in Track C referring to respondents that have no previous experience in offshoring neither are they planning to do so within the next twelve months	443
Average duration of completing questionnaire	7.2 minutes
Shortest time taken to complete questionnaire	1.7 minutes
Longest time taken to complete questionnaire	27.2 minutes
Period of follow up phone calls	6-11-09 till 27-11-09
End of data collection in the field	9-12-2009

3. Data Analysis

Of the 681 respondents, 197 have already relocated activities before, 41 were planning to do so within the next twelve months (per September 2009) and the rest (443) did not relocate or plan to do so in the future as shown in the table below.

Table 2: Overview of respondents that A) have relocated their activities before, B) those that are planning to do so within the next twelve months and C) those that have no previous experience in doing so, nor have plans to relocate activities within the next twelve months.

FIRMS OPERATING FROM THE NETHERLANDS PARTICIPATING IN THE SURVEY	FREQUENCY	PERCENTAGE
A) Yes, our company has offshored activities before	197	28.93
B) Yes, our company is planning to offshore activities within the next twelve months	41	6.02
C) No, our company did not offshore business activities and is not planning to do so in the next twelve months	443	65.05

Descriptive statistics were used to analyze the data and present the research results in the underlying report. SPSS (version 15) was used for presenting the frequencies and percentages per variable for Tracks A, B and C. The respondents in Tracks A and B were asked to assign their answers to one or more activities their firm had relocated or were planning to do so within the next twelve months. Therefore, the way the questionnaire was designed allowed to link specific activities to: number of jobs/functions being relocated, offshoring locations, type of offshoring and objectives and barriers.

4. Describing the Sample of Respondents

In this section, the characteristics of the respondents are further described according to their industry classification; headquarters location of subsidiaries; the extent to which they had previous experience in offshoring or were planning to relocate activities within the next twelve months; their size based on the number of full time employees (FTE); and the number of activities they had relocated or were planning to relocate. Data for variables offshore locations divided in regions and major areas and by income level were obtained from secondary sources, while data for the other variables were obtained from the questionnaires completed by the respondents and the interviews per telephone.

Industry classification

The respondents were categorized based on the industry classification as shown in Figure 1. The majority of the respondents (38,62%) are categorized as manufacturing firms.

Figure 1: Industry classification of respondents

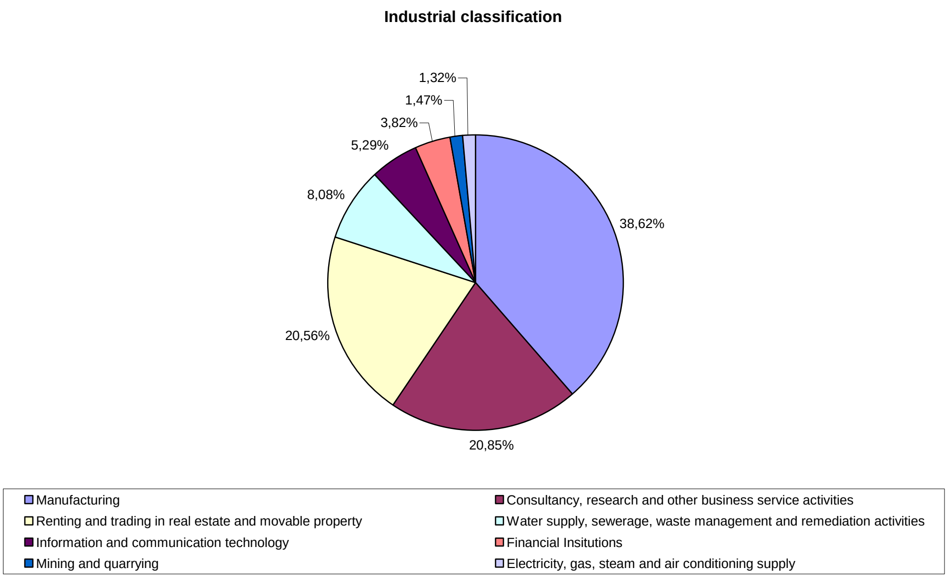


Table 3 provides an overview of respondents divided in Tracks A, B and C categorized by industry classification.

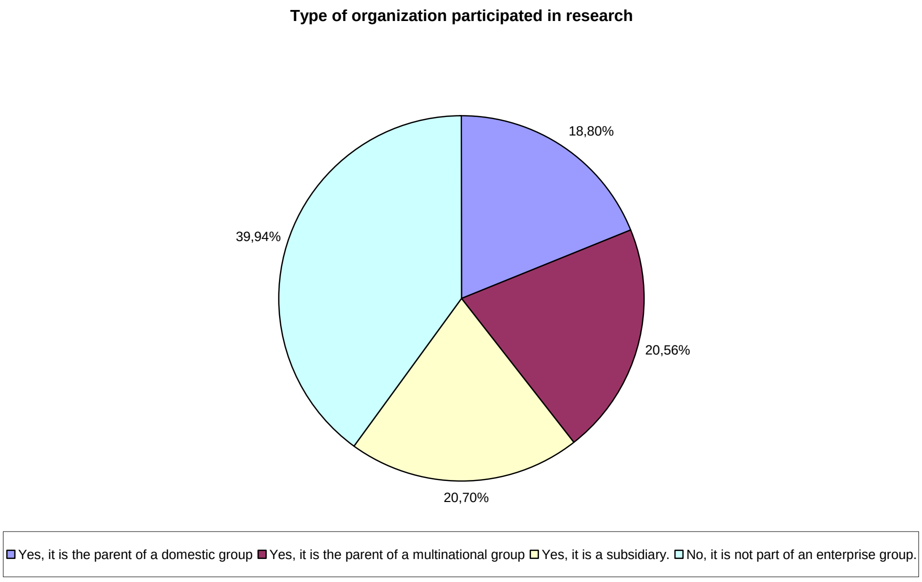
Table 3: Respondents in Tracks A, B and C distributed according to industry classification

RESPONDENTS DISTRIBUTED OVER INDUSTRY SECTOR	
1) Tracks A, B, and C combined	Percentage
Manufacturing	38.62
Consultancy, research, and other business service activities	20.85
Renting and trading in real estate and movable property	20.56
Water supply, sewerage, waste management, and remediation activities	8.08
Information and communications technology	5.29
Financial institutions	3.82
Mining and quarrying	1.47
Electricity, gas, steam, and air conditioning supply	1.32
Total	100.00
2) Track A	Percentage
Manufacturing	43.65
Consultancy, research, and other business service activities	24.87
Renting and trading in real estate and movable property	10.15
Water supply, sewerage, waste management, and remediation activities	2.54
Information and communications technology	11.68
Financial institutions	5.08
Mining and quarrying	1.52
Electricity, gas, steam, and air conditioning supply	0.51
Total	100.00
3) Track B	Percentage
Manufacturing	19.51
Consultancy, research, and other business service activities	21.95
Renting and trading in real estate and movable property	26.83
Water supply, sewerage, waste management, and remediation activities	4.88
Information and communications technology	12.20
Financial institutions	9.76
Mining and quarrying	4.88
Electricity, gas, steam, and air conditioning supply	0.00
Total	100.00
4) Track C	Percentage
Manufacturing	38.15
Consultancy, research, and other business service activities	18.96
Renting and trading in real estate and movable property	24.60
Water supply, sewerage, waste management, and remediation activities	10.84
Information and communications technology	1.81
Financial institutions	2.71
Mining and quarrying	1.13
Electricity, gas, steam, and air conditioning supply	1.81
Total	100.00

Type of organization

Respondents were categorized according to whether they belong to an enterprise group or not. The majority of respondents are part of an enterprise group (60.06%) as either subsidiary (20.70%), parent of a domestic group (18.80%) or parent of a multinational group (20.56%) as depicted in Figure 2 below. 39.94% of the respondents indicated that they are not part of an enterprise group. The majority of the subsidiaries part of an enterprise group are headquartered in the Netherlands (50.35%) followed by the United States (16.31%).

Figure 2: Classification of respondents based on the type of organization



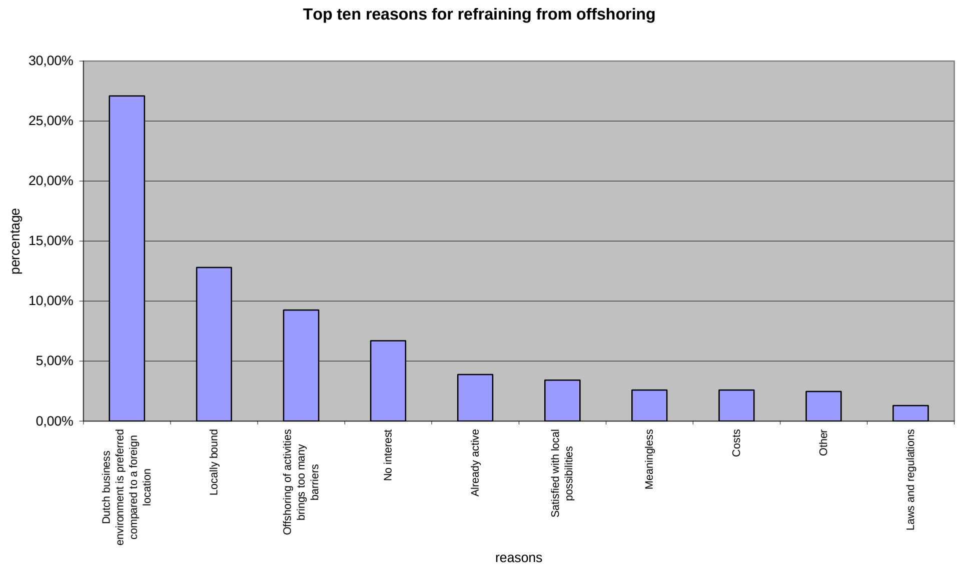
5. Empirical Findings

In the next paragraphs, the empirical findings regarding the offshore behavior of firms participating in this research are presented.

5.1. Offshoring by Firms Operating from The Netherlands

The majority of respondents (65.05%) have no experience in offshoring nor have any plans to relocate their activities within the next months (per September 2009). The top three reasons for not offshoring are: 1) t*he Dutch business environment is preferred to a foreign location*; 2) *the activities of the firms are locally bound and hence can not relocate their activities to a foreign location*; 3) *offshoring is perceived as bringing too many barriers*. Figure 3 provides an overview of the top ten reasons why firms refrain from offshoring.

Figure 3: Top ten reasons for firms to refrain from offshoring



Level of Offshoring Experience

The respondents taken into account for further analysis were divided in Track A (82.77%), firms with *previous experience in offshoring*, and Track B (17.23%) those *planning for offshoring within the next twelve months* (Table 4).

Table 4: Overview of number of firms that previously relocated activities and those planning to do so within the next twelve months

OVERVIEW OF LEVEL OF OFFSHORING EXPERIENCE FOR RESPONDENTS IN TRACKS A AND B		
EXPERIENCE IN OFFSHORING OR PLANNING TO DO SO	**FREQUENCIES**	**PERCENTAGES**
Firms with offshoring experience	197	82.77
Firms with offshoring plans within the next twelve months	41	17.23
Total	238	100,00

The firms with experience in offshoring are further classified by the number of years of experience they have. The majority of respondents (57.36%) have *more than 5 years* offshoring experience. 34.52% have *1 to 5 years* experience and 8.12% have *less than a year* experience in offshoring.

Firm Size

The firms participating in the research were divided into two categories according to their size expressed in number of full time employees[23], i.e. *SMEs with less than 100 FTE* (A: 44.16%; B: 73.17%; and C: 42.44%); and *large firms with 100 or more FTE* (A: 55.84%; B: 26.83%; and C: 57.56%) as is shown in Table 5. The majority of firms participating in this research were large firms (55.21%).

Table 5: Overview of firm size in Tracks A, B and C

FIRM SIZE IN FTE FOR RESPONDENTS IN TRACKS A, B, AND C				
NUMBER OF FTEs	PERCENTAGE TRACK A	PERCENTAGE TRACK B	PERCENTAGE TRACK C	TOTAL PERCENTAGE
SME < 100 FTE	44.16	73.17	42.44	44.79
Large firms >100 FTE	55.84	26.83	57.56	55.21
Total	100.00	100.00	100.00	100.00

Number of Offshoring Activities

Further analysis is done on activity level for those respondents with previous offshoring experience respectively those expressing offshoring plans for the future. They make up a total of 238 valid responses that are linked to a total of 426 offshoring activities. 85.92% of these activities have already been relocated, 14.08% are on the nomination to be offshored within the next twelve months.

Table 6: Overview of the number of activities offshored already or planned to be offshored in the next twelve months

NUMBER OF ACTIVITIES THAT ARE RELOCATED OR WILL BE OFFSHORED WITHIN THE NEXT TWELVE MONTHS	
OFFSHORING ACTIVITIES	FREQUENCIES
Activities that have been offshored already	366
Activities that will be offshored in the next twelve months	60
Total	426

Dividing these activities over SMEs and large firms provides the following picture. 53.92% of the activities are relocated by large firms versus 32.63% by SMEs. 3.52% of the activities are planned to be relocated within the next twelve months by large firms versus 10.56% by SMEs (Table 7).

[23] Centraal Bureau voor de Statistiek (2007); Demografie van bedrijven, uitgebreide toelichting.

Table 7: Overview of the number of activities offshored already or planned to be offshored in the next twelve months divided by firm size

NUMBER OF ACTIVITIES THAT ARE OFFSHORED OR WILL BE OFFSHORED WITHIN THE NEXT TWELVE MONTHS DIVIDED BY FIRM SIZE						
OFFSHORING ACTIVITIES DIVIDED BY FIRM SIZE	**FREQUENCIES SMEs**	**PERCENTAGES SMEs**	**FREQUENCIES LARGE FIRMS**	**PERCENTAGES LARGE FIRMS**	**TOTAL**	**TOTAL PERCENTAGE**
Activities that have been offshored already	139	32.63	227	53.29	366	85.92
Activities that will be offshored in the next twelve months	45	10.56	15	3.52	60	14.08
Total	184	43.19	242	56.81	426	100,00

Dividing the 426 activities by industry shows that 36.38% is already offshored by the manufacturing firms versus 49.53% by other industries; 2.35% is planned to be offshored by manufacturing firms versus 11.74% by other industries.

Table 8: Overview of the number of activities offshored already or planned to be offshored in the next twelve months divided by industry

OFFSHORING ACTIVITIES DIVIDED BY TYPE OF INDUSTRY FOR RESPONDENTS IN TRACKS A AND B						
OFFSHORING ACTIVITIES DIVIDED BY INDUSTRY	**FREQUENCIES MANUFACTURING**	**PERCENTAGES MANUFACTURING**	**FREQUENCIES OTHER INDUSTRIES**	**PERCENTAGES OTHER INDUSTRIES**	**TOTAL**	**TOTAL PERCENTAGES**
Activities that have been offshored already	155	36.38	211	49.53	366	85.92
Activities that will be offshored in the next twelve months	10	2.35	50	11.74	60	14.08
Total	165	38.73	261	61.27	426	100.00

5.2. How To Offshore

In this section, the results are presented of the offshore behavior of manufacturing and service firms regarding their choice for a specific entry mode when offshoring, i.e. offshoring in the form of a foreign direct investment (*captive offshoring*), via a third party (*offshore outsourcing*) or a *combination of both types of offshoring*.

Choice for Type of Offshoring

The majority of firms that previously offshored activities (76.42%) or are planning to do so (80.00%) referred to c*aptive offshoring* as their mode of entry into a foreign offshore location as is shown in Table 9.

Table 9: Overview of type of offshoring used (in the future) by respondents in Tracks A and B

TYPE OF OFFSHORING OF RESPONDENTS IN TRACKS A AND B TO ENTER FOREIGN OFFSHORE LOCATION		
TYPE OF OFFSHORING	**PERCENTAGES TRACK A**	**PERCENTAGES TRACK B**
Captive offshoring	76.42	80.00
Offshore outsourcing	23.58	20.00
Total	100.00	100.00

33.25% of the activities relocated (in the future) by SMEs are done with captive offshoring versus 43.69% of the activities offshored by large firms. As far as offshore outsourcing is concerned, 11.41% of the activities relocated by SMEs are or will be relocated via a third party versus 11.65% of the offshoring activities of large firms.

Table 10: Overview of type of offshoring divided by firm size

TYPE OF OFFSHORING DIVIDED BY FIRM SIZE			
TYPE OF OFFSHORING	**PERCENTAGES SMEs**	**PERCENTAGES LARGE FIRMS**	**TOTAL PERCENTAGES**
Captive offshoring	33.25	43.69	76.94
Offshore outsourcing	11.41	11.65	23.06
Total	44.66	55.34	100.00

Type of Captive Offshoring

The majority of respondents choosing captive offshoring as an entry mode for relocating their activities (52.80%) have done so by using an existing *subsidiary* versus establishing a *greenfield* for those planning to offshore within the next twelve months (41.70%).

Table 11: Overview of form of captive offshoring used (in the future) by respondents in Tracks A and B

FORM OF CAPTIVE OFFSHORING OF RESPONDENTS IN TRACKS A AND B		
FORM OF CAPTIVE OFFSHORING	**PERCENTAGE TRACK A**	**PERCENTAGES TRACK B**
Subsidiary	52.80	37.50
Merger & acquisition	10.40	10.40
Greenfield	26.00	41.70
Joint Venture	10.80	10.40
Total	100.00	100.00

5.3. Why Offshoring

In this paragraph, the findings are presented regarding the objectives for offshoring and the perceived barriers for both respondents who previously relocated activities and those who were planning to get involved in offshoring within the next twelve months. Furthermore, for respondents who had actually relocated their activities, findings are presented regarding the objectives they did achieve and those not achieved.

Categorization into main categories

All answers related to objectives / objectives achieved were codified in the following main categories:

• *Cost advantages* referred to all objectives related to cost savings as a result of offshoring, for example, labor and operational costs.

• *Market access seeking* referred to gaining access to new geographical markets, for example by following customers, suppliers and competitors through offshoring.

• *Strategic asset seeking* referred to gaining strategic assets, such as improving competitiveness, increasing quality or labor productivity; to exploit advantages of legislation and regulations.

• *Strategic resource seeking* referred to getting access to strategic resources, such as qualified employees and natural resources.

• *Other objectives* for offshoring not belonging to one of the aforementioned categories.

All answers related to barriers and reasons for not achieving objectives by offshoring were codified in the following main categories:

• *Management issues* referred to issues related to managing offshoring activities, for example, with respect to communication, culture differences, bureaucracy and governance issues.

• *Unavailability of resources* referred, for example, to the lack of skilled employees or knowledge.

• *Unavailability of strategic assets* referred to issues such as lack of quality or flexibility.

• *Other barriers* for offshoring not belonging to one of the aforementioned categories.

• *No barriers* was added as a main category for answers of respondents expressing that they perceived no barriers at all for offshoring activities.

Objectives for Offshoring

For respondents in both tracks who previously relocated activities and those who are planning to do so, the top two frequently mentioned and most important objectives for offshoring were *costs savings* and *improve/maintain competitiveness*. Figures 4 and 5 show the top ten of frequently mentioned and most important objectives for relocating activities mentioned by respondents in Tracks A and B.

For Track A *increase flexibility* ranks third as frequently mentioned objectives. However, looking at the most important objectives *entering new markets* rank third for respondents in Track A. For respondents in Track B objectives related to *enter new markets* rank third as frequently mentioned objectives for offshoring. Those related to *Improve quality* rank third as most important objectives for this category of respondents.

Figure 4: Top ten frequently mentioned versus most important objectives for offshoring by respondents in Track A

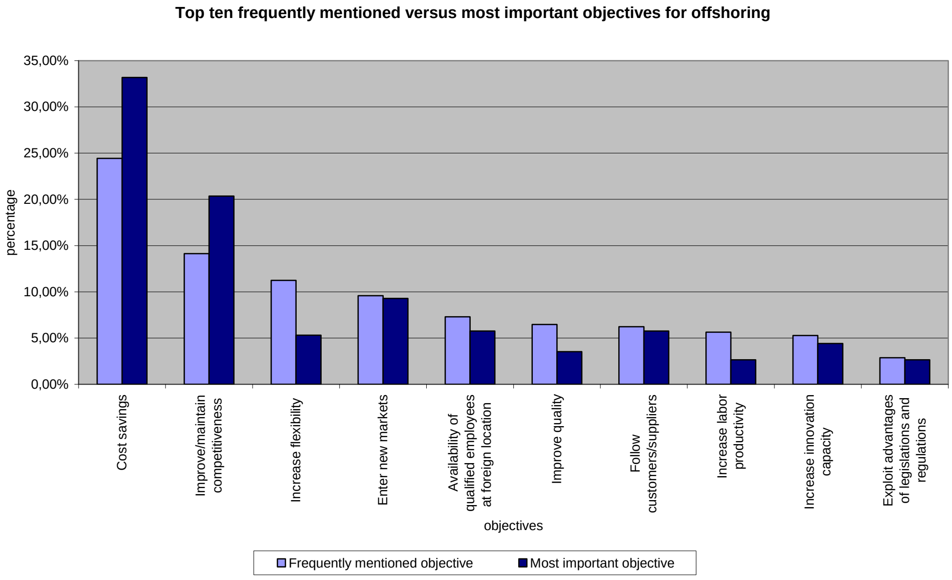
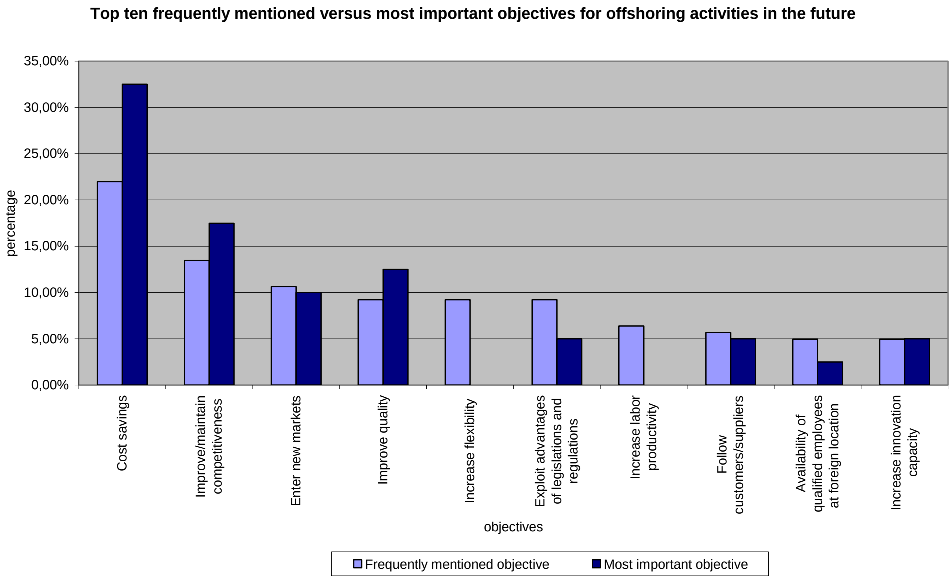
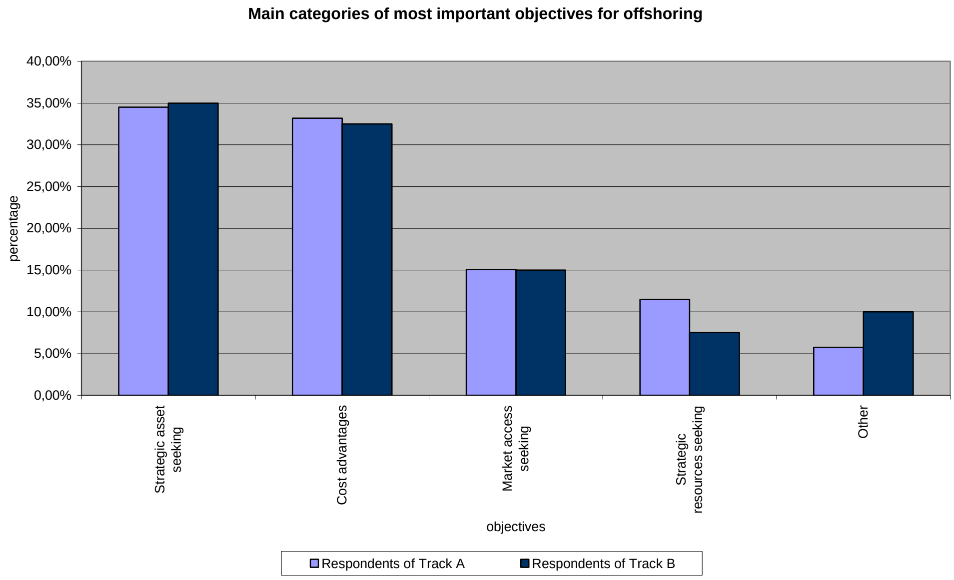


Figure 5: Top ten frequently mentioned versus most important objectives for offshoring by respondents in Track B



When codifying these responses in main categories, *strategic assets* are for experienced respondents and those planning for offshoring frequently mentioned as most important objectives for relocating activities to a foreign location.

