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Offshoring strategy: Motives, functions, locations, and governance modes of small, medium-sized and large firms

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ABSTRACT

How does firm size impact on a firm's offshoring strategy? Are the underlying motives for offshoring, the particular functions considered, the locations to relocate, and the particular governance mode different for small, medium-sized and large firms? In this paper, cost, resource and entrepreneurial drivers are investigated for their relationship with firm size. Moreover, we hypothesize on the relationship between function, location and governance mode choices of offshoring and firm size. Using multi-country data of the Offshoring Research Network (ORN), we present empirical evidence on the three offshoring driver categories and function, location and governance mode choices of small, medium-sized and large firms. The results show offshoring might be used as cost, resource or entrepreneurial strategy. Cost drivers are most important for large and small firms, whereas resource drivers are especially important for medium-sized and large firms. Entrepreneurial drivers are most important for medium-sized firms, just like these firms have a relatively stronger preference for nearshoring. Small firms mostly offshore competence exploring activities, whereas large firms relocate competence exploiting activities.

1. Introduction

The relocation of business activity has been employed by companies for many years. Offshoring focuses on the relocation of business functions from home base to foreign locations. This strategy is labeled as new managerial practice and finds its origin in the late seventies (Lewin & Peeters, 2006b). Whereas previous theories focus on explaining international production (Dunning & Buckley, 1977) or geographical distribution of sales (Dunning, 1980), nowadays 'welfare-enhancing international division of labor' (cf. Dunning, 2009, p. 10) receives more attention. Offshoring is a new managerial practice for several reasons. First, the relocation of activities (Manning, Massini, & Lewin, 2008) is the focal characteristic of an offshoring strategy. Relocation can be labeled as a form of replication. Replication addresses 'transferring or redeploying competences from one concrete economic setting to another (Teece, Pisano, & Shuen, 1997, p. 525). Transfer of people or investments to convert tacit into codified knowledge to exchange knowledge underlie performance gains. Different governance modes exist to execute an offshoring strategy. These range from non-equity based to equity based collaboration to wholly owned subsidiaries corresponding diffused, balanced and dominant equity modes (Anderson & Gatignon, 1986). In this paper, therefore, we study the most often used offshoring governance modes simultaneously, i.e. captive and outsource offshoring (Manning et al., 2008). Moreover, firms may use different governance modes for the same activity; this is referred to as taper integration (Harrigan, 1984) or concurrent sourcing (Parmigiani, 2007). Second, not only 'simple' manufacturing

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Table 1
Examples of advantages and disadvantages of SMEs and large companies.

Behavioral advantages	Material disadvantages
SMEs	
Little bureaucracy, entrepreneurial management, rapid decision-making; risk-taking; organic style	Market start-up can be prohibitively costly
Fast reaction to changing market requirements; can dominate narrow market niches	Full-time R&D can be too costly. Can suffer diseconomies of scope
Large companies	
Often controlled by risk-averse accountants; managers become bureaucrats and lack dynamism	Comprehensive distribution and servicing facilities, high market power with existing products
Can ignore emerging market niches with growth potential; see new technology as threat to existing products and not as an opportunity	Can support the establishment of a large R&D laboratory: economies of scale and scope in R&D

Based on Rothwell (1989) and Rothwell and Dodgson (1993).

activities are relocated around the world, but also 'complex integrated and interactive networks for the generation of new ownership advantages' relying on 'specialized activities conducted in certain locations' (cf. Cantwell, 2009, p. 36). Global sourcing has experienced three waves, as three different types of activities have been sourced subsequently, i.e. manufacturing, information technology and business processes (Kotabe, Mol, & Murray, 2009). Likewise, early offshoring projects involved manufacturing activities, while more recent projects relocate accounting, finance sales and other business processes abroad (Couto, Mani, Lewin, & Peeters, 2006; Lewin & Peeters, 2006b). So, intermediate products replace raw materials and final products. Third, offshoring is characterized by a broad set of drivers, ranging from cost savings to innovation and from efficiency gains to growth. As such the strategy meets the motives for setting up foreign operations as mentioned in international business literature, i.e. market seeking, resource seeking, efficiency seeking and strategic asset seeking (Dunning, 1993). Although location advantages like cost advantages are still important, firms seek for talent and technology resources and expansion possibilities by offshoring as well. Hence, as offshoring implies relocating activities to execute international strategies, it is 'a new variation of FDI, or international joint ventures, or partnerships' (Lewin, Massini, & Peeters, 2009, p. 919) to profit from worldwide markets.

