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The dynamics of reshoring decisions and the role of purchasing

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Reshoring is a reversal of offshoring decisions and is increasing in business practice. There is limited understanding of how different drivers relate to different reshoring decisions. There has been little examination of purchasing's role in reshoring decision-making. Through 25 case studies of reshoring decisions taken by 18 companies, this research examines the relationship between different drivers and the type of reshoring decision taken, and how purchasing was involved at different stages of the reshoring decision-making process. The findings reveal four types of reshoring; most companies made mono-dimensional reshoring decisions, and three types of mono-dimensional decisions were found. One type of bi-dimensional reshoring initiatives involved changed location and ownership. The most common drivers for reshoring were operational reasons and brand reputation, as reasons for the original offshoring decision had changed over time. Four types of involvement of purchasing in different stages of reshoring decisions were found: no involvement, operational involvement in implementation, early involvement in feasibility studies, and strategic involvement throughout the whole process. Different types of purchasing involvement were found to relate to different types of reshoring with particularly strong involvement in bi-dimensional reshoring decisions.

Keywords: decision analysis; reshoring decisions; reshoring drivers; purchasing

Introduction

After decades of decentralising production activities to emerging countries through offshoring, many US and European companies are now gradually bringing back production to closer locations i.e. they are reshoring. Manufacturing reshoring is gaining momentum, as evidenced in management consultancy reports (e.g. BCG, 2011) and more recently in academic research (e.g. Fratocchi et al. 2014) which has predominantly focused on what is driving reshoring decisions (Ancarani et al. 2015; Fratocchi et al. 2016). Research has provided evidence of particular drivers of reshoring including cost, brand reputation and need for greater flexibility; a summary of research on drivers is provided in the literature review. However, less is known about types of reshoring decision differentiated by ownership and location factors, and which drivers relate to which type. The first objective of this research, therefore, is to examine how drivers of reshoring relate to different types of reshoring decisions.

There is recent, albeit limited, research evidence providing understanding of the stages involved in the process of reshoring decision-making (Bals, Kirchoff, and Foerstl 2016). The significant role that purchasing can play in strategic decision-making is well accepted (Carr and Pearson 1999, 2002), particularly in decisions impacting supply networks and their reconfiguration (Van den Bossche et al. 2014). However, despite recognition of how critical it is for purchasing to play a key role in reshoring (Foerstl, Kirchoff, and Bals 2016), there is little empirical research evidence of their actual involvement (Brandon-Jones and Knoppen 2018). The second objective of this research is to examine purchasing's involvement in reshoring decision-making.

To tackle these two research objectives, 25 case studies in 18 companies are presented. It is found that particular drivers of reshoring relate to four types of reshoring differentiated by location and ownership. In terms of purchasing's involvement in reshoring decisions, it is found that the role and level of involvement relates to these different types of reshoring.

The paper is organised as follows: in Section 2, the theoretical background of the study provides definitions and drivers of reshoring. It also examines the potential contribution of the purchasing function, leading to the formation of a conceptual framework for the study. Research methodology is summarised in Section 3. In Section 4 findings on how different drivers of reshoring initiatives relate to type of reshoring chosen which, in turn, is related to purchasing involvement, evidenced

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in Section 5, Finally, in Section 6 the main conclusions of the paper are presented, summarising theoretical and practical contributions, limitations of the study and opportunities for further research.

Theoretical background

Defining reshoring

Production offshoring is an effective strategy to relocate production (Ferdows 1997; Kedia and Mukherjee 2009; Da Silveira 2014) particularly to reduce labour and logistics costs (Kinkel 2014; Tate 2014; Brandon-Jones et al. 2017). However, some companies choose to reverse their offshoring decisions (Dou and Sarkis 2010), and this decision reversal is termed 'reshoring' (Tate 2014). Reshoring is a location decision (Ellram 2013; Gray et al. 2013) to relocate all or part of production (Bals et al. 2013) within or closer to a company's home country (Kinkel and Maloca 2009), to improve competitive advantage (Fratocchi et al. 2014). Associated with this relocation decision is the decision of ownership – whether production should be owned in-house or outsourced to a supplier. Defining location as offshore, nearshore and domestic and ownership as in-house, partnership and sourced, Foerstl, Kirchoff, and Bals (2016) created a 9 cell grid of different combinations of location and ownership states. Ketokivi et al. (2017) examined the temporal aspect of the reshoring decision, causing a direction of travel as location changes are made over time.