Figure 6: Main categories of most important objectives for offshoring for respondents in Tracks A and B



Objectives achieved

Respondents who previously relocated activities were asked which objectives they achieved by offshoring their activities. *Cost savings, improve or maintain competitiveness* and *increase flexibility* are in the top three of frequently mentioned objectives that respondents achieved by offshoring their activities (Figure 7). These same objectives rank also high on objectives that were only *little* or *not at all achieved*. Figure 8 provides an overview of the objectives *largely* and *completely achieved* versus those *little* and *not achieved*.

Figure 7: Objectives achieved by offshoring activities to foreign location by respondents in Track A

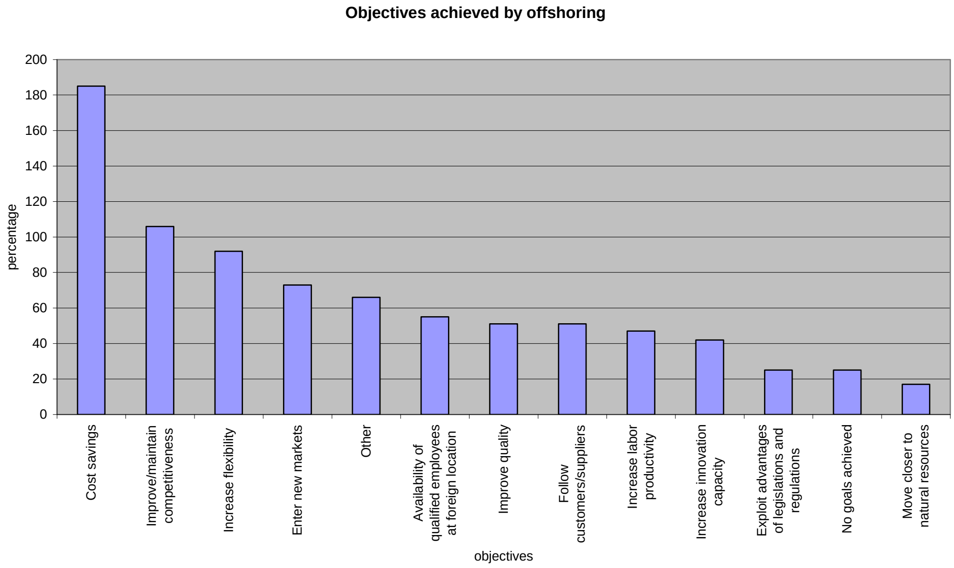
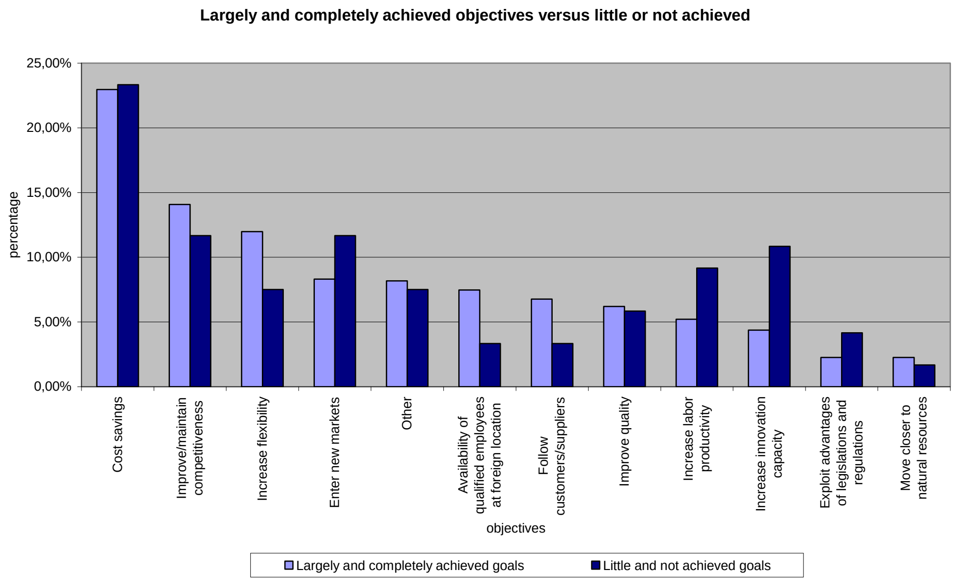
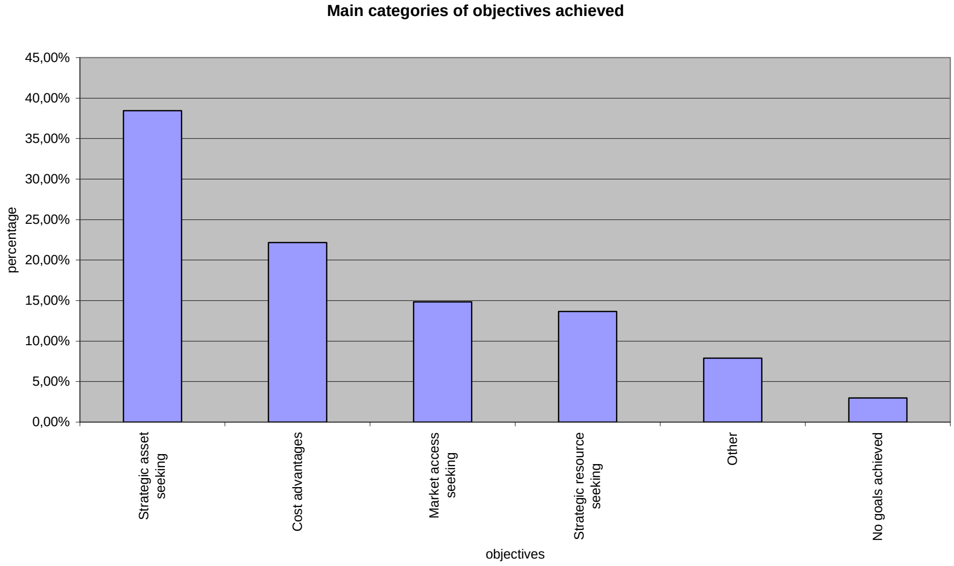


Figure 8: Largely and completely achieved objectives versus little or not achieved objectives by offshoring activities to foreign location by respondents in Track A



When codifying these responses in main categories, objectives related to *strategic asset seeking* followed by *cost savings* and *market access seeking* were frequently mentioned in the top three as having been achieved (Figure 9).

Figure 9: Main category of objectives achieved by offshoring activities to foreign location by respondents in Track A

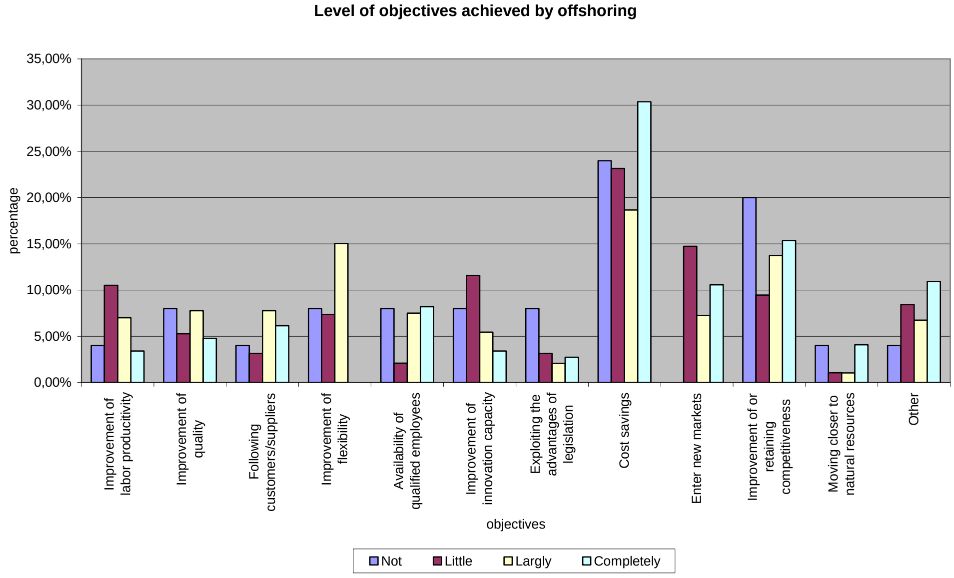


Further analysis showed a significant relationship between type of offshoring and the objectives associated with it. *Captive offshoring* is more often than expected used in order to seek *strategic assets* versus *offshore outsourcing* to seek *cost advantages*.

Respondents who previously relocated activities were asked the level of which they achieved their objectives by offshoring their activities. The answers were codified in four categories: *not*, *little*, *largely*, and *completely*. 84.98% of the objectives were *largely* or *completely achieved*, whereas 15.02% were *little* or *not achieved*. 2.99% of the firms that have relocated some of their activities to a foreign location mentioned they had *not achieved any of their objectives*.

Objectives related to *cost savings* were frequently mentioned as being completely achieved and also score high in the categories not and little achieved. The same applies for *improvement of or retaining competitiveness* and *enter new markets*. *Improvement of flexibility* is frequently mentioned as an objective that is largely achieved. *Improvement of labor productivity* and *improvement of innovation capacity* were relatively frequently mentioned as being *little* achieved.

Figure 10: Overview of level of objectives achieved by offshoring for respondents in Track A.



Reasons for not achieving Objectives by Offshoring

Those respondents who did not or just somewhat achieved their objectives frequently referred to *governance* issues as the reason followed by *costs for offshoring that were higher than expected*. Another frequently mentioned answer was that it was *too early to judge because the offshoring of activities was not yet fully implemented*. Answers given in the category *other* are related to for example the *financial crisis*.

Figure 11: Reasons for not achieving objectives by offshoring mentioned by respondents in Track A

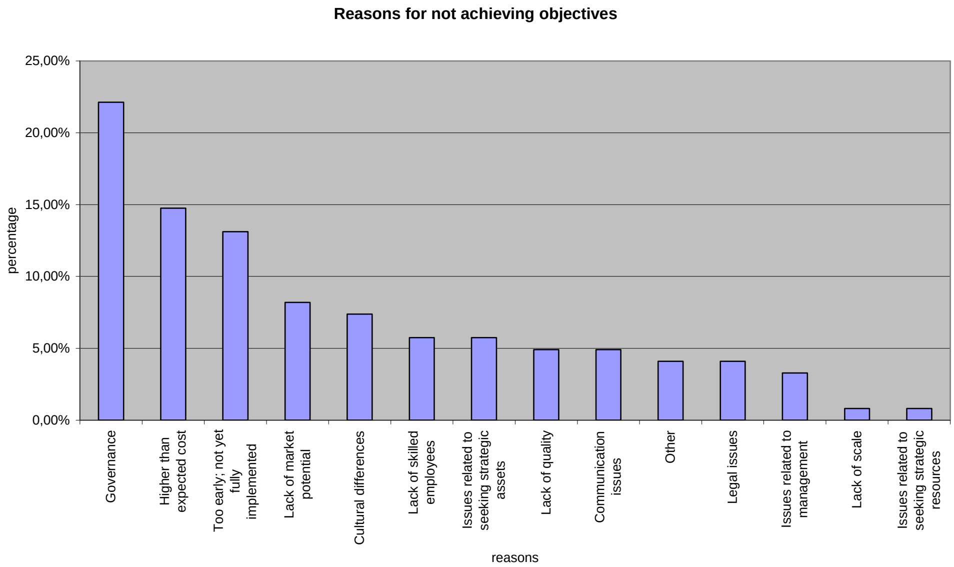
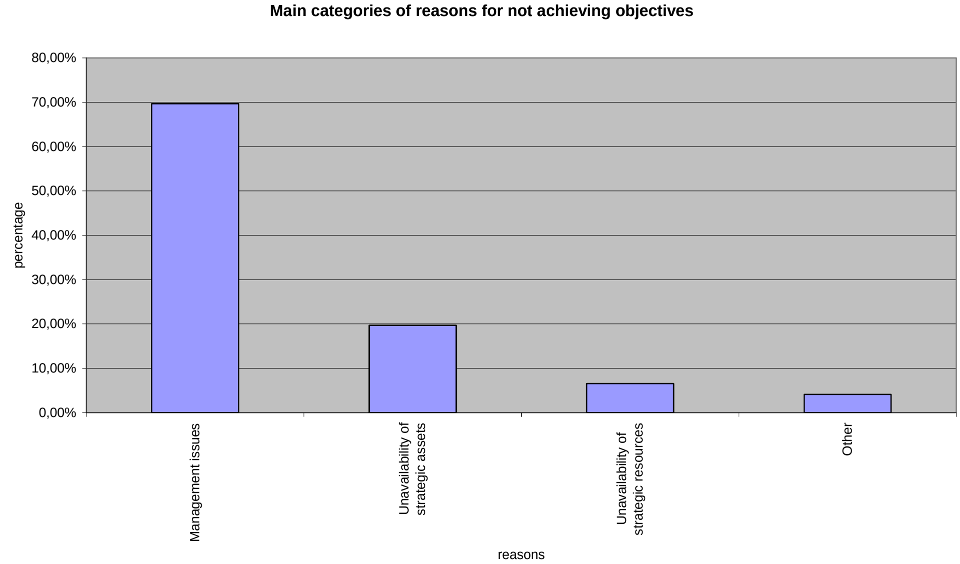


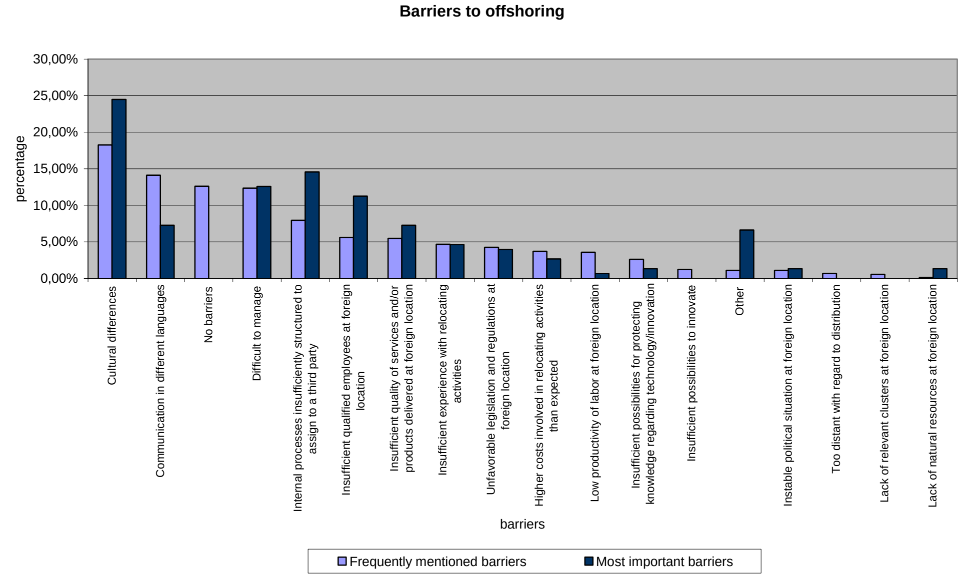
Figure 12: Main categories of reasons for not achieving objectives by offshoring mentioned by respondents in Track A



Barriers to Offshoring

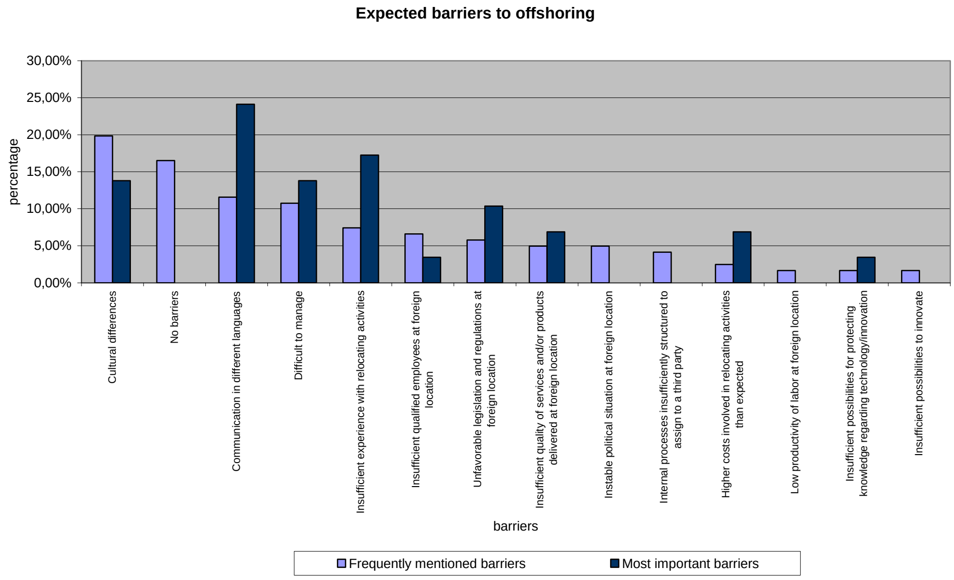
Top three frequently mentioned barriers of respondents who previously relocated activities of respondents were: *cultural differences*, *difficult to manage* and *communication in different languages*. Third in ranking were respondents mentioning that they perceived *no barriers at all* to offshoring their activities. Respondents referred to their top three of most important barriers to offshoring: *cultural differences*, *insufficient structure of their internal processes* and the fact that offshoring activities were *difficult to manage*.

Figure 13: Frequently mentioned versus most important barriers to offshoring mentioned by respondents in Track A



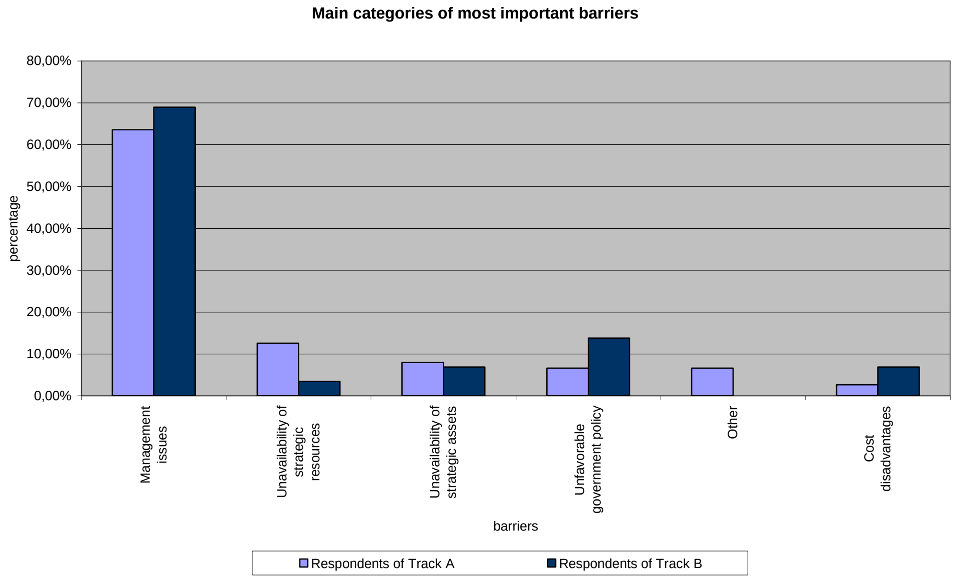
For respondents who were planning to offshore the top three of barriers that they expected were: *cultural differences*, *difficult to manage* and *communication in different languages*. Second in ranking were those firms expecting to encounter *no barriers at all*. The most important barriers expected by respondents in Track B mentioned were: *communication in different languages*, *insufficient experience with offshoring* and ranking both third *difficult to manage* and *cultural differences*.

Figure 14: Frequently mentioned versus most important barriers to offshoring mentioned by respondents in Track B



When codifying these responses in main categories, the category *management issues* stands out as frequently mentioned barriers by both respondents with experience in offshoring and those planning to do so (Figure 15).

Figure 15: Main categories of most important barriers to offshoring mentioned by respondents in Tracks A & B



5.4. What to Offshore

This section elaborates on which activities respondents chose to relocate or were planning to offshore in the future.

Offshoring Activities

The top two of activities offshored by respondents who previously relocated activities and those planning to do within the next twelve months were *production* and *sales* (Figures 16 and 17). Third in ranking for offshored activities is *technology and application development*. For activities that are planned to be relocated *management functions* rank third.

Figure 16: Activities that are offshored to foreign locations by respondents in Track A

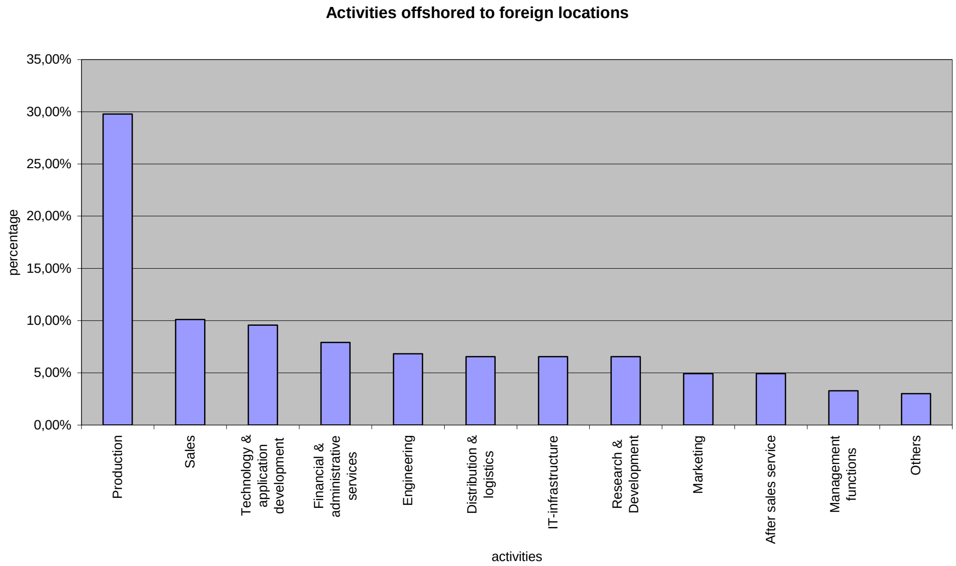
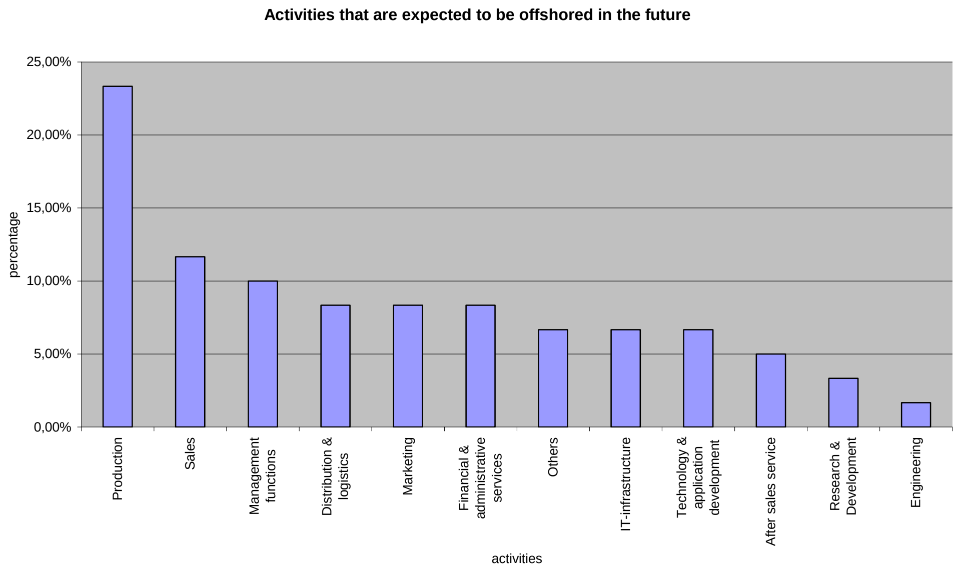


Figure 17: Activities that are planned to be offshored to foreign locations by respondents in Track B



Core and Non-Core Activities

Based on the self-reported measures of respondents, activities that were relocated were divided into those relating to the core business and those that were not[24]:

• *Core activities* referred to offshoring activities belonging to a firm's core business and that are considered essential for the long-term success of a firm.

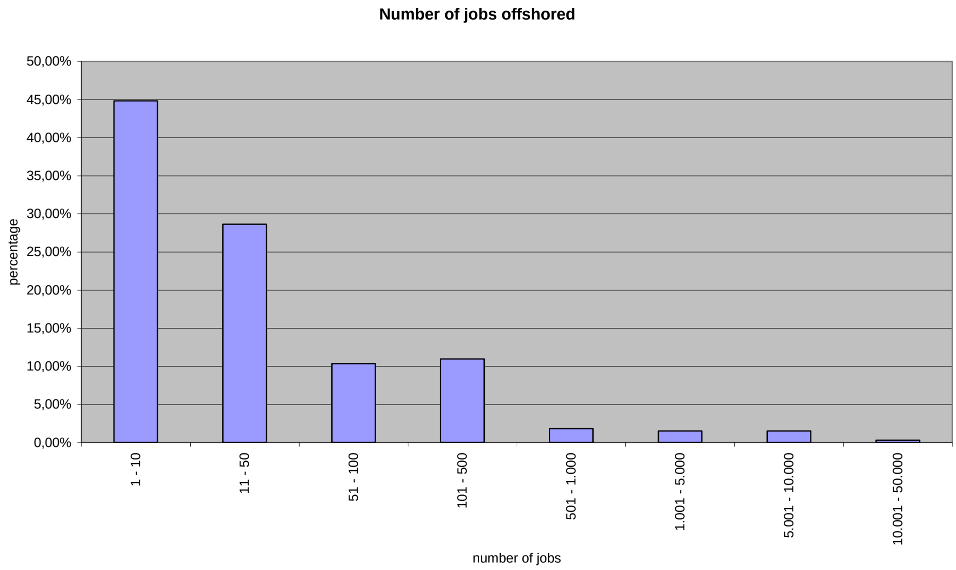
• *Non-core or peripheral activities* referred to those offshoring activities not belonging to a firm's core business and that are considered to be less strategically relevant to differentiate or contribute to the long-term success of a firm.

When asked whether they referred to their offshoring activities as core or non-core, the majority of respondents in both Tracks A and B referred to them as belonging to their *core business* (A: 69.67%; B: 65.00%). Further analysis showed a significant relationship between the activity being core or non-core and the type of offshoring, i.e. *captive offshoring* is more often than expected associated with *core activities* and *offshore outsourcing* with *non-core activities*.

Offshoring Activities and Jobs involved

The relocation of jobs involved in offshoring activities is one of parameters to measure the impact of offshoring on national economies. In this research, the number of jobs relocated is measured per activity and classified in the following interval: *1 – 10*; *11 – 50*; *51 – 100*; *101 – 500*; *501 – 1.000*; *1.001 – 5.000*; *5.001 – 10.000*; *10.001 – 50.000*; and *more than 50.000*. The majority of jobs involved the relocation of *1 to 10 jobs* this was followed by activities involving the relocation of *11 to 50 jobs* (Figure 18).

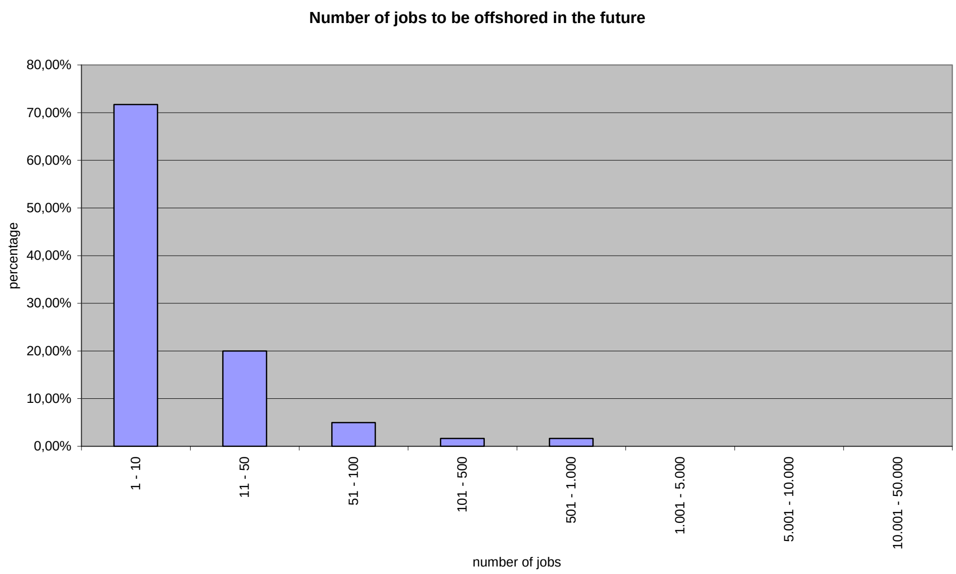
Figure 18: Number of jobs involved in offshoring activities by respondents of Track A



[24] Murray, J.Y. and Kotabe, M. (1999). *Sourcing strategies of U.S. service firms: A modified transaction-cost analysis.* Strategic Management Journal, 20(9): 791-809.

A similar picture applies to the activities that respondents plan to relocate. Activities involving the relocation of *1 to 10 jobs* stands out even more followed by those involving *11 to 50 jobs*.

Figure 19: Number of jobs expected to be relocated by offshoring activities of respondents in Track B



The jobs involved in offshoring were categorized in the following four levels of income: *below modal income* (less than €31659 per annum); *modal income* (€31659 per annum); and *above modal income* (more than €31659 per annum). 37.70% of respondents have offshored jobs in the *above modal* income category, followed by 31.97% of jobs in the *modal* category and 30.33% of jobs in the *below modal* category. With regard to activities that are likely to be offshored in the future, jobs in the *modal income* category topped the list with 36.67% of respondents choosing this option. This was followed by jobs in above *modal income* category (33.33%) and *below modal* income category (30.00%).

5.5. Where to offshore

In providing further insight into the offshore behavior of firms, this section presents the research findings for the respondents' preferred offshore locations. Offshore locations were analyzed based on their geographic position (countries, regions and major areas) as well as on their income level.

Countries were divided in the following major areas and regions[25]:

• *Africa* included the regions *Eastern, Middle, Northern, Southern and Western Africa.*
• *Asia* included the regions *Eastern, Southern, Central, South-eastern and Western Asia.*
• *Europe* included the regions *Eastern, Northern, Southern and Western Europe.*
• *Americas* included the regions *Latin America and the Caribbean, Central and South America and Northern America.*
• *Oceania* included the regions *Australia/New Zealand, Melanesia, Micronesia and Polynesia.*

Every country mentioned by respondents was assigned to one of the following *income levels*[26]:

• *High income* referred to economies with GNI[27] per capita of US$ 10,066 or more.
• *Upper middle income* referred to economies with GNI per capita between US$ 3,256–10,065.
• *Lower middle income* referred to economies with GNI per capita between US$ 826–3,255.
• *Low income* referred to economies with GNI per capita of US$ 825 or less.

Offshore Locations by Countries

In the top five of offshore locations mentioned where firms relocated their activities to were mentioned: *India*, *China*, *US*, *Germany* and *Poland*. Those firms planning to relocate some of their activities to a foreign location rank their offshore locations as follows: *Germany*, *Belgium*, *India*, *China* and *Australia*. For an overview of the top ten offshore locations of respondents in both Tracks A and B, see Figures 20 and 21.

[25] Countries divided in geographic regions on the basis of the definition of major areas and regions defined by UNSTAT, United Nations Statistics Division. (2008). *Composition of macro geographical (continental) regions, geographical sub-regions, and selected economic and other groupings.* UNSTAT. New York.

[26] The codification of countries by income level is based on The World Bank. (2005). *List of economies.* The World Bank. Washington D.C.

[27] GNI: Gross National Income referring to the aggregate value of the balances of gross primary incomes for all sectors; gross national income is identical to gross national product (GNP) as understood in national accounts generally. Available at: http://web.worldbank.org/WBSITE/EXTERNAL/DATASTATISTICS/0,,contentMDK:20420458~menuPK:64133156~pagePK:64133150~piPK:64133175~theSitePK:239419,00.html

Figure 20: Top ten offshore locations for respondents in Track A

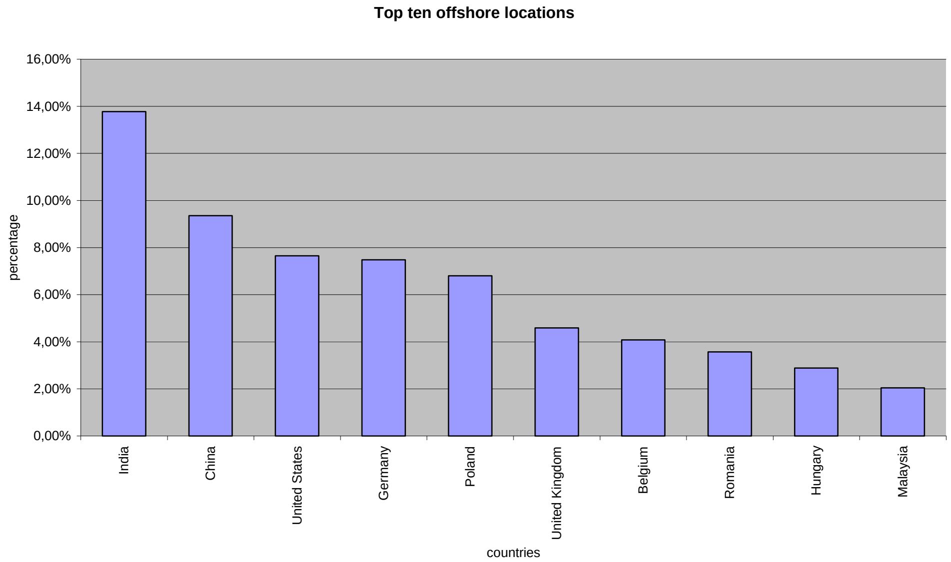
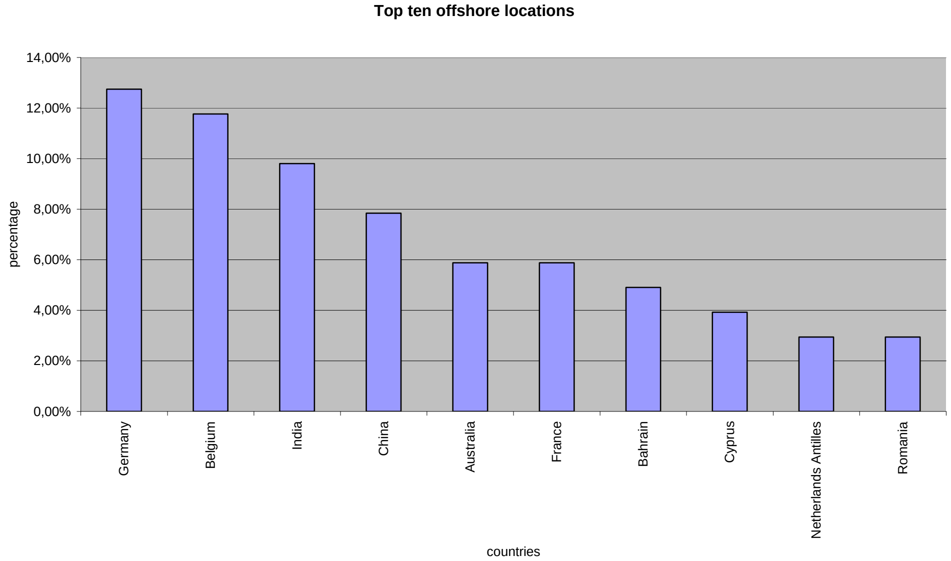


Figure 21: Top ten offshore locations for respondents in Track B



Offshore Locations by Regions

The top three of offshore regions for respondents in Track A were *Eastern Europe*, *Western Europe* and *Southern Asia*. For respondents in Track B *Western Europe* stands out compared to the number two and three regions in ranking *Eastern Europe* and *Southern Asia* respectively.

Figure 22: Offshore locations classified by region for respondents in Tracks A and B

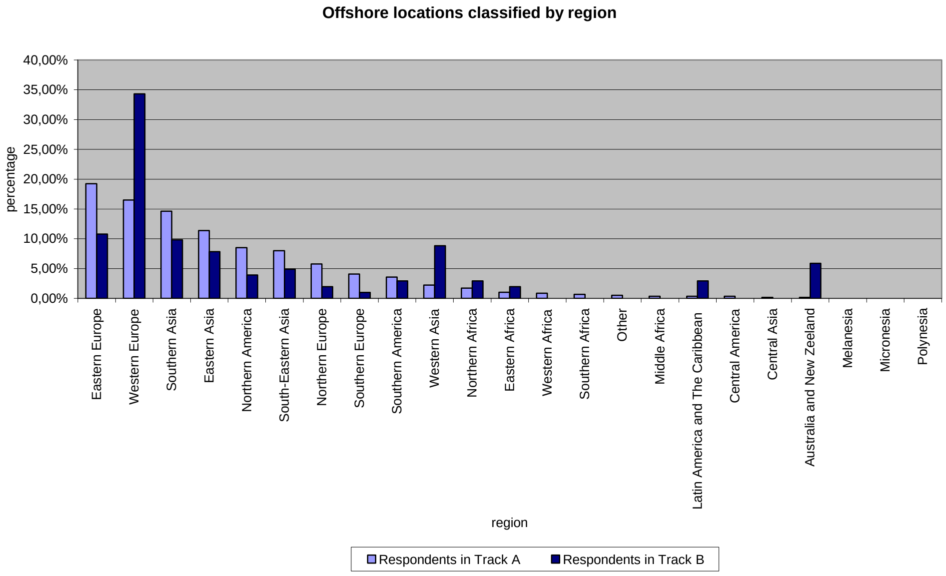


Figure 23: Offshore region classified by firm size for respondents in Track A

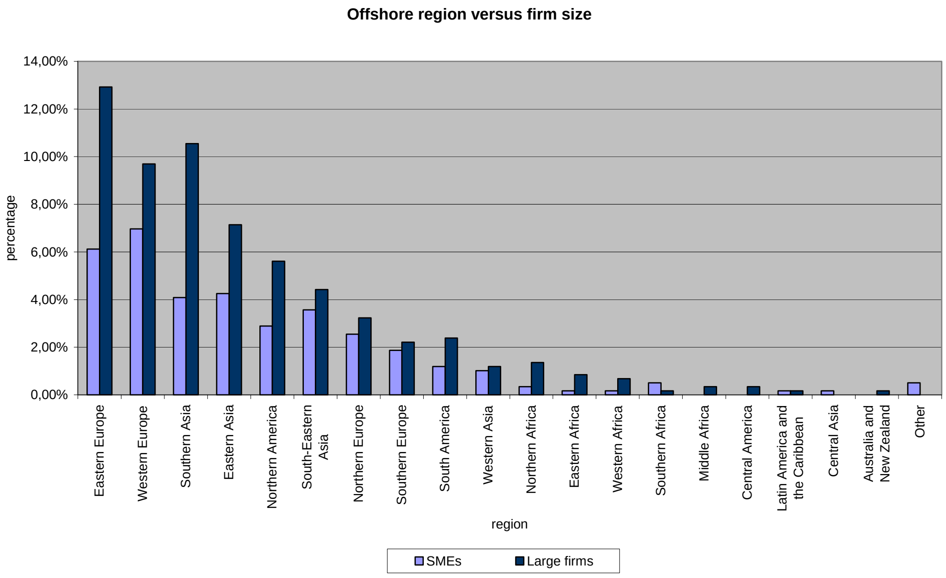


Figure 24: Preferred offshore region classified by firm size for respondents in Track B

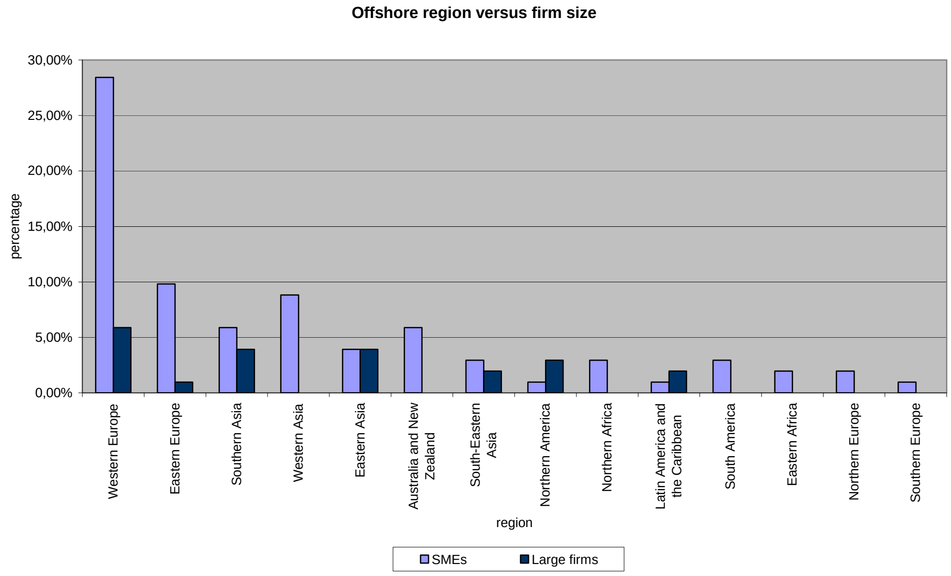
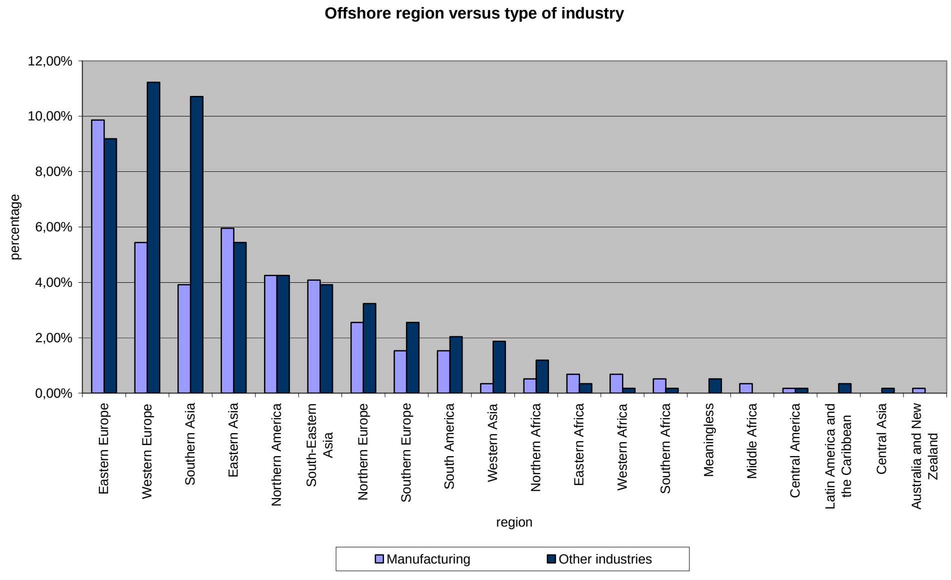
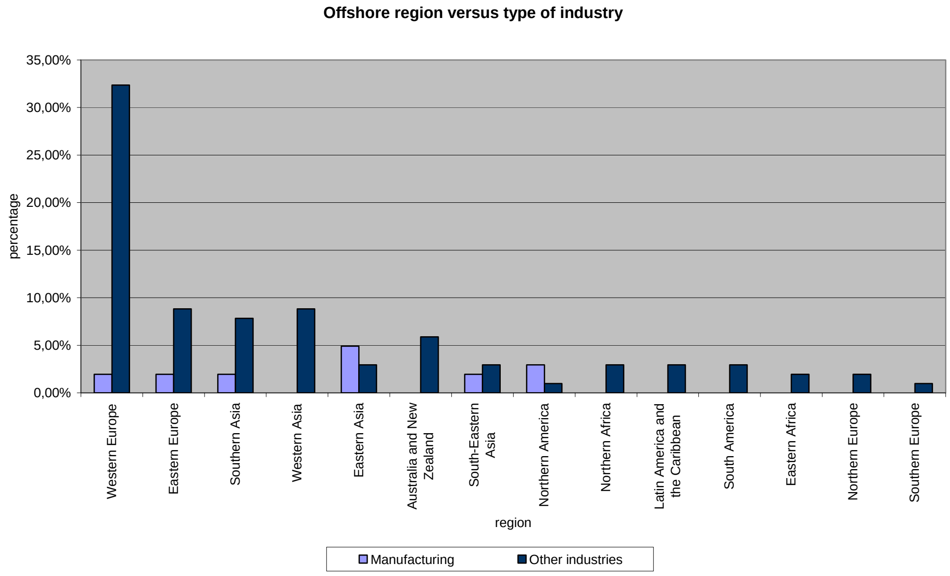


Figure 25: Offshore region classified by type of industry for respondents in Track A



When analyzing offshore regions versus type of industry, it shows that manufacturing frequently mention *Eastern Asia* as a region for relocating activities. For the other industries participating in the research *Western Europe* is standing out as an offshore region for relocating activities (Figure 26).

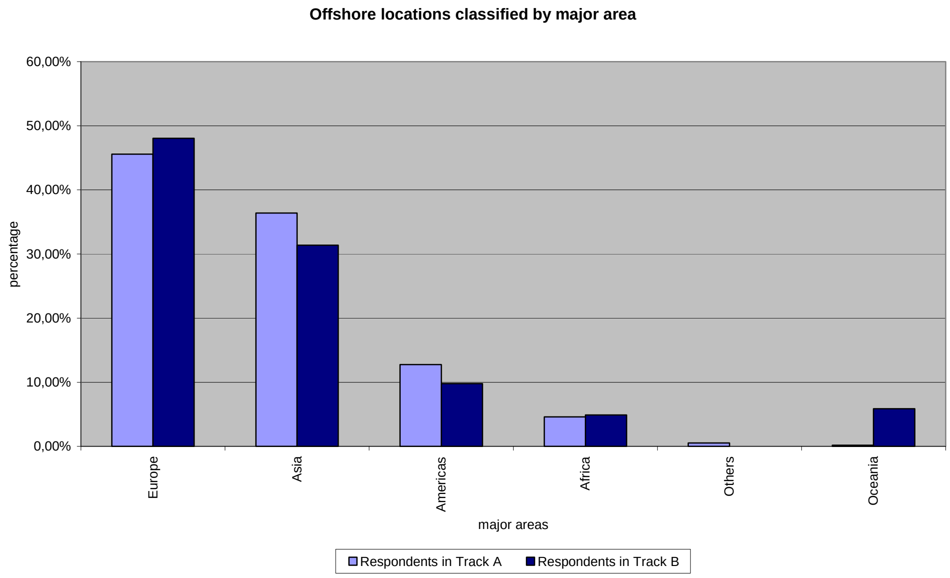
Figure 26: Offshore region classified by type of industry for respondents in Track B



Offshore Locations by Major Area

Both for respondents in Tracks A and B *Europe* stood out as a major area to which they have relocated their activities followed by *Asia* and the *Americas.* This picture applies to both category of respondents.

Figure 27: Offshore locations classified by major area for respondents in Tracks A and B



When analyzing major offshore areas versus type of industry, *Europe* and *Asia* stand out for both respondents in Tracks A and B as frequently mentioned for relocating activities (Figures 28 and 29).

Figure 28: Major offshore areas versus type of industry for respondents in Track A

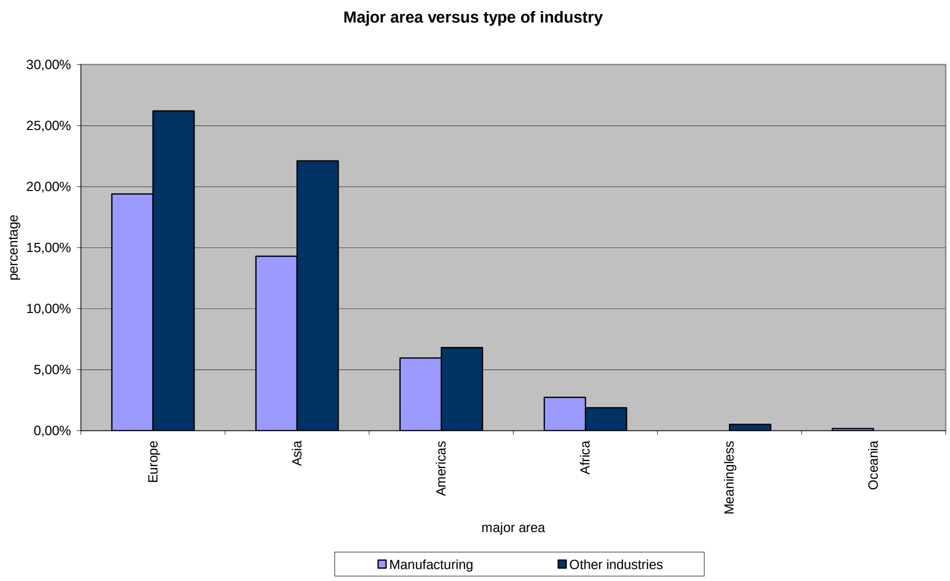
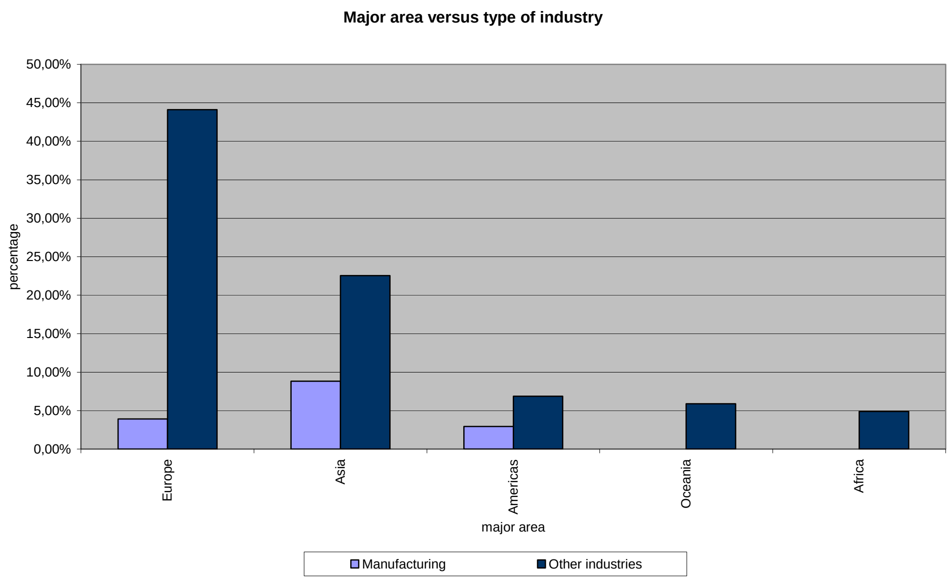


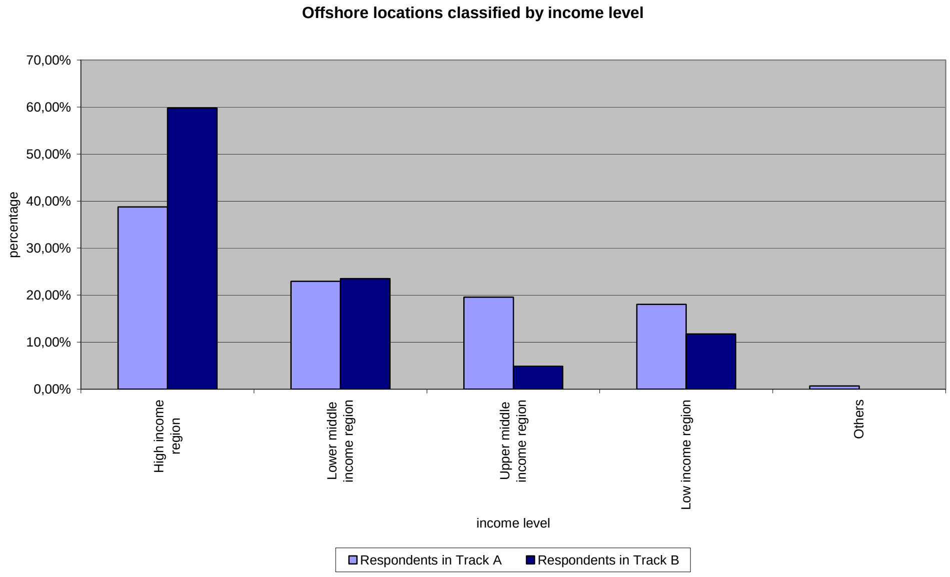
Figure 29: Major offshore areas versus type of industry for respondents in Track B



Offshore Locations by Income Level

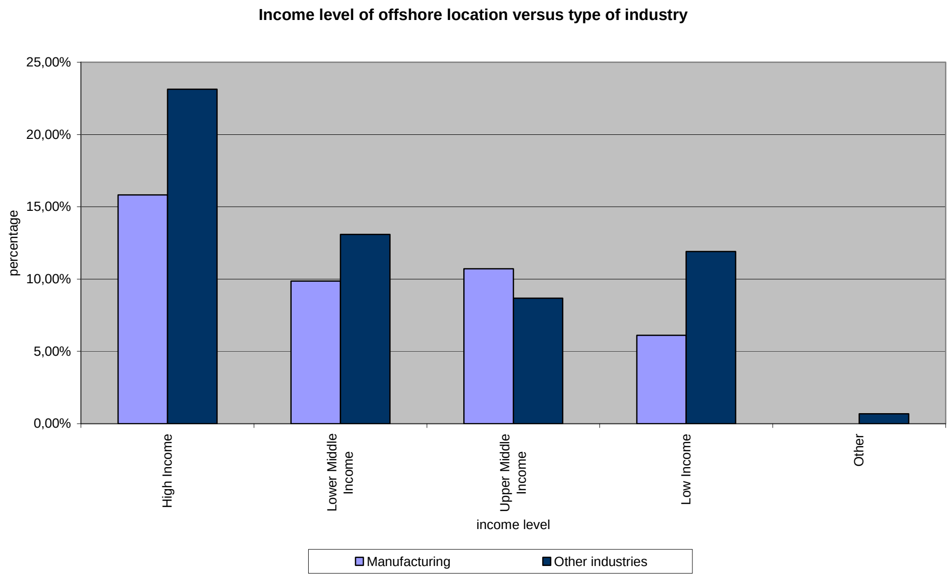
The majority of respondents with previous offshoring experience relocated their activities to offshore locations with a *high income level*. This is the case for both categories of respondents and especially for those planning to engage in offshoring.

Figure 30: Offshore locations classified by income level for respondents in Tracks A and B



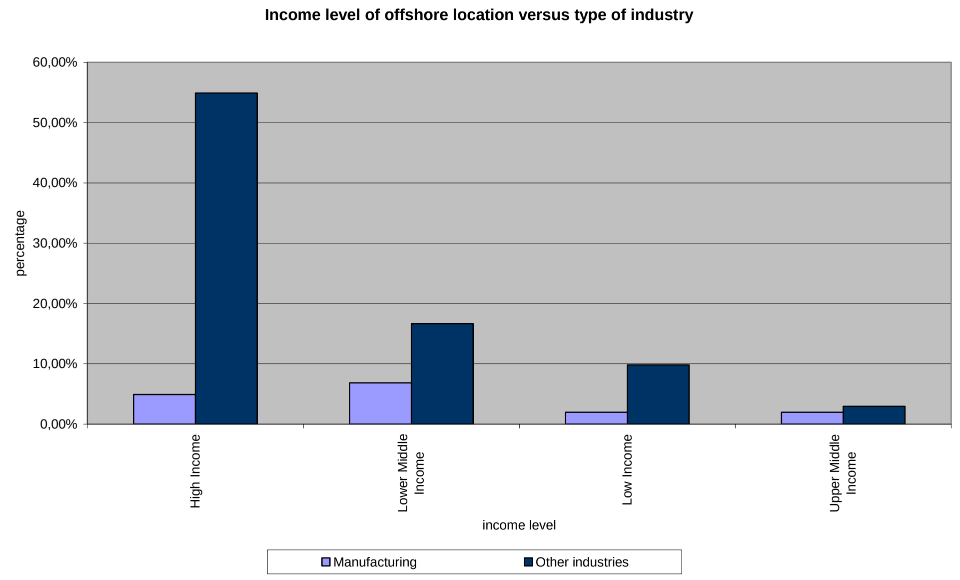
Furthermore, firms classified according to type of industry versus income level offshore locations were analyzed. *Manufacturing* firms mention most frequently *high income level* and *upper middle income level* offshore locations to which they have relocated their activities. Firms in *other industries* mention most frequently *high income level* and *lower middle income level* locations to which they have located their activities.

Figure 31: Income level offshore locations versus type of industry for respondents in Track A



Manufacturing firms planning for offshoring frequently refer to *lower middle income level* offshore locations followed by *high income level* locations. Firms representing *other industries* refer to *high income level* followed by *lower middle income level* offshore locations.

Figure 32: Income level offshore locations versus type of industry for respondents in Track B



Further analysis showed a significant relationship between income level of the offshore region and the type of offshoring the respondents engage themselves in. *High income level* offshore regions are more often than expected associated with *captive offshoring* versus *lower middle income* level offshore regions with *offshore outsourcing*.

5.6. Future Plans for Offshoring

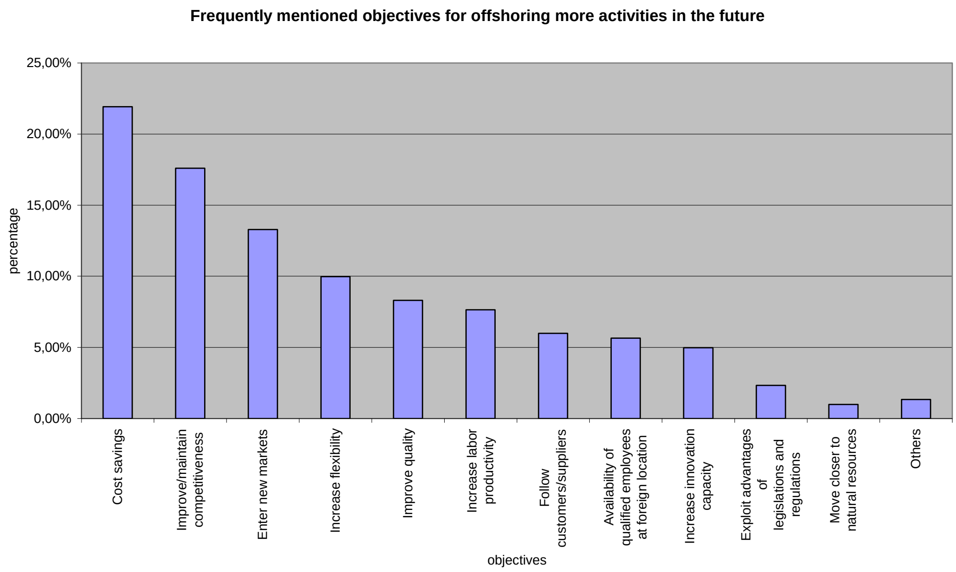
In this section the research results regarding the future plans of those firms that previously relocated activities and jobs involved are presented. It includes their plans to (not) continue offshoring or relocate additional activities; category of activities they are planning to relocate; and their motives for (not) doing so.

The majority of respondents in Track A (55.67%) that previously relocated activities to foreign locations, mentioned they plan to offshore more activities in the future.

Objectives for more Offshoring

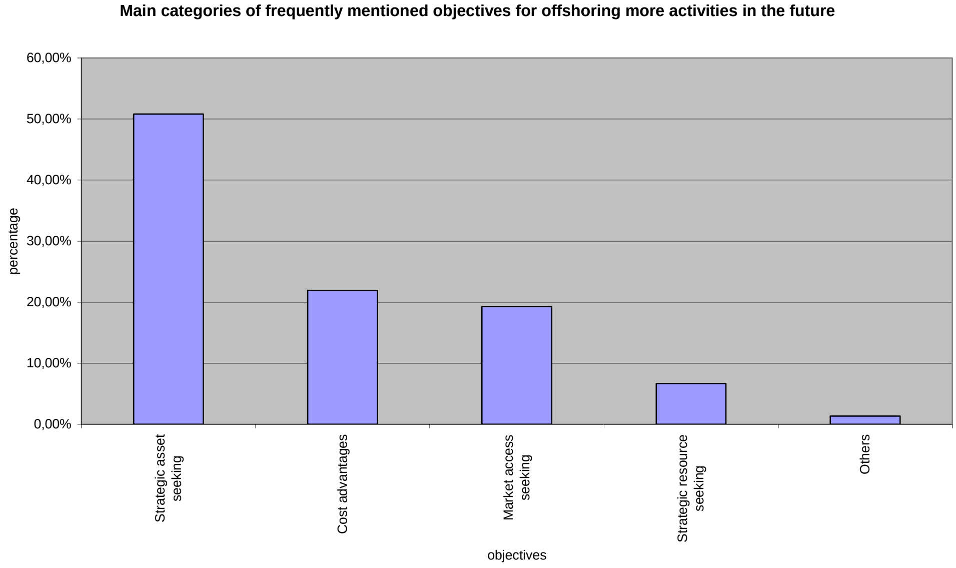
The three frequently mentioned objectives for offshoring more activities in the future were *cost savings*, *improve or maintain competitiveness*, and *enter new markets*.

Figure 33: Frequently mentioned objectives for relocating more activities in the future



When codifying these responses in main categories, reasons related to *strategic asset seeking* were frequently mentioned.

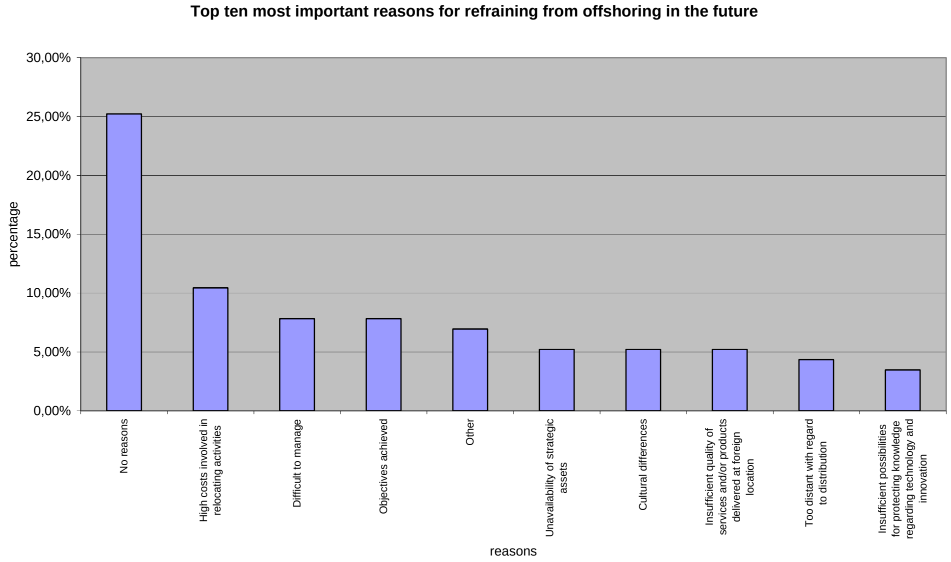
Figure 34: Main categories of frequently mentioned objectives for relocating more activities in the future by respondents in Track A



Reasons for not Offshoring

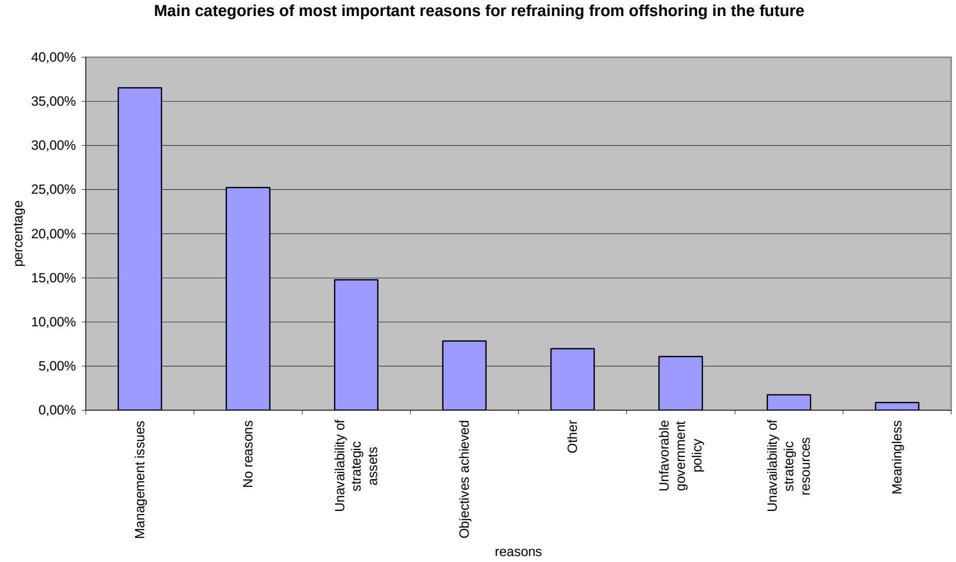
As is shown in Figure 35, the top two of reasons frequently mentioned for not relocating more activities in the future were: relocating activities involved *higher costs than expected* and it was *difficult to manage*. Highest in ranking scores the fact that respondents have *no specific reason* for refraining from offshoring in the future. Fourth in ranking is the fact that respondents have simply *achieved all objectives*. Hence there is no reason for them left to relocate more activities in the future.

Figure 35: Top ten most important reason for refraining from offshoring in the future by respondents in Track A



When codifying these responses in main categories, reasons related to *management issues* were frequently mentioned preventing respondents from offshoring in the future.

Figure 36: Main categories of most important reason for refraining from offshoring in the future by respondents in Track A



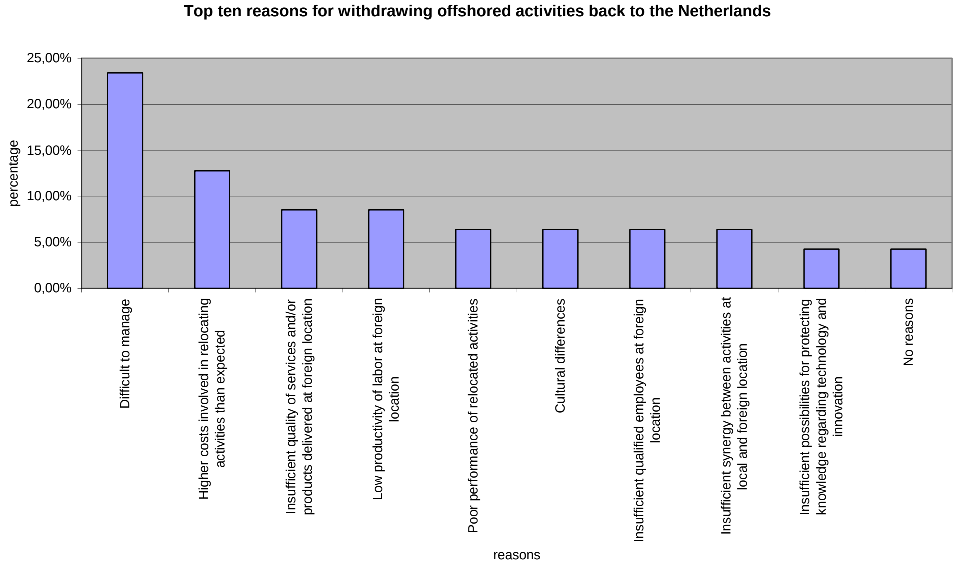
Degree of withdrawing Activities

The majority (82.99%) of respondents who previously relocated activities did not withdraw them. 17.01% decided to withdraw some or all of their activities.

Reasons for withdrawing Activities

The number one frequently mentioned reason for withdrawing activities is the fact that it is *difficult to manage* offshored activities. This is followed by *higher costs involved in relocating activities than expected* and *insufficient quality of product/service delivered at the foreign location* as well as *low labor productivity at the foreign location.*

Figure 37: Top ten reasons to withdraw offshored activities back to the Netherlands



When codifying these responses in main categories, reasons related to *management issues* were frequently mentioned for withdrawing already offshored activities back to the Netherlands.

Figure 38: Main categories of reasons for withdrawing offshored activities back to the Netherlands for respondents in Track A