Offshoring opens new opportunities for firms of different sizes. Many studies show that also SMEs are important actors in internationalizing markets (e.g. Liesch & Knight, 1999; Oviatt & McDougall, 1994). Research shows their resource constraints to become less important as technological developments and global markets increasingly have taken away difficulties to access information (e.g. Liesch & Knight, 1999). Therefore, also SMEs might undertake offshoring and express their entrepreneurial profile on the international markets as well. Second, offshoring can be used as strategy to globalize and to overcome resource constraints as this strategy only sparsely draws upon firm resources, because firms' business activities are relocated. This is especially true for outsource offshoring (Narula, 2004). This mode circumvents set-up costs of captive offshoring. More specifically, this study will discern between behavioral and material differences between SMEs and large firms (Rothwell, 1989; Rothwell & Dodgson, 1993). SMEs are often characterized by entrepreneurial management and quick response to market changes. Large firms usually run the risk of bureaucracy and inflexibilities toward change (Volberda, 1998). However, large firms possess material advantages generating economies of scale and scope, while small and medium-sized firms are disadvantaged in this respect. Further examples of behavioral and material advantages and disadvantages are presented in Table 1.

This paper further elaborates on the offshoring drivers and the function, location and governance mode choice involved in offshoring and their respective relationship with firm size. Cost motives are often considered to be the most important driver for offshoring (Aksin & Masini, 2008; Bunyaratavej, Hahn, & Doh, 2007; Lewin & Peeters, 2006b; Stratman, 2008). However, other motives, like for example acquiring human capital (Lewin & Peeters, 2006b) or firm growth (Lewin & Peeters, 2006a) are also mentioned in the literature. Other parts of an offshoring strategy are function, location and governance mode choices (Couto et al., 2006; Lewin & Peeters, 2006b; Youngdahl & Ramaswamy, 2008). Firms offshore different types of functions ranging from relatively simple activities to highly knowledge insensitive activities more recently (Lewin & Peeters, 2006b). Furthermore, location choices play an essential role in international business strategies (Dunning, 2009). Activities might be nearshored or farshored dependent on the fit between firm demands and location characteristics. To execute an offshoring strategy, firms apply a captive or outsource governance modes (Manning et al., 2008; UNCTAD, 2004).

In this paper, we first investigate the differences in offshoring strategies of small, medium-sized, and large firms. In particular, we will develop several hypotheses on the firm size effects on the underlying drivers, functions to be relocated, location choice and governance mode of offshoring. Subsequently, on the basis of a multi-country database of the Offshoring Research Network (ORN), we present empirical evidence on the three offshoring driver categories and function, location and governance mode choices of small, medium-sized and large firms. We conclude with a discussion of our findings and the limitations of this study.

2. Offshoring drivers

In this study three different groups of offshoring drivers are discussed. First, scholars apply *transaction cost economics* to explain cost drivers of offshoring (Farrell, 2005), in addition to 'simple' location specific advantages as low labor costs

(production efficiency). Low labor costs alone are not enough in explaining the offshoring cost driver, as offshoring increases transaction costs, which might (partly) offset savings (Stratman, 2008). Transaction costs are increased by uncertainty involved in the relocation activities (Coase, 1937; Williamson, 1975). Firms exploit their firm specific ownership advantages, for example economies of scope and technological and organizational expertise, by geographically relocating activities (Doh, 2005; Dunning, 1980). These ownership advantages are transferred to decrease cost levels by profiting from lower wages (i.e. location advantage) (Dunning, 1980). In the past, these cost advantages were used to stay competitive in comparison to local suppliers at foreign locations. However, nowadays, offshoring is undertaken to compete against imparts originating from low wage countries' (Coucke & Sleuwaegen, 2008, p. 1262) in the domestic markets (Kotabe, 1990). Transaction cost economics has shown how to distribute activities over market and firm in a way to minimize internal and external transaction costs (Poppo & Zenger, 1998; Williamson, 1975). Digitization has decreased transaction costs dramatically both for hierarchy and market transactions (Coase, 1937; Ellram, Tate, & Billington, 2008) and in this way unlocked gaining access to lower labor costs at offshore locations. It is important to notice transaction costs usually increase by internationalization processes due to uncertainty involved. Offshoring is a business strategy to perform business activity at offshore locations at lower cost through market and/or arms-length transactions, thereby reducing summed transaction costs (Coase, 1937) and production costs. In particular, TCE explains offshoring strategies by lower overseas labor costs, as well as the government and management costs related to these overseas activities (Coase, 1937; Williamson, 1975). TCE has been applied to explain offshoring (Stratman, 2008), offshore outsourcing (Ellram et al., 2008) and sourcing (Vivek, Banwet, & Shankar, 2008). Companies may be able to reduce the total costs of labor (production efficiency) and transaction below the level in the home country either through outsource offshoring or captive offshoring, although there might be 'invisible' costs like communication related costs (Stringfellow, Teagarden, & Nie, 2008) or set-up costs (Ellram et al., 2008) when offshoring services.

Firms may seek for efficiency gains at offshore locations. Therefore, offshoring might decrease transaction costs. Large numbers of suppliers at overseas intermediate markets decrease transaction costs (Holcomb & Hitt, 2007). This effect is strengthened by a more common understanding of the value proposition of offshoring (Stratman, 2008). This decreases technological uncertainty for standard services. Moreover, available IT and communication systems have importantly decreased transaction costs (Ellram et al., 2008). Key attributes of transaction cost theory are bounded rationality, opportunism and uncertainty. Based on these attributes offshoring governance decisions might be taken. Firms may choose for captive offshoring due to for example intellectual constraints, self-interest and external and internal uncertainty (Stratman, 2008). However, market transactions, i.e. offshoring outsourcing, may be an attractive option when no specific investments are required, large number of transactions outweighs high fixed set up costs and further standardization and availability of products and services on intermediate markets.

Having discussed and explained offshoring cost drivers and the relationship between offshoring and transactions costs, we now turn to the relationship of an offshoring cost driver with firm size. Although larger companies may benefit of their scale advantages (e.g. Cavusgil & Kirpalani, 1993) to overcome e.g. set up costs, SMEs might also have possibilities to reduce their cost levels with offshoring. Offshoring is an attractive strategy for these firms as it only sparsely draws on their resources while relocating business activity involves fewer resources than starting new business activities. Moreover, resource constraint firms only have a small internal scale which limits the efficiency of internal production and results in relatively high internal governance costs (Poppo & Zenger, 1998). Summed governance and production costs (production efficiency) might be decreased by the relocation of activities to offshore locations. Also, suppliers on the intermediate markets might generate scale advantages for SMEs by serving different clients, which large firms might obtain themselves easily. Therefore, offshoring is a strategy offering scale advantages to SMEs, as setup costs are relatively low and their suppliers also create scale advantages for them. This makes it possible to produce their specialist products at competitive levels. However, this will not fully compensate their limited material advantages compared to large firms, e.g. financial and technological resources (Fagiolo & Luzzi, 2006; Lu & Beamish, 2001; Rothwell, 1989; Rothwell & Dodgson, 1993). For this reason we expect that larger firms are likely more able to gain cost advantages from offshoring. Thus we hypothesize,

H1. Offshoring driven by cost motives will become more likely when firm size increases.

The *resource-based view* (Barney, 1991; Penrose, 1959; Vivek et al., 2008) explains the second group of driver, namely resource drivers. From this view offshoring is caused by the availability of for example qualified personnel or capabilities for business process redesign at offshore locations (Lewin & Peeters, 2006b). Resource drivers focus on knowledge-seeking and efficiency-seeking, which are the two most important causes for international activity in information-intensive industries (Nachum & Zaheer, 2005). In this view, the emphasis is on the resources a firm needs to maintain and improve its competitive position. To do so, the firm might also search at distanced locations (e.g. Lewin & Peeters, 2006b; Westhead, Wright, & Ucbasaran, 2001).

Whereas economies of scope, learning or scale, are typically important in executing ownership advantages (Dunning, 1980), these advantages are less important for resource driven offshoring. This makes it possible for SMEs to profit from offshoring as they might use it to acquire and leverage their disadvantaged resource base (Mosakowski, 2002). Smaller firms face constrained resources (George, Wiklund, & Zahra, 2005; Hoffmann & Schlosser, 2001; Lu & Beamish, 2001), for example financial resources (Fagiolo & Luzzi, 2006). These companies, therefore, might search for complementary resources with offshoring strategies, similar to acquiring and leveraging resources with alliances (e.g. Baum, Li, & Usher, 2000). SMEs of all

sizes need to use their external environments to find necessary resources (Dickson, Weaver, & Hoy, 2006). The resources firms seek enable firms to go beyond performing activities in a cheaper way. Gaining access to personnel and technologies, for example, gives firms the opportunity to become more efficient, i.e. doing existing things more efficient. Mature companies might be focused more on managing their existing resource base. However, they also need to manage their growth (Jarillo, 1989) and seek for resources by offshoring. Smaller firms might search for resources relatively closely to their core activities, whereas mature firms focus on resources more distant to their core activities as they have more possibilities to build their existing resources within their own firm. Therefore, we expect smaller and large firms to apply offshoring for search of resources, although the kind of resources might be different.

H2. Offshoring driven by resources motives is equally important for SMEs and large firms.

Entrepreneurial drivers can also motivate offshoring strategies, as a third category of offshoring drivers. Research pointed out offshoring as a strategy to realize growth (Lewin & Peeters, 2006a) and for less information-intensive industries new market entry is specifically important (Nachum & Zaheer, 2005). Entrepreneurship theory (Baumol, 1993; Fiet, 2001; Phan, 2004) provides an argument for moving beyond resources to address new resource combinations (Foss & Ishikawa, 2007) and emphasize the importance of strategic choice (Baden-Fuller & Stopford, 1994; Mosakowski, 2002). Entrepreneurship is about 'carrying out new combinations' (Schumpeter, 1934); it implies the ability to identify new opportunities and to develop the resource base needed to pursue the opportunities (Arthurs & Busenitz, 2006). Entrepreneurship also reflects the willingness of firms to grow, explore and stretch the boundaries of the firm (Davidsson, 1989). International entrepreneurship has been an emerging field of research (McDougall & Oviatt, 2000; Oviatt & McDougall, 2005) and is applicable in the context of offshoring strategies as well. The relocation of business functions makes it possible for firms to get closer to potential customers and other opportunities. Geographic expansion is a strategy for small firms to grow (Barringer & Greening, 1998), which might be realized through an offshoring strategy. Smaller firms may find it more advantageous to differentiate than to pursue a cost leadership strategy (Porter, 1985; Qian & Li, 2003). The relocation of activities only draws in a limited way on firm resources, which is typically important for smaller firms due to their resource constraints. Other entry strategies, like FDI and alliances aiming to set up new activities, are less attractive for small firms than large firms. Therefore, small firms might use offshoring as entrepreneurial strategy more often than large firms.

H3. Offshoring driven by entrepreneurial motives will become less likely when firm size increases.

We conclude this section with summarizing the three driver categories, the theoretical perspectives and core references, the expected effects, and how the three categories of drivers are associated with the drivers used in the Offshoring Research Network (ORN) survey (see Table 2).

3. Offshoring function

More companies start to offshore higher added value activities (Lewin & Peeters, 2006b). Therefore, offshoring activities might be divided into competence exploiting and competence creating activities (Cantwell & Mudambi, 2005). Whereas the latter focuses on technologically advanced activities like performing basic research, the former focuses on deploying existing technologies, like assembly activities. Competence exploiting and competence creating activities closely relate to the distinction between exploitation and exploration (March, 1991). Exploitation activities are closely linked to cost advantages, whereas exploration activities are more focused on value creation by innovation. More specifically, exploitation involves refinement, choice, production, efficiency and selection, while exploration involves search, variation, risk taking and flexibility (March, 1991).

Compared to large companies, the behavioral advantages of SMEs, i.e. entrepreneurial dynamism, internal flexibility and responsiveness to changing circumstances (Rothwell, 1989; Rothwell & Dodgson, 1993) might enable them to offshore activities associated with competence creating, i.e. product development activities. Furthermore, in comparison to large

Table 2
Main theoretical perspectives, core references and illustrative examples of offshoring.

Offshoring driver	Theoretical perspective	Core references	Effect	Examples, drivers ORN
Cost driver	Transaction cost economics (production efficiency theory)	Coase (1937) and Williamson (1975)	Use low costs (summed production and transaction costs) at offshore locations to decrease *cost levels* at domestic location	Labor costs Other cost savings
Resource driver	Resource-based view	Penrose (1959) and Barney (1991)	Use resources at offshore location to improve *efficiency* of current operations at domestic location	Gaining access to qualified personnel Business process redesign Improved service levels
Entrepreneurial driver	Entrepreneurship theory	Schumpeter (1934) and Davidsson (1989)	Use entrepreneurship to address new resource combinations to realize *new business opportunities*	Part of a larger global strategy Increasing speed to market Differentiation strategy Access to new markets

companies, lack of financial and technical resources, i.e. lack of high-level technical skills and diseconomies of scope (Rothwell, 1989; Rothwell & Dodgson, 1993) might stimulate smaller companies to investigate the possibilities that offshoring might offer to further develop their specialist profile. SMEs might overcome their resource constraints by network relationships, as mentioned in the overview of Coviello and Mc Auley (1999). Internationalizing these network relations, i.e. offshoring, might be a strategy to do so. Therefore it is hypothesized that larger companies will less often offshore product development activities.

H4. Offshoring competence creating activities will become less likely when firm size increases.

4. Offshoring location

Location choice is an important element of internationalization strategies (Dunning, 2009) and is closely related to the drivers of offshoring; for example if a firm is motivated by cost, then choosing a low-cost location is important. Location choice of smaller companies is assumed as well to be influenced by limited material advantages, for example financial and technological resources (Fagiolo & Luzzi, 2006; Lu & Beamish, 2001; Rothwell, 1989; Rothwell & Dodgson, 1993). Smaller companies, therefore, search for complementary resources, which are more likely to be found in nearshore economies as these are often more innovation driven. Second, smaller companies are subject to several constraints with regard to information gathering (Liesch & Knight, 1999) and might try to limit their constraints by choosing nearshore locations. Although smaller firms possess entrepreneurial capabilities to develop competitive advantages from complex international resource combinations (Karra, Phillips, & Tracey, 2008) and international participation might be more easily possible around the world due to technological developments (e.g. Knight & Cavusgil, 2004), larger firms possess still greater information capacity and resources than large firms. Large firms have for example large scale research and development facilities, whereas smaller firms are often specialists (e.g. Qian, 2002). These differences point at similar differences in information capacity. Therefore we hypothesize that large firms are more likely to offshore to farshore locations.

H5. Offshoring to farshore locations will become more likely when firm size increases.

5. Offshoring governance mode

In order to undertake international activities, companies can choose several governance modes as entry strategy. Different researchers have focused on certain types of foreign market entry. Agarwal and Ramaswami (1992) focus for example on exporting, licensing, joint ventures and sole ventures. Acquisition, joint ventures and greenfield investment are considered by Kogut and Singh (1988). Research distinguishes roughly three governance modes (Anderson & Gatignon, 1986). First, the so-called dominant equity mode, which allows full ownership and control. Second, the balanced mode, which shows shared ownership, like joint-ventures. Lastly, the diffused governance mode which lacks ownership and has only limited possibilities for control. In this paper, we divide between captive offshoring and outsource offshoring (UNCTAD, 2004), distinguishing, on the one hand, between full and shared ownership and, on the other hand, no ownership models (see Table 3).

Especially the limited financial resources of SMEs (Fagiolo & Luzzi, 2006; Lu & Beamish, 2001; Rothwell, 1989; Rothwell & Dodgson, 1993) are expected to have a significant influence on governance mode choice. As ownership, i.e. captive offshoring, requires more capital than no ownership modes, it is less likely that the dominant mode will be chosen by smaller companies in comparison to large companies. Furthermore, the entrepreneurial dynamism, internal flexibility and responsiveness to changing circumstances (Rothwell, 1989; Rothwell & Dodgson, 1993) which are more prominent in smaller companies than in larger ones are likely to influence a preference for governance modes that are collaboration focused.

H6. Captive offshoring will become more likely when firm size increases.

6. Data and method

The survey data was gathered through an international research collaboration, the Offshoring Research Network (ORN). This network is led by Duke University US. Universities from Germany (WHU), Spain (IESE), United Kingdom (Manchester Business School), Denmark (Copenhagen Business School) and the Netherlands (Rotterdam School of Management, Erasmus University) are taking part in this joint research project. The first survey was launched in November 2004. The objective of ORN is to yearly investigate the adoption of offshoring administrative and technical functions (Lewin & Peeters, 2006b). ORN

Table 3
Offshoring governance modes.

Offshoring governance modes	Categorization (Anderson & Gatignon, 1986)
Captive offshoring	Full ownership model Shared ownership model
Outsource offshoring	No ownership model

has been building the first firm-level database on offshoring. Companies were invited by an email invitation to participate in the survey. The survey addresses questions including when each firm started offshoring, with what particular business function, where it was offshored, using what governance mode and why. The survey also addressed issues like perceived risks, benefits and future plans. For every offshored function, offshoring strategy items were asked separately. Companies could report on more than one offshoring function. To investigate offshoring strategy and the impact of firm size, the data from the 2006 annual ORN survey were used. We investigated 353 unique functions offshored by firms from United States, United Kingdom, the Netherlands, Germany and Spain.

6.1. Offshoring drivers

The importance of nine different offshoring drivers used in the ORN survey (see Table 2, right column) was investigated using a 5-point Likert scale. An exploratory factor analysis (a statistical method used to derive main categories from different drivers of offshoring) was done to find support for the three theoretically defined categories. The analysis supports the three categories of offshoring drivers, i.e. costs, resources and entrepreneurial (all items loaded on their appropriate factors greater than 0.66, and no cross-loading was greater than 0.26, eigenvalues for each factor were greater than 1).

6.2. Offshoring function

The different functions which are offshored, were categorized similarly to the division of Cantwell and Mudambi (2005) between competence exploiting and competence creating activities. Functions were divided between (1) Finance/ Accounting, Human Resources, Marketing & Sales, IT, Call Center, Procurement, Logistic Services and (2) Engineering, R&D and Product Design. The former are assumed to be primarily associated with competence exploiting and the latter with competence creating activities.

6.3. Offshoring location

The offshoring location involves the country to which a certain activity is offshored. Nearshoring is for European countries offshoring to Western and Eastern European countries and for US to Canada, Mexico, and Central America. Other locations for the respective countries are labeled as farshoring.

6.4. Offshoring governance mode

With regard to governance mode, the different models were either set as outsource or captive offshoring (Manning et al., 2008; UNCTAD, 2004). Firms are offshore outsourcing when they outsourced to a domestic partner, an international party and/or a local party, when they applied more than one of these or in case they only answered outsourcing. Captive offshoring firms form joint ventures or keep full control over overseas activities (see Table 3).

6.5. Firm size

Based on the European Union's categorization (Wiklund & Shepherd, 2003), we divided firms in three size classes (1–49, 50–249 and +250 employees). Similar categorizations have been made in other studies (Bohata & Mladek, 1997; Sadler-Smith, 2004). We repeated the analysis using US categorization of firm size (small firms −500 and large firms +500 employees) (Arend, 2006; Dickson et al., 2006), resulting in a two-category analysis, addressing small and large firms.

7. Analysis and results

To investigate whether differences regarding driver categories, function, location and governance mode are present between small, medium-sized and large companies, ANOVA is used (the *F*-value of the ANOVA shows whether significant differences exist between the three groups of companies with regard to the driver categories).

Table 4 shows means and standard deviations of the three firm size groups. Also, significant differences between size groups and drivers for offshoring are shown. The significance of the *F*-values has shown that the cost driver, resource driver, entrepreneurial driver, function and location to be different. Only governance mode does not show a significant difference. Moreover, we did post hoc analyses to investigate how the significant differences between the three groups are composed (Table 5). The first hypothesis states that cost drivers are likely to be more important when firm size increases. The findings show that Hypothesis 1 can be accepted for medium-sized firms as small firms indicate cost drivers to be equally important as to large firms. With regard to the resource driver, this driver is equally important for medium-sized and large firms, however, small firms assign relatively the least importance to offshoring as resource strategy. Therefore, Hypothesis 2 can only be accepted for medium-sized and large firms. Moreover, medium-sized firms show to be most entrepreneurial driven. Results on small and large firms show these firms to be relatively least entrepreneurial. Again the research identifies small firms as different group. Hypothesis 3 can be accepted for medium-sized and large firms.

Table 4
Importance of offshoring drivers for small, medium-sized and large firms (ANOVA) ($N = 353$).

	Small firms (1–49 employees)	Medium-sized firms (50–249 employees)	Large firms (>250 employees)	F-value*
Cost driver	4.22 (0.99)	3.71 (1.46)	4.21 (0.74)	5.270**
Resource driver	3.20 (1.00)	3.70 (0.94)	3.71 (0.83)	6.535**
Entrepreneurial driver	2.57 (1.27)	3.65 (1.20)	2.90 (1.02)	10.132***
Function	0.34 (0.48)	0.21 (0.41)	0.16 (0.37)	3.887*
Location	0.90 (0.30)	0.65 (0.49)	0.90 (0.30)	9.838***
Governance mode	0.41 (0.50)	0.35 (0.49)	0.42 (0.50)	0.317

Note: Cells provide means and standard deviations for the importance of a certain driver; $N = 353$.
* $p < 0.05$.
** $p < 0.01$.
*** $p < 0.001$.

Table 5
Strategic and organizational attributes of small, medium-sized and large firms (ANOVA subsets).

Strategic attributes	Subset A	Subset B
Cost driver	Medium-sized firms	Small and large firms
Resource driver	Small firms	Medium-sized and large firms
Entrepreneurial driver	Small and large firms	Medium-sized firms
Organizational attributes	**Subset A**	**Subset B**
Function	Large and medium-sized firms	Medium-sized and small firms
Location	Medium-sized firms	Small and large firms
Governance mode	All firms	

Turning to the other elements of the offshoring strategy, i.e. function, location and governance mode, shows the following results. Large firms indeed offshore the least competence exploring activities, whereas small firms offshore relatively the most competence exploring activates. Although, medium-sized firms are not significantly different from either of the groups, the assigned importance of this group is between small and large firms, which confirms Hypothesis 4. The fifth hypothesis states that farshoring is more likely when firm size increases. The findings point out that this is true for both medium-sized and large firms. Small firms were expected to undertake relatively more nearshoring; however they report to undertake more farshore implementations. Therefore, Hypothesis 5 is not confirmed. Governance mode, addressed by the sixth and last hypothesis, shows not to be affected by firm size, for which Hypothesis 6 is not confirmed.

We repeated the analysis using the US categorization of firm size (below or above 500 employees). This analysis shows that large firms are relatively most cost and resource driven, and they also offshore exploitative functions and choose for farshoring. The opposite is true for smaller companies (<500 employees). The entrepreneurial driver and again the governance mode do not show any significant differences.

8. Discussion and conclusions

Firm size is recognized to be an important (control) variable, but did not receive yet much attention as an antecedent of firm behavior in strategic management or organization theory literature, like cost, human capital, growth (Farrell, 2005; Lewin & Peeters, 2006a, 2006b). In this paper, we proposed three conceptual categories, namely cost, resources and entrepreneurial drivers. These categories were derived from transaction cost economics (and production efficiency theory), the resource-based view of the firm and entrepreneurship theory respectively. They were supported in the analysis with ORN data as three distinct groups of drivers. This shows that offshoring allows firms to realize cost, resource and entrepreneurial strategies. Firms can not only decrease their cost levels at their domestic locations, but they can also improve their efficiency, gaining access to qualified personnel and potential customers at offshore locations for geographical expansion. Our findings show that offshoring strategies might be used as cost strategy, resource strategy and value creating strategies that focus on innovation and growth (Lewin & Peeters, 2006a). Moreover, they show again that managerial intentionality (Hutzschenreuter, Pedersen, & Volberda, 2007) is important for offshoring strategies (Lewin et al., 2009).

Second, this study contributes to existing research by showing differences in importance companies of different sizes assign to the three driver categories and the offshoring strategy choices of function, location and governance mode. Contrary to our expectations, small firms seem to be capable of overcoming their lack of material advantages, i.e. financial and technological advantages (Rothwell, 1989; Rothwell & Dodgson, 1993). These firms assign the same importance to using offshoring as cost strategy, farshoring and offshoring competence exploring functions. This might indicate that small firms may have the so-called born global capabilities to develop complex international resource combinations across the world (Karra et al., 2008) to profit from lower costs at farshore locations and sending competence exploring activities abroad. Moreover, once more stage models of internationalization (Johanson & Vahlne, 1977) are questioned as these firms farshore

Table 6
Main findings.

- Offshoring can be undertaken as a cost, resource or entrepreneurial strategy
- Small companies use offshoring as cost strategy, are relatively often farshoring and relocating competence exploring functions
- Medium-sized firms use offshoring as cost, resource and entrepreneurial strategy and are relatively often nearshoring
- Large firms use offshoring as cost and resource strategy, are relatively often farshoring and relocating competence exploring functions
- Firm size does not affect the offshoring governance mode, either captive or outsourcing offshoring

as much as large firms. Research already indicated stage models to be less relevant in nowadays business (e.g. Autio et al., 2000; Oviatt & McDougall, 1994).

Medium-sized firms, however, favor employing offshoring as entrepreneurial strategy more than small and large firms. Nonetheless, they undertake offshoring also as cost and resource strategy. Further, these firms choose relatively more often for nearshoring. Medium-sized firms might still follow a more traditional internationalization path (Johanson & Vahlne, 1977) preferring nearshore locations and exploiting their specialist entrepreneurial profile and finding resources in this way, while profiting from some cost advantages as well. Interestingly, the governance mode choice of offshoring is not affected by firm size. In this case both small and medium-sized firms show not to be constrained by their firm size to choose an equal proportion of offshore implementations to be executed with a captive governance mode. Governance mode might be more influenced by for example size of the operation, industry and host country (Brouthers & Hennart, 2007).

We will indicate several limitations and suggest directions for future research. First, firms of different sizes seem to use the offshoring strategy in a different way. Future research needs to further explore and explain these differences and specifically address the characteristics of small and medium-sized firms. Applying international entrepreneurship literature (Oviatt, 2005; Oviatt & McDougall, 1994) whether offshoring might function as a born global strategy would be a fruitful way of additional research. Second, future research has to investigate the impact of offshoring drivers on offshoring performance, for example improved competitive position and firm growth. Research (e.g. Gilley & Rasheed, 2000) has produced mixed findings. Third, future research needs to investigate firm capabilities. For instance, absorptive capacity is mentioned to be an important capability to execute international strategies (Zahra & Hayton, 2008), enabling firms to gain profits from their offshoring strategies. Finally, in future research offshoring drivers and behavior could be investigated in a co-evolutionary context including the emergence of new organizational forms. Offshoring strategies and more specific offshoring drivers, are embedded in a co-evolutionary setting in which the firm and the environment interact (Lewin & Volberda, 1999; Volberda & Lewin, 2003). By offshoring, business functions of companies become globally dispersed and due to co-evolutionary processes this might result over time in new organizational forms (Lewin & Volberda, 1999) and capabilities (Volberda, 1998). For example, embedded in firm strategies, strategic alliances co-evolve with other firm strategies, the environment and managerial intentionality.

In conclusion, our findings help firms to consider offshoring as a strategy that moves beyond gaining cost advantages (see Table 6 for a summary of the main findings of this paper). They clearly show that companies of different sizes might profit in different ways from their offshoring strategies.

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