The focus of this research is reshoring, defined as bringing production back into the company's domestic country (backshoring) or bringing it closer (nearshoring). Reshoring decisions are defined here as bi-dimensional decisions, changing both location and ownership (backshore & outsource, backshore & insource, nearshore & outsource and nearshore & insource) or mono-dimensional, changing only location (backshore & stay outsourced, backshore & stay in-house, nearshore & stay outsourced, or nearshore & stay in-house).

Drivers of reshoring

Most research studies of reshoring have focused on what drives the reshoring decision (Ancarani et al. 2015; Fratocchi et al. 2016). Some companies reshore because they perceive risks of loss of flexibility, longer delivery lead times (Ellram, Tate, and Petersen 2013), and risks to their intellectual property, product quality and brand image (Lewin and Peeters 2006; Keupp, Beckenbauer, and Gassmann 2010; Simchi-Levi et al. 2012; Dachs et al. 2015; Skowronski and Benton 2018). A summary of research on the reasons why companies reshore is provided in Table 1, grouping drivers of reshoring into 6 categories provided by Di Mauro et al. (2018).

How do companies take reshoring decisions?

With the offshoring trend entrenched, many domestic supply networks have evaporated, mainly because new supply networks have been developed in the new location (Fel and Griette 2017). Reshoring companies have alternative sourcing

Table 1. Drivers of reshoring decisions.

Driver category	Description	References
Cost	Factors related to supply chain cost improvement – e.g. logistics cost, quality control cost, transaction costs, labour costs	Ellram, Tate, and Petersen (2013); Tate et al. (2014); Fratocchi et al. (2016)
Operational	Factors related to operational excellence improvement of company processes – e.g. flexibility, lead time reduction, integration between production and R&D	Holmes et al. (2016); Ellram, Tate, and Petersen (2013); Fratocchi et al. (2014); Patrucco, Scalera, and Luzzini (2016)
Organisational	Factors related to organisational cost improvement – e.g. coordination and communication cost needed for geographical and cultural distance	Kinkel (2012); Kinkel (2014); Fratocchi et al. (2014); Tate et al. (2014)
Brand Reputation	Factors related to final customer perception of company brand – e.g. made – in effect; customer proximity; quality and safety issues	Musso, Francioni, and Pagano (2012); Simchi-Levi et al. (2012); Gray et al. (2013); Fratocchi et al. (2016)
Risk reduction	Factors related to risk sources connected to geographical distance and country economic instability – e.g. supply disruption, currency value volatility	Aron, Clemons, and Reddi (2005); Gray et al. (2013); Arlbjørn and Mikkelsen (2014); Tate (2014)
Government policy	Factors related to government policy and decisions – taxation level, incentives, import/export duties	Leibl, Morefield, and Pfeiffer (2011); Simchi-Levi et al. (2012); Fratocchi et al. (2016)

options; they may have to rely on the supply networks still located in the country where production was offshored, they may drive suppliers and their networks to follow them to their home country (Kinkel and Maloca 2009), or try to rebuild a domestic supply network.

The decision to reshore includes consideration of factors other than just availability of supply. Customers' preferences for location of production may be a decision criterion (Tate 2014), as this can impact on delivery lead times, brand and perception of quality. Dynamically changing supply, customer and currency markets can impact on the reshoring decision (Stentoft et al. 2016). Strategies to couple production more closely with research and development can affect location choice in the reshoring decision (Ketokivi et al. 2017). Consideration of longer term rather than short term issues may feature more prominently in the decision-making process (Bals, Kirchoff, and Foerstl 2016). Scholars have discussed contingent variables that may affect the dynamics of this decision-making process, such as country-level factors (e.g. Dunning 2000; Ellram, Tate, and Petersen 2013), firm-specific factors (e.g. Sun et al. 2012; Macchion et al. 2015) and decision-impact factors (e.g. Kinkel 2014). In addition to research on the factors affecting reshoring decision-making, there are also taxonomies to classify these decisions (e.g. Bals, Kirchoff, and Foerstl 2016; Foerstl, Kirchoff, and Bals 2016); however, to date there has been limited research on the process of the reshoring decision. The most illuminating so far is the identification of decision-making process stages proposed by Bals, Kirchoff, and Foerstl (2016). Three sequential stages are identified: (1) ex-ante activities, involving evaluation of the feasibility of reshoring; (2) activities to take the reshoring decision, including researching alternatives, analysis, development of a solution and selection of a supply source and (3) implementation activities.

Purchasing's role in reshoring decisions

The role of purchasing in the reshoring decision is critical (Foerstl, Kirchoff, and Bals 2016) yet has been largely absent in decision-making relating to outsourcing, offshoring (Spekman 1988; Ellram and Carr 1994) and more recent reshoring decisions (Brandon-Jones and Knoppen 2018). There are two main reasons to involve purchasing; first, reshoring involves reconfiguring supply networks (Van den Bossche et al. 2014) and, second, purchasing can play a role in strategic decision-making (Carr and Pearson 1999, 2002; Tchokogué, Nollet, and Robineau 2017; Gonzalez-Benito 2007). The involvement of purchasing within strategic decision-making is more likely to happen when purchasing is recognised as a strategic function in the organisation (Ateş, van Raaij, and Wynstra 2018). Paulraj, Chen, and Flynn's (2006) framework for recognising purchasing's strategic relevance has three dimensions: (1) strategic focus – are purchasing objectives focused on long-term opportunities? (2) strategic involvement – are purchasing people and activities integrated with strategic planning processes, and (3) purchasing recognition – are purchasing people and competencies perceived as value-adding by top management and other departments?

Conceptual framework and research questions

At the heart of this research is the reshoring decision as bi-dimensional (changing location and ownership) or mono-dimensional (changing only location). Reshoring direction over time is based on Ketokivi et al. (2017) and shows direction of travel as the offshoring decision is reversed i.e. from offshore to backshore or nearshore. Two main research questions related to the reshoring decision are examined

RQ1: How do drivers of reshoring decisions relate to type of reshoring in terms of ownership and location?

RQ2: How is purchasing involved in the reshoring decision-making process?

Research methodology

This study is exploratory in nature, so multiple case studies were selected as an appropriate approach to answer 'how' questions (Yin 2003) and to describe phenomena in a real context through in-depth investigation (Voss, Tsikriktsis, and Frohlich 2002; Flyvbjerg 2006). In particular, case studies are appropriate to explore links between drivers of reshoring and types of reshoring decisions. This qualitative approach enables teasing out aspects of the reshoring decision-making process and how purchasing is involved. There is a strong history of the use of case study methodology to analyse offshoring and reshoring dynamics (Mudambi and Venzin 2010; Di Mauro et al. 2018; Ketokivi et al. 2017; Johansson and Olhager 2018), so this research builds on these qualitative foundations.

Table 2. Case study details.

Reshoring initiative embedded case study	Industry	Turnover 2016	Employees 2016	Home country
Tractor	Automotive	390 Million €	1234	Italy
Child 1	Pharmaceuticals	581 Million €	1700	Italy
Child 2				
Shirt	Apparel	9 Million €	77	Italy
Travel luggage	Leather goods	39 Million €	112	Italy
Automotive	Automotive	113 Billion €	230,000	Italy
Work luggage	Leather goods	60 Million €	267	Italy
Knitwear 1	Apparel	73 Million €	379	Italy
Knitwear 2				
Trousers	Apparel	7 Million €	13	Italy
Elevators	Transport systems	9 Billion €	50,000	US
Sport shoes 1	Sportswear	74 Million €	173	Italy
Sport shoes 2				
Sport shoes 3				
Sport shoes 4				
Casual shoes	Apparel	39 Million €	n.a.	US
Sitting room	Furniture	437 Million €	2232	Italy
Home appliances	Home appliance	5 Million €	38	Italy
Jackets 1	Apparel	47 Million €	125	Italy
Jackets 2				
Jackets 3				
Ski pole	Ski pole	1 Million €	5	US
Electric bikes	Bicycle	23 Million €	n.a.	Italy
Washing machine	Home appliance	5 Billion €	100,000	US
Formal suit	Apparel	1.3 Billion €	7000	Italy

Data collection

Initial selection of cases was through use of secondary sources (Cowton 1998) to identify companies featured in news media such as newspapers (e.g. Sole 24 Ore) or dedicated news collections (e.g. Pambianco News) as having taken reshoring decisions in 2015 or 2016; this yielded around 100 example companies. Secondary sources and primary data collection through telephone calls to each company were used to establish relevance to this research. Fratocchi et al.'s (2016) definition of reshoring as reversal of a previous offshoring decision was applied. This screening process led to 18 companies being identified, details of which are provided in the Appendix. This set of case studies contains variety in terms of sector, country, turnover and drivers of the original offshoring decision (as Gray et al. 2017 highlighted that most prior studies had focused only on cost-efficiency drivers).

Since the research questions relate to reshoring decisions, embedded case studies were used, selecting the reshoring initiative as the unit of analysis. The final set of case studies includes 25 reshoring initiatives embedded in these 18 companies, details of which are in Table 2.

For each case, data were collected through direct interviews performed during 2016 and 2017. Interviews were conducted face-to-face whenever possible or through virtual meetings. Each interview involved at least two researchers for comparison of perceptions and to avoid bias. To reduce information loss, notes were taken by researchers and the interviews were recorded where permission was granted. In each case two to five appropriate managers were interviewed. Interviewees included chief purchasing officers (CPO), chief executive officers (CEO), supply chain managers, vice presidents, senior vice presidents, production managers, and general managers. Interviews were conducted using a semi-structured interview protocol which was sent in advance to the interviewees (Brinkmann 2014). It included questions in the following areas (full interview protocol available upon request):

- General description of the company, including turnover, home country, product category, description of the supply chain and description of the purchasing department (Gray et al. 2013).
- Description of each original offshoring decision in terms of location, main drivers and characteristics (Jahns, Hartmann, and Bals 2006; Gray et al. 2013; Tate 2014).
- Description of each reshoring decision regarding location, main drivers and characteristics (Kinkel et al. 2009; Fratocchi et al. 2014, 2016; Foerstl, Kirchoff, and Bals 2016).
- Description of the decision-making process and the role of purchasing in reshoring decisions (Bals, Kirchoff, and Foerstl 2016).

Table 3. Criteria for data collection and analysis.

Rigour criterion	Definition	Choice
Internal validity	Causal relationships between variables and results	Research framework designed by existing reshoring literature
Construct validity	Quality of the conceptualisation or operationalisation of the relevant concept	1. Data triangulation (multiple direct interviews, secondary reports, information collected through workshops, direct observation during interviews) 2. Review of transcripts by a peer not involved in the paper 3. Transcription of interviews by at least two researchers involved in the paper
External validity	Level of generalisability of results not only in the setting in which they are studied	1. Multiple case studies 2. Nested approach (more reshoring initiatives within the same company) 3. Details on case study context, as reported in cross-case analysis tables
Reliability	The absence of random error	1. Case study protocol (a standard protocol was used for performing all the interviews) 2. Case study database (an online database for sharing transcription, within and cross-case analysis)

Data analysis

After the interviews, data were coded and cross-checked with the interviewees; queries and omissions of data were resolved through emails and virtual meetings. Data collected through the interviews were triangulated with secondary sources (including newspapers, websites, additional documents provided by the companies, presentation of the reshoring initiative in conferences or workshops). Where appropriate, interviews with trade associations (e.g. Assocalzaturