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This edition of *AIB Insights* is focussed on the process of *reshoring* or *backshoring*. Were we in the concrete construction business we might have encountered these terms related to using *forms* to support poured concrete structures. The online Merriam-Webster and Cambridge dictionary do not list either term; the Oxford Online Dictionaries does not list backshoring, but it does define reshoring as: *The practice of transferring a business operation that was moved overseas back to the country from which it was originally relocated*, indicating the term's first use in this context in the early 21st century.

Searching the internet we found several people doing interesting work in the area, and we invited their contributions. In the first article, Lydia Bals, Anika Daum, and Wendy Tate inform us that the phenomenon of *backshoring* is not new, with documentation dating back to the 1980s. This useful article discusses distinctions amongst the definitions of the various terms *offshoring, backshoring, insourcing vs. outsourcing, outsourced backshoring,* and *in-house backshoring*, along with reasons firms engage in each.

In "Returning from Offshore: What Do We Know?", Filippo Albertoni, Stefano Elia, Luciano Fratocchi and Lucia Piscitello discuss of some of the drivers of reshoring, and they provide tables of global statistics for the phenomenon. They point out that offshoring and reshoring require further investigation and research in order to understand their ultimate impact on economic systems.

In New Zealand, the process was recently discussed in *The Business* insert of the New Zealand Herald, 7 August 2015, which helped bring this topic to our attention. For counterpoint, Taghreed Hikmet and Peter Enderwick, in the final article of this issue, advise a thorough understanding of the cost savings of *offshoring* before making *reshoring* decisions.

From Romie Littrell: My three year term as editor of *AIB Insights* comes to an end with this issue. I have enjoyed the processes of interacting with those of you who have contributed and appreciate the time and effort spent in producing your articles. I have also enjoyed working with Associate Editor Daniel Rottig, who now takes the post of Editor for the next three year term. Daniel and I have received outstanding support from the Academy of International Business staff who manage the production of the journal. Thanks a lot to everyone involved.

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From Offshoring to Rightshoring: Focus on the Backshoring Phenomenon

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Is "Backshoring" a New Fad or a Viable Business Option?

Recently, the news about companies bringing back their formerly offshored products and processes has increased. There are indicators that after 50 years of extensive offshoring, companies are rethinking their strategies and realizing the advantages of onshore production and services. For some companies, offshoring might continue as an appropriate strategy, while for others the disadvantages dominate as offshore locations lengthen their delivery times, increase capital tied up in safety stock, and open up the company to uncontrollable quality issues. Another strengthening factor for the backshoring trend is that the conditions of low-cost and industrialized countries have changed as well. Lately, the former ones have faced increasing wage rates and labor shortages, while the latter ones have been able to employ new technologies to increase their productivity (Imberman, 2013; Tate, 2014; Tate, Ellram, Schoenherr and Petersen, 2014a).

To ensure a common understanding of the terms used in this article: *Offshoring* refers to the relocation of value chain activities outside of the company's original location of its headquarters (Bals, Jensen, Moeller-Larsen, & Pedersen, 2013) and covers both make or buy alternatives (Jahns, Hartmann & Bals, 2006). *Backshoring* concerns the relocation of business processes, production, and services alike, which previously had been moved to an offshore or nearshore location, back to the country of origin (Fratocchi, Mauro, Barbieri, Nassimbeni, & Zanoni, 2014; Kinkel and Maloca, 2009; Arlbjørn and Mikkelsen, 2014). In other words, backshoring is one specific form of reshoring, which itself is the reversal of offshoring (Gray, Skowronski, Esenduran, Rungtusanatham, 2013). The backshoring term only concerns the physical location, not the ownership of the process, which otherwise would be *insourcing* vs. *outsourcing* (Förstl, Kirchoff & Bals, 2015). Consequently, backshoring is possible in different ownership modes. *Outsourced backshoring* describes the relocation of business processes from an offshore supplier to an onshore supplier, while *in-house backshoring* describes the relocation of processes from a subsidiary in a foreign country to a company location in the home country (Förstl et al., 2015).

Actually, the phenomenon of backshoring is not new, with documentation dating back to the 1980s (e.g. Fratocchi et al., 2014). Nevertheless, the coverage of related events in the media as well as political interest have recently increased. According to a study by PwC, the European backshoring rate topped the offshoring one in 2013 as 60% of the examined companies had backshored products and processes and only 55% offshored. The main backshoring destinations in Europe are Italy, Ireland, Germany, and Spain (Za, 2014). In Germany, every fourth to sixth company that has offshored then reshores within the next five years, summing up to 400-700 companies per year (Kinkel, 2014). Simultaneously, offshoring activities are on a record low (Dachs, Ebersberger, Kinkel, & Waser, 2006). The main industries for reshoring are the production of electrical equipment and components, transport equipment and apparel which sum up to 42% of all backshoring activities (Tate et al., 2014a; Tate, Ellram, Petersen, & Schoenherr, 2014b).

Other studies, on the contrary, suggest that the offshoring trend has not yet reached an end, as the volume imported from low-cost countries to the industrialized countries is still rising. Furthermore, the majority of production processes that are backshored are assembly-related, while the value-adding aspect of manufacturing from scratch largely remains offshore (Dachs and Zanker, 2014; Stewart, 2014; Van den Bossche, 2013).

Therefore, it is currently very difficult to state a clear trend, but it can be noted that the backshoring phenomenon is gaining increasing momentum. Questions arise regarding the causes and decision processes that are behind this phenomenon and which of these would warrant further research attention.

Drivers: Why Do Companies Decide to Backshore?

To understand why backshoring solutions have increased lately, it is first necessary to differentiate the drivers. First of all, backshoring might be a short-term operational measure to correct previous offshore decisions that resulted in less than ideal results for the company, or it could actually be a long-term strategic measure. Currently, 80% of German backshoring activities are categorized as operative corrections to managerial decisions while 20% are estimated to be strategic adaptions to environmental conditions (Kinkel, 2014). It is observable that the trend moves away from managerial adaptions to strategic ones (Förstl et al., 2015).

Motivators to engage in offshoring have been extensively studied (e.g. Bals et al., 2013; Lewin, Massini, & Peeters, 2009; Tate, Ellram, Bals, & Hartmann, 2009), while those to disengage have not. The decisions to disengage can arise through imperfect information or unpredictability of events which manifest themselves in not reaching anticipated synergies or in problems with the offshore location. These difficulties are often based in the geographical distance, like disruptions of transportation, poor cooperation and misunderstandings due to cultural differences, as well as high control, coordination, and logistics costs (e.g., Larsen, Manning, & Pedersen, 2013). As an example, the premium kitchen manufacturer Berndes Küche GmbH backshored its production from

China to Germany after realizing that the fixed costs of two production locations in China and Germany were too high (Christ, 2012).

Quite often, companies that backshore as a managerial adaptation are following differentiation strategies, promising their customers high quality, innovation and outstanding customer service. After offshoring, they realize that this strategy is not compatible with the offshore location as they face unsatisfied customers due to long lead times and quality issues (Gylling, Heikkilä, Jussila, & Saarinen, 2015; Van den Bossche, Gupta, Gutierrez, & Gupta, 2014). Another example for this is the German teddybear maker Steiff, which returned its production from China after facing quality complaints from customers and long delivery times (Förstl et al., 2015). Such issues have also been suggested as main drivers of insourcing recently (Stentoft, Mikkelsen, & Johnsen, 2015). Martinez-Mora and Merino (2014) revealed in a study about backshoring in the Spanish shoe manufacturing industry that especially companies offering premium products are reshoring processes as such an operational adaption.

On the other hand, backshoring might also be based in the change of external influences making a long-term strategic adaptation necesary. Such changes might be triggered by macroeconomic aspects or by new consumption patterns of customers (Kinkel, 2014). Macroeconomic factors influencing location decisions can be wage rate increases in low-cost countries or the increase of oil prices which have an effect on transport costs. China is an example of a country which has experienced increases of wage rates and ancillary labor costs in the last years. Besides, it has faced shortages in qualified personnel while the tax incentives have been reduced. Simultaneously, the conditions of industrialized countries have been changing as well with labor costs shrinking due to the crisis and increasing productivity through new technologies (Arlbjørn & Mikkelsen, 2014; Tate et al., 2014a; Van den Bossche et al., 2014). As an example, the German company STOPA Anlagenbau shows that the optimization of an ERP system can lower production costs to an extent that backshoring becomes lucrative (Harzer, 2013).

Furthermore, consumers increasingly require fast deliveries, customized products and high quality. These requirements are not compatible with long transport ways and minimum order quantities in offshore countries (Arlbjørn & Mikkelsen, 2014; Daum, 2015; Tate et al., 2014a). The example of the Spanish footwear industry shows that especially companies offering products in the low and lower middle price segment are backshoring as a strategic adaption to changing contextual conditions, as their main reason for offshoring were cost synergies in the first place (Martinez-Mora & Merino, 2014). Moreover, this study suggests that the reasons to backshore can actually depend on the price segment of products, as illustrated in Figure 1.

Price Segment of Products	Reasons to Backshore
Premium	Mainly operational adaption as offshore production locations did not fulfill objectives and do not fit to a differentiation strategy with customized products and high quality
Middle	Mainly strategic adaption as cost synergies fade in offshore locations and local production becomes more lucrative

Figure 1: Reasons to Backshore per Price Segment (based on Martinez-Mora & Merino, 2014)

Decision Process: How Do Companies Decide to Backshore?

While sourcing decision-making processes (e.g., Handley, 2012; McIvor, 2010) as well as offshoring implementation processes (e.g., Jensen et al., 2013) have been covered in previous literature, reshore decision making has not yet received much attention in the literature. Therefore, this has become one of the further areas studied by the authors (e.g., Förstl et al., 2015; Tate, 2014; Daum, 2015).

As a first step to gain more insight into backshoring decision making, four backshoring cases were analyzed based on the organizational buying center (OBB) literature (Robinson et al., 1967; McQuiston, 1989; Webster and Wind, 1972; Wind and Thomas, 1980). These cases represent three manufacturing relocation and one service relocation events.

In line with the theory (e.g., Robinson et al., 1967), decisions with the importance and complexity of backshoring are usually not taken by one person or department alone but rather by a project team consisting of different departments and backgrounds, the buying center. Within the four case studies, all five participants of the buying center were analyzed: the *buyer* or person with the formal responsibility for the buying, the *decision maker*, the *user* mainly represented by the head of production or internal customers, the *influencer*, and the *gatekeeper* who collects and distributes information and therewith has the possibility to filter them (Monczka, Handfield, Giunipero, & Patterson, 2009; van Weele, 2010). Additionally, one participant classification needed to be added to describe a newly identified group of people: the *initiators* are those people who are confronted with issues caused by the offshore locations first and push for a solution. Such can be marketing and sales, which realize decreasing sales figures, or finance, which sees the negative financial impacts (Daum, 2015).

Moreover, all involved people in the case study firms were senior managers or owners of the company. This emphasizes the importance of the "shoring" decision. Nevertheless, this importance is not always reflected in the tools used to make this decision. First of all, half of the interviewed companies stated that their final decision was based on a mixture of analyses conducted and an emotional approach. The three analyses that were actually conducted were redesign of processes, cost analyses, and analyses of location factors. Regarding the first, the case study analysis revealed that besides a redesign of the process, often the product itself is being redesigned as well. Regarding the second, total cost approaches were chosen to mainly analyze two aspects: to determine whether backshoring is more

favorable than offshoring and to determine the best location within the home country. Finally, location factors were mainly examined for availability of skilled personnel and quality of infrastructure. Interestingly, other analyses like scenario planning, risk analysis, or creating a stakeholder matrix were hardly conducted, or not at all (Daum, 2015).

Furthermore, the decision-making process itself with its interactions and influences was analyzed using OBB's four different types of influential forces playing a role in a decision: environmental, organizational, group, and individual forces (van Weele, 2010). All cases suggest that corporate strategy had an influence on the backshoring decision. Companies that follow a differentiation strategy, focusing on innovation, ecological aspects, or quality, might find onshore production and services more suitable than offshore ones. Group forces are observed in the interaction of management or owners with the different stakeholders. In the four cases, not all stakeholders were equally involved, and often actually the users were excluded from decision processes. This re-emphasizes the observation also made by Gylling et al. (2015), who point out that despite the strategic importance of backshoring, the decisions are often solely made on the management level without including the production representatives who might add an important perspective. Also, groups and individuals were indeed found to influence the decision, either through their functional authority or expertise, or acting in self-interest to drive the decision in the preferred direction. For example, on the individual level a manager of one of the cases drove the location decision to onshore and nearshore countries as in his opinion the company was already over-represented in offshore countries. In another case, a manufacturing expert convinced the company owner of backshoring with his experience and knowledge while in a third case an individual pushed for a certain location in which later on he himself started a new job (Daum, 2015).

With a view towards managerial implications of these preliminary findings, the following can be stated: besides the three evaluations mentioned (redesign of processes, cost analyses, and location factors), the range of analyses seems rather narrow. Especially considering that the majority of companies stated they had faced unexpected delays and difficulties with the relocation, a broader range of analyses, like an exit strategy, change management, or risk analysis might help identifying these risks and preventing them. Furthermore, stakeholder analyses would be sensible in order to follow a holistic approach and include all parties, which might add value to the discussions and decision-making process. Moreover, it might be helpful to offer potential backshoring companies a platform to exchange and discuss knowledge and experiences.

Additional areas of interest to further research in terms of decision making are expanding the use of OBB as well as exploring further theoretical foundations. Also, current examples often center on SMEs, and the question arises how that decision process looks in multinational companies with multi-location decision-making scenarios (Tate & Bals, 2014).

Outlook: Which Factors Will Influence the Backshoring Trend in the Near Future?

Future backshoring decisions will be influenced by factors such as the importance of controlling supply chains, standardization of regulations, political incentives, and new technologies. The various trends are summarized in Table 1.

Level	Trends of Interest
Environmental	Standardization of regulations (e.g. environmental); political incentives (e.g. subsidies for backshoring); new technologies (e.g. 3D printing, Robotic Process Automation, advancement of cyber-physical systems for manufacturing automation)
Organizational	Importance of controlling supply chains; increasing experience with Global Integrated Shared Services; digitization of product
Group and Individual	Increasing use of mobile technologies

Table 1: Trends of Interest per Influencing Forces Level

The focus on supply chain capabilities has increased as companies have realized that their supply chains can be a competitive advantage; therefore they increasingly opt to control, own, and shorten them. This allows for the reduction of lead times and the introduction of innovations. Offshoring often means external and long supply chains, which implies the risk of interruptions that have a negative impact not only on profits but also on the customer relationship (Arlbjørn et al. 2014; Ellram et al., 2013). As supply chains can be shortened and centered more around major markets, risks of supply chain disruptions, such as by climatic events like hurricanes and taifuns disrupting transportation (Bals, 2012), decrease. Moreover, more advanced recycling concepts to keep resources in geographical proximity, e.g., in the spirit of closed-loop supply chains (e.g., Wells and Seitz, 2005), cradle-to-cradle design (McDonough and Braungart, 2010), and urban mining (Zaman, 2015) would be facilitated.

Another aspect driving reshoring is standardization of regulations. Recently, environmental regulations were proposed as a contributor to reshoring and/or backshoring in particular; for example, international shipping chains often operate on coal, and this could be challenged soon in the context of carbon emissions (Gray et al., 2013). The shortened supply chains mentioned in the previous paragraph would make it easier to overview and steer compliance with environmental as well as social standards, ultimately facilitating implementation of triple bottom line sustainability into whole supply chains (Bals & Tate, 2015).

Also, backshoring has caught the attention of politicians lately as it promises to create jobs. The impact of governmental incentives on backshoring and its sustainability need to be further researched (Tate, 2014). Nevertheless, it should be kept in mind that while bringing production back closer to today's major markets, future market developments should be carefully considered (Gray et al., 2013). Looking back at the four cases mentioned above, there are only few possibilities for companies to gain information on related opportunitites and risks. The creation of dedicated platforms for tried and tested analyses and exchange among companies making backshoring experiences could help reduce the hurdles and accelerate transitions.

Finally, technological advances will play a major role in the future production and service landscapes as well. For services, especially Robotic Process Automation (RPA) is of importance. RPA automates service processes and has been reported to shorten them by 60% and increase their accuracy, which in turn increases customer satisfaction and generates cost savings of 25%-50% (IRP, 2015). For physical production processes, additive manufacturing, like 3D printing, and the advancement of cyberphysical systems are of importance. Additive manufacturing enables a highly-automated production of finished products steered by the product itself and therewith makes the assembly of different parts obsolete. Additionally, it enables the digital storage and transportation of products (Lee, Kao, & Yang, 2014; Abramowicz, 2015; Schmidt, Van den Bossche, & Lakner, 2014). In Germany, for example, the advancement of cyberphysical systems goes under the headline of "industry 4.0" and is deemed a considerable growth factor for industry within Germany (BMBF, 2014).

The implication of these technologies is that their mastery might in itself develop into a competitive advantage, and in order for companies to enable synergy effects, ensure mainentance, and exert full control, they might be moved to local sites, even if in high(er) wage countries. Having production and service provision back in such locations is facilitiated by the replacement of manual work by automated processes, which in turn erodes wage differentials. This has already led to the notion that the location choice as we know it might be coming to an end, implying that instead of picking a geographical scope, the future will be no specific location at all (e.g., A.T. Kearney, 2014; Brettel, Friederichsen, Keller, & Rosenberg, 2014). Instead, a network of servers that could be located anywhere in a centralized or decentralized way takes over these tasks.

These technological advances are expected to enable shorter time-to-market and development cycles as well as more customized products (De Treville et al., 2014). While most coverage on these trends refers to manufacturing, this development applies for physical products as well as services. IT services, for example, have been a target of offshore activities for years, but in the current digital environment, companies increasingly invest in high quality and integrated communication aligned, as this forms an important part of the customer experience (Laudicina, Peterson, & Gott, 2014).

Although offshore countries still are important locations for Western companies, a trend towards increasing coverage of backshoring events in the media and recent literature is observable. The motives and actual decision-making processes provide interesting research opportunities. Further research should also study more broadly how this trend will develop in the upcoming years and how the off- and reshore movements relate to each other in terms of magnitude. Besides the operational adaptions of those companies for which offshoring was not a suitable strategy in the first place, it is expected that the number of companies for which backshoring is a strategic adaption to face changed macroeconomic factors, regulations, customer demand and supply disruption risks will increase. Backshoring might be a means to secure competitiveness in this changing landscape, harnessing the erosion of traditional geographic criteria in the light of new technological possibilities.

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Returning from Offshore: What Do We Know?

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After experiencing decades of offshoring, involving not only manufacturing (Fratocchi et al., 2014) but also business functions and services (Albertoni & Elia, 2014; Lewin et al., 2009; Manning et al., 2008), some companies have started to bring back their activities to their home country. This phenomenon has been labelled with several terms; in this short paper we use the term *reshoring* and we focus on the voluntary (i.e., not forced by host country governments) corporate strategy regarding the home-country's partial or total relocation of production or other business functions to serve the local, regional, or global demands.

This phenomenon has been acknowledged by the economic press (*The Economist*, 2013), consultancy companies (Sirkin et al., 2012), and transnational institutions (UNCTAD, 2013). The interest in reshoring is based on the opportunity to recover from the loss of jobs from offshoring in advanced economies (e.g. Gray et al, 2013; Pisano & Shih, 2012). To date academic research has devoted only a little attention to reshoring, and only recently has started to investigate this phenomenon. The existing literature has traditionally focused on the description of the relocation of manufacturing operations (see, among others, Ellram, 2013; Ellram et al., 2013; Fratocchi et al., 2014; Kinkel & Maloca, 2009; Martìnez-Mora & Merino, 2014; Tate et al., 2014). Three main drivers were proposed to explain such a phenomenon: changes in the business context (Martinez-Mora & Merino, 2014), managerial errors (Kinkel & Maloca, 2009), and the strong interconnections along the value chain (Steinle & Schiele, 2008). However, the phenomenon needs a deeper analysis as regards the theoretical explanations, the empirical evidence, and the managerial and policy implications.

Regarding the first driver (changes in the firm's environment), the real option portfolio perspective suggests that firms decide to locate their activities in growing markets following the macro-economic performance of the host countries. According to this view, companies—thanks to a widespread presence in several countries—can shift their business activities from one location to another (including their home country) in order to respond to market dynamics (Belderbos & Zou, 2009). For example, the inflation of Chinese wages—that increased more than 20% annually in the last 5 years (Shih, 2013)—made this host country gradually less attractive. In this perspective, reshoring can be considered as one of the options available to a firm that is willing to relocate its foreign activity after a change of the macro-economic business context. It is worth highlighting that not only do the macro-economic conditions affect the business environment (e.g., the inflation of labour wages), but also the institutional and cultural framework (e.g., the political instability or cultural clashes).

Concerning the second driver, managerial error, relocation decisions are made considering whether the outcome of the offshoring initiative is able to meet the expectations belonging to the earlier implemented off-shoring strategy. Indeed, offshoring seems to be increasingly inadequate to guarantee cost savings, quality standards and organizational flexibility (Platts & Song, 2010). As consequences of managerial errors, firms might decide to bring back their activity to their home country, thus triggering the reshoring activities.

The third driver is related to the increasing awareness that offshoring can threaten the capabilities to coordinate different activities, and that the inter-connections along the value chain often lead to the need to co-locate different activities. Given that coordination costs negatively affect the net benefit associated with the adoption of offshoring solutions (Larsen et al., 2013; Meijboom & Voss, 1997), recent research has started to emphasize the role of intra-organizational relationships and linkages among the different parts of the value chain. In particular, innovative and productive activities are affected by strong interdependencies and complementarities, and the co-location of R&D and manufacturing is critical to foster innovation (Alcacer & Delgado, 2014; Berry, 2014; Steinle & Schiele, 2008). Hence, the loss of manufacturing capabilities and, more generally, the loss of business capabilities, implies the reduction of innovation competencies (Pisano & Shih, 2012). Due to these strong interdependences among the stages of the value chain, a company might decide either to offshore also the R&D function close to the manufacturing activity, or to bring back the offshored manufacturing activity. In this latter case reshoring takes place.

Next we provide some empirical evidence for what we know regarding the reshoring phenomenon so far. We then conclude with some implications for managers and policy makers and some possible research paths for academics.

What Do We Know? Evidence on the Reshoring Phenomenon

The evidence concerning manufacturing reshoring is sourced from the dataset provided by the project "Uni-CLUB MoRe reshoring", which was developed by five Italian Universities (Catania, L'Aquila, Udine, Bologna, Modena-Reggio Emilia). It is based on secondary data regarding single reshoring decisions in cases of multi-reshoring firms. The most up-to-date data from this research group account for more than 400 companies, mainly from the US and EU (Fratocchi et al., 2015a). The evidence concerning the reshoring of business functions is sourced from the

dataset provided by the Offshoring Research Network project, which has been developed since 2004 by Duke University and its corporate and university partners to study and collect data on the offshoring (and reshoring) of business functions that occurred from 2005 to 2011 all over the world.

Manufacturing Activities

The Uni-CLUB MoRe database—to date—consists of 501 cases belonging to 423 companies, as 58 companies (13.7% of the total) implemented more than one reshoring operation (from 2 to 6). Breakdown by home country reveals that EU and US companies are almost equally represented (respectively 52.3% and 45.9%). The three countries with the highest number of cases are the US, Italy, and Germany which are among the developed countries with the strongest specialisation in manufacturing. Italian, German, and French firms have quite often implemented "multiple reshoring initiatives". As for the host country whence reshoring strategies took place, around 73% of total operations involving China (58.8%) and other Asian countries (14.1%), whereas Eastern Europe accounts for around 10%. In particular, 73% of initiatives by US companies involve activities located in Asia (including China), around 20% of decisions by EU companies concerns instead activities located in Europe. This result confirms the region-centric approach of EU companies in term of manufacturing off-shoring strategies (see, among others, Alajääskö, 2009; Daudin et al., 2011). Finally, no reported reshoring experience belongs to companies headquartered in emerging economies (with the exception of Taiwan). This result might—at least partially—be explained by the fact that FDI from emerging markets' companies are relatively recent, and also by the fact that these investments tend to be market seeking, thus making reshoring implausible.

Table 1: Manufacturing Reshoring: Breakdown by Home and Host Country

Host country	Home country/ Home region			
	Western Europe	North America	Asia (other than China) and Oceania	Total
China	119	168	8	**295**
Asia (other than China)	38	32	1	**71**
Eastern Europe & former USSR	48	1		**49**
Western Europe	34	6		**40**
North America	8	18		**26**
North Africa & Middle East	9	1		**10**
Central & South America	6	2		**8**
Oceania		2		**2**
Total	**262**	**230**	**9**	**501**

Source: Uni-CLUB MoRe database (updated July 2015)

Reshoring strategies were implemented in a wide range of manufacturing industries, independently of their level of technology intensity and their capital/labour intensity nature. In this respect, it is worthy of notice that the highest number of cases concern Clothing & Footwear—traditionally classified as low-medium technology intensive and labour intensive—and Electronics (including PC)—considered, on the contrary, medium-high technology intensive and more capital intensive.

With respect to the motivation of reshoring decisions reported by the firms, the most common is related to costs (144 cases). In particular, the labour cost gap reduction is indicated in 73 cases. Consistent with previous studies, logistics costs are the most important reshoring motivation in our sample (92 cases). The Uni-CLUB MoRe reshoring data further confirm the importance of logistics in terms of increased delivery time in offshore locations (70 cases), especially when the offshoring strategy is not market-seeking. Among the home country–related elements, many companies reported the so-called "made in" effect (82 cases). As far as the host country related elements are concerned, the main reshoring motivation is the poor quality of offshored production (73 cases). Among the remaining motivations (firm-specific and marketing-related) the most frequently indicated are the firm's global reorganization (35 cases) and the improvement of customers' services (44 cases). The latter may capture elements related to logistics (e.g., the speed and reliability of deliveries), which are worsened both by "long" supply chains and by manufacturing units spread globally. Finally, generic global crisis related motivations do not appear as relevant as they have been depicted in the literature. These motivations mainly refer to untapped production capacity at home and to the domestic unions' pressure.

Business Functions

Data from the ORN survey show that the reshoring of business functions is still a limited phenomenon. Indeed, only 113 offshoring initiatives out of 1,577 (corresponding to 7.17% of observations) involve a reshoring phenomenon (Table 2 reports only 101 observations due to some missing data on the home and host country dimensions).

Among the reshored activities, the number of initiatives that were offshored in-house is larger (35.40%) than the number of initiatives that were previously outsourced (22.12%). This means that reshoring is more likely to reflect the decision to relocate back to the home country the business functions that were object of foreign direct investments, rather than the switch from one supplier to another.

European firms tend to reshore their business functions more than US firms, the former being responsible for 77% and the latter for 22% of the reshoring initiatives. As regards the host country (i.e., the geographical areas from where companies tend to escape), reshoring plans are more frequent from India (40.71%), Asia (except India and China, 12.39%), Eastern Europe (11.50%) and Western Europe (10.62%). On the one hand, this evidence seems to suggest that the business context of Asian countries is not as attractive as it was in the past, probably due to the increase of wages, to the floating exchange rates, and to the downturn of the several Asian economies, as has been observed recently for China. On the other hand, it emerges that reshoring flows are not necessarily

from emerging to advanced countries, but they can depart also from advanced countries such as Western and Eastern Europe.

Information Technology (24.78%), Call Centres (18.58%), and Software Development (13.27%) are the business functions that are more likely to be reshored. It seems rather difficult, hence, to rely on reshoring of business functions as a strategy to restore advanced competences and skills, given that this phenomenon does not involve the high-value added activities (such as product design, engineering and R&D) but mainly middle- and low-value added tasks.

Implications for Managers, Policy Makers, and Researchers

Our analyses show that reshoring is often associated with less favourable host country business contexts (with respect to the time in which the offshoring decision was implemented) and to performance shortcomings (not only economic and financial ones). This means that, before engaging in an offshoring initiative, managers and practitioners should more deeply evaluate the host country's business conditions and the threats associated with offshoring. In so doing they would avoid strategic errors that would end up into a costly reshoring experience.

However, even when companies adopt a proper offshoring strategy, managers should constantly monitor both the business context—as the host country's location advantage might be eroded by macro-economic changes—and the offshoring venture, making the offshoring operations no longer profitable. In both these cases, reshoring becomes the next-stage strategy that follows the offshoring venture, rather than being a remedy to performance shortcomings arising from managerial errors. It is a further step in a non-linear internationalization process (Fratocchi et al., 2015b). Hence, managers should plan in advance a reshoring strategy in order to be able to implement it quickly and less costly when the business context changes or when the goal underlying the offshoring initiative is fulfilled.

Table 2: Business Function Reshoring: Breakdown by Home and Host Country

Host country	Home country/ Home region			
	Western Europe	North America	Asia (other than China) and Oceania	Total
China		1		**1**
Asia (other than China)	41	17	1	**59**
Eastern Europe & former USSR	14			**14**
Western Europe	12			**12**
North America	2	2		**4**
North Africa & Middle East	3	3		**6**
Central & South America	1			**1**
Oceania		4		**4**
Total	**73**	**27**	**1**	**101**

Source: our elaboration on ORN data

A deeper understanding of reshoring could also help policy makers to understand to what extent this phenomenon can be beneficial to improve employment rates and restore the innovation capability of advanced countries. A system of incentives set up by policy makers could probably trigger the reshoring of high value added manufacturing activities and business functions. However, policy makers should be primarily concerned with: (i) enhancing the innovation capabilities for existing companies, in order to avoid that they are delocalized somewhere else; (ii) encouraging the birth of new entrepreneurial ventures within their countries; (iii) and attracting new ventures and fresh capital from abroad.

Policy makers should also try to draft laws that properly inform the final customer regarding the origin of the products they buy. Consumers often prefer products entirely made in a given country, and this turns into a competitive advantage for companies based in that country. However, legislation does not always protect local producers and, often, controversial labels mislead the final consumer. A narrow legislation on the "made-in" effect could trigger a reshoring phenomenon, especially in some specific industries such as food and fashion. Conversely, other industries involved in the production of more standardized goods might continue to improve their efficiency thanks to the adoption of offshoring practices (Pisano & Shih, 2012). Therefore, the offshoring and reshoring phenomena require further investigation and research in order to understand their ultimate impact on the economic system:

- What are the consequences of reshoring?
- Can it really re-store the competences and the skills that have been displaced by offshoring?
- Should policy makers support and actively incentive this phenomenon?
- Should managers design and implement reshoring strategies?
- What are the costs and the advantages of reshoring for companies?

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Offshore Sourcing and Reshoring: The Impact of Governance on Cost and Incentives

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Introduction

Offshore sourcing continues to grow in importance for firms in a range of industries, and for many smaller firms it is a key step in the internationalisation process. Offshore sourcing helps firms maintain their competitiveness and meet their customers' expectations of lower prices and better quality while facing high levels of international competition. A particularly favoured location for offshore sourcing is China, which offers a number of advantages including a large and rapidly growing market, low cost resources (particularly labour and land), access to an increasingly sophisticated supply base and R&D capability, as well as proximity to other high growth economies in Asia. In this short paper we outline the findings of a recent pilot study that examined the experience of a small sample of New Zealand-based medium- and high-technology firms engaged in offshore sourcing to China. The study is of considerable interest as it sheds light on aspects of offshoring not widely understood, in particular differences between anticipated and landed cost savings, the role of institutional weaknesses in the host country (China), and the trade-offs that result from alternative governance arrangements for offshored activities. We briefly consider the implications of our findings for incentives to re-shore activities.

Cases

To investigate the intricacies of offshoring, a qualitative research approach was adopted. Participant selection was based on three criteria: that they were key personnel with decision-making responsibility; that they had been part of the offshore decision-making process; and that the company had been involved in offshoring to China for at least two years. The sample was selected from small-medium manufacturing firms within the New Zealand high-tech industry, drawing on a relevant government database. The pilot study involved three firms, termed A, B, and C. Primary data were collected through in-depth, face-to-face interviews, and were supplemented by secondary sources including company websites, reports, and publicly accessible media. Respondents were asked a series of open-ended questions covering company background and context, the offshore decision-making process, perceived benefits, challenges experienced in China, and ways in which such challenges were addressed.

At the time of data collection, all three participants were based in Auckland, New Zealand; one of the three owned his company, while the other two participants were in partnerships. At the time of the interview, the experience of offshore sourcing ranged from 8 to 15 years. All the participants were male. One of the three was born in New Zealand while the other two participants were born overseas and migrated to New Zealand. All participants held relevant tertiary qualifications (business or technical).

Key Findings

There was a strong consistency of findings across all three case companies. Four key themes emerged from the interviews relating to the benefits and challenges of offshoring, in particular: cost savings, quality issues, challenges around intellectual property, and governance concerns.

Cost Savings

For all three respondents, offshoring to China was underpinned by cost-seeking motives. All respondents recognised the huge potential labour cost savings that might be achieved but also experienced additional savings in areas such as land, raw materials, and logistics. These resulted from access to specialist suppliers in China, proximity to buyers and suppliers operating in China, and reduced lead times. Overall, all three managed to reduce their landed costs, back in New Zealand, by 40-80%depending on the choice of governance mode and the degree of integration within China.

Quality Improvement

A surprising finding of the research was that all three respondents believed that offshoring to China can lead to quality improvements. While most started from the position that through offshoring they hoped to reduce costs whilst at least maintaining quality levels, they actually experienced quality improvements. The primary source of quality improvement occurred through product improvements resulting from the existence in China of a wide range of specialist suppliers and producers. Compared with the respondents' home base of New Zealand, Chinese suppliers benefitted from both larger scale and higher levels of specialisation. However, such improvements were not costless, and respondents discussed the investments that had to be made to minimise the likelihood of "quality fade" where initial quality levels, perhaps as contractually specified, were not maintained over time. Respondents believed that in many cases Chinese suppliers offered extremely low prices to attain contracts, and then sought ways to improve margins at a later stage, perhaps by lowering quality. We discuss these types of trade-off, in this case between cost savings and quality maintenance, below. Respondents mentioned the benefits of effective documentation processes and accurate translation of specifications and expectations as helpful in maintaining quality levels.

Intellectual Property Concerns

The three respondent companies were all involved in technologically sophisticated manufacturing and had strong advantages in product design, development, or know-how, which they considered valuable firm-specific intellectual property (IP). They were aware of the risk to intellectual property in a country such as China, which is perceived as having weak IP protection laws and sophisticated suppliers capable of copying such technology. For two respondents this issue was addressed by retaining key IP within New Zealand and fitting this (typically software) when the product was brought back to New Zealand. Technical services, including R&D, were viewed as being cost competitive in New Zealand and supported by strong IP laws. Interestingly, uncertainty over IP created an opportunity for Company C to establish its own facilities in China and, in turn, to contract out to other New Zealand businesses. Company C was able to offer significant assurances to other companies that they would be, in effect, operating within their home culture and context, but at Chinese cost levels. As we will discuss below, this is a further area of trade-off in the offshoring decision process.

Governance Issues

One of the most interesting findings from the pilot companies was the complexity of governance of offshore sourcing. While conceptually governance alternatives appear straightforward, the reality in emerging markets such as China is quite different. In theory, offshored operations can be managed through a wholly or majority owned facility (captive offshoring), through an arms-length or trading relation, or through some form of contractual relationship. Each offers various benefits and costs. A captive facility gives greater control over quality and IP for example, but may not offer the cost savings that domestic suppliers can achieve. A purely trading relationship may work for the exchange of standardised commodities, but it offers little opportunity for customisation or mutual learning. Contracts, while appealing in theory, are only effective if the contracting party has confidence in the host country institutional structures, particularly the legal and policy environments. Since many emerging economies are characterised by institutional weaknesses or "voids", confidence in independent enforcement may be low and may need to be supplemented by other forms of trust building or assurance.

Challenges and Trade-Offs

The major findings from this pilot study highlight the considerable complexities of offshore sourcing and the range of trade-offs or compromises that are involved. We highlight some of the major challenges that respondents discussed.

Unanticipated Benefits

The first issue is a positive one in that all respondents experienced unanticipated benefits resulting from offshore sourcing. As mentioned earlier, cost savings were the primary driver behind the offshoring decision in all three cases, coupled with an expectation that quality levels could, at least, be maintained. In practice, our respondents experienced a number of benefits other than simply cost reductions. These related to the highly efficient supply base that China offers, particularly because of the presence of experienced specialist providers. It is perhaps worth noting that buyers based in developed home economies larger than New Zealand might not experience the same secondary benefits. A presence in China was also valuable in enabling the respondent firms to be closer to their customers, many of whom had also moved operations to China, and to expand into other high growth Asian markets.

Anticipated vs. Landed Cost

A second key finding was the extent to which there was variation between anticipated and achieved cost savings. For the respondent firms, the critical determinant of cost savings was the chosen governance mode. For example, Firm C found that moving from contract manufacturing by a local specialist to operating its own wholly-owned factory in China reduced landed cost savings from 60 to 40% of total costs. The difference, some % of costs, was due to an increase in the firm's overhead expenses as it established a factory, recruited and trained staff. Because our respondent firms also experienced an evolution in governance structures (see below) it was difficult to accurately forecast likely cost savings. Anticipated savings based solely on a comparison of wage and productivity rates is likely to be misleading since it fails to take account of governance costs.

Institutional Weaknesses and Relationships

Governance is a key issue in China because of what respondents saw as institutional weaknesses. Particular concerns were expressed about Chinese officials and administration. Difficulties of transparency, consistency, and accountability made it very difficult to accurately forecast costs and timeframes. Not surprisingly respondents recognised the value of networks and of building strong relationships if one is to do business in China. For example, Company A used its chief engineer, who was from China, to facilitate the search process in finding suitable suppliers. On the other hand, when the company moved to establish its own production facility in China, this took four years, in part because their Chinese manager did not have good relationships with local officials. Both Companies B and C also relied on their networks to reduce search costs in identifying suitable suppliers and partners. This finding should not be surprising and simply reinforces the continuing importance of China's relationship-based business system.

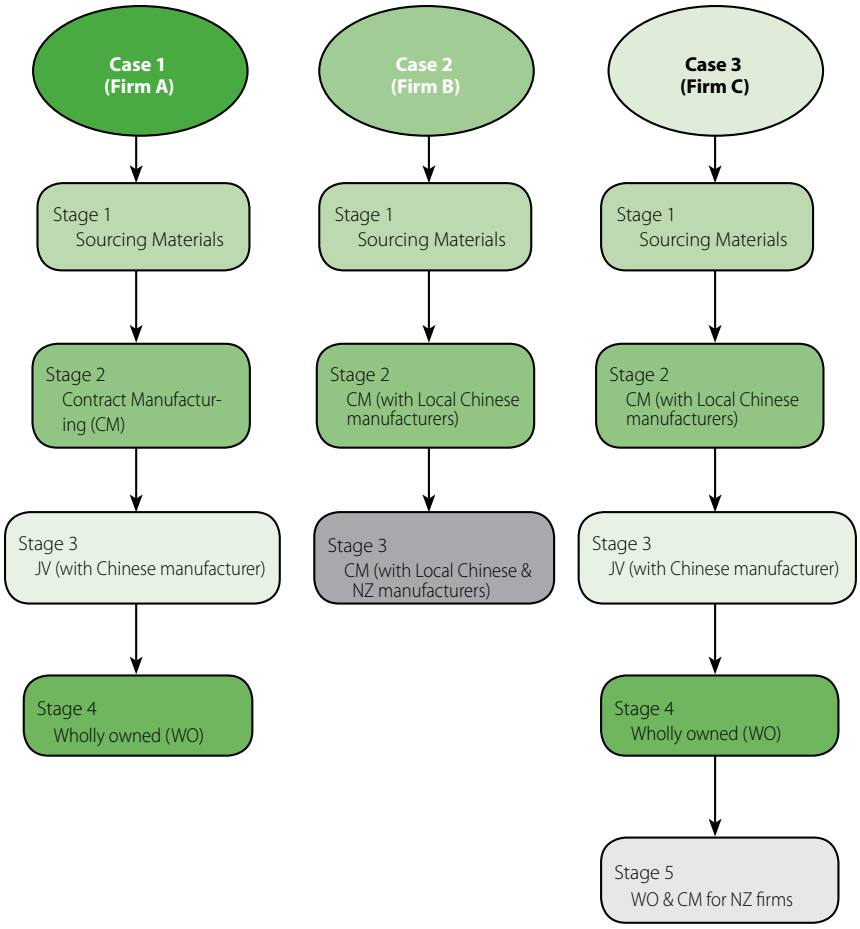
Dynamics of Governance

The changing forms of governance used to manage offshore sourcing by the respondent firms was a key finding, and one that is central to the future development of this research project. All three firms shifted governance structures in their offshore production in China and these stages are illustrated in Figure 1.

All three firms evolved, over a relatively short period of time, through different governance forms in their offshore production activities in China. Interestingly, the first and second stages were the same for all three.

The first stage was based on a commercial relationship sourcing from different suppliers in China. This was followed by the selection of a supplier that best matched the firm's requirements. Finding these suppliers was done in different ways such as via networks, visiting exhibitions, or through the internet. For example, Firm A made use of the company's chief engineer's network in China, where he was originally from. Firm B made use of its network in Hong Kong to find suppliers in China. Firm C found its first suppliers through visiting different electronic exhibitions in Hong Kong, China, and Malaysia.

Figure 1: The Evolution of Governance Structures



The second stage for all three firms involved contracting local Chinese manufacturers to produce parts or final products. Both Firm A and Firm B reported an increase in the quantity of their products on the shelf without any increase in costs. For example, Firm B reported that stocks of finished goods increased from 200 to 3000 without any cost increase. Firm C reported landed cost savings of 60%. Although these levels of saving were dramatic, at this stage respondents had significant concerns about the quality of their goods as they had less control over production processes and the quality of components used in their products.

At the third stage both Firm A and Firm C formed joint ventures with one of their suppliers to increase control over production. Firm A reported the total cost saving at that stage were about 75% of landed costs. Firm B continued to use contract manufacturing but started to contract not only local Chinese manufacturers in China but also foreign manufacturers—New Zealand, American, and Australian—that had established manufacturing facilities in China.

By the fourth stage, both Firm A and C had exited from their joint venture (JV) relationships to establish their own manufacturing facilities in China with full control over their production, testing, and marketing. Different reasons were behind these decisions, for example Firm C's JV partner started making decisions without consulting Firm C and made trade-offs between costs and quality. The reason behind Firm A's exit from its JV was due to differing goals. Firm A wished to target the local Chinese market while the other party wanted to only sell to foreign companies. Both firms reported a decrease in cost savings: Firm A's savings went from 75% to 60% while Firm C's went down from 60% to 40%, although they had achieved much greater control over production quality, their future goals, and their ability to target particular markets.

Firm C continued to evolve its wholly owned facility to become as a contract manufacturer for foreign businesses in the electronics industry. These foreign businesses decided to offshore their production activities to China for cost savings reasons but they were concerned about product quality and IP protection, while at the same time lacking the required financial resources to establish their own production facilities in China. Respondent C reported that these customer firms managed to save 50–80% of their costs by contracting to Firm C. Firm C successfully reduced a customer's cost for producing a particular electronic controller by 80%, going down from NZ$150 to $30, for the first batch, and eventually reaching just NZ$13 for the balance of production while at the same time maintaining the integrity of both the customer's IP and quality of the supplied products.

Impact of Offshoring on Company Competitiveness

The final topic explored with the respondent companies was the impact of offshoring to China on the firm's competitiveness. All three firms agreed that offshoring has made them stronger international competitors. The primary impact was through cost savings. Directly, cost savings could be passed on in the form of lower prices to customers. Indirectly, the savings allowed respondents to make additional investments in new technology and machinery raising efficiency and productivity and reducing wastage. The indirect, and often unanticipated, effects of offshoring also contributed to competitiveness. Respondents had access to more efficient suppliers, were often closer to buyers and used their experience to move into new markets. The impact on competitiveness appeared to be both positive and strong.

Implications for Reshoring

Although other papers in this issue consider in some detail the growth of reshoring activities, our findings have interesting implications for this discussion. While reshoring appears to be prompted by changes in the operating conditions of offshore locations, to correct previous suboptimal locational choices, or to overcome operating challenges including quality, complex supply chains and a lack of flexibility, our discussion highlights other factors that managers need to consider.

The first is that the trade-off between rising costs in the offshore location and the possibility of utilising advanced production technologies in the reshored location must take into account the characteristics of the home country. For our case companies reshoring to New Zealand, a small, geographically remote economy with a limited industrial supply base, may be a less attractive option when compared to bringing processes home to economies such as the United States, Germany or Japan. In the case of an economy like New Zealand, the balance is likely to favour offshoring for the foreseeable future. Second, the nature of products offshored, often involving standardised components and

limited product adaptation, means that issues of customer responsiveness and significant delivery times might be less pressing for our respondents. Finally, perhaps the key implication is that our firms see alternatives to reshoring in the face of declining operating conditions or a need to correct suboptimal prior decisions. Changes in governance forms and structures, as illustrated in Figure 1, may be sufficient to offset adverse changes in local conditions or to correct (locally) suboptimal structures. In effect, these alternatives serve to delay or even offset pressures to reshore. This is clearly an area worthy of further research attention.

Conclusions

This short paper has outlined the key findings from a pilot study of technology-based firms offshoring to China. Our findings confirm much of what is already known, particularly that offshoring is primarily cost driven and seems to contribute to overall firm competitiveness. However, we also discovered some more subtle aspects of offshoring manufacturing. Firms reported other benefits, often unanticipated. The extent of cost savings was linked to governance choice, in essence, greater control over quality or intellectual property protection comes at the price of reduced savings. Theoretical perspectives on the governance of offshoring do not seem to capture the reality of operating in a relationship-based economy such as China where institutional weaknesses mean that great reliance is placed on networks and relationships. Interestingly, our study reveals some solid data on the extent of cost savings, and these appear to be significant.

These results will help guide the next stage of the research which, using a much larger sample, will examine the choice of governance mode and the triggers that initiate mode switches.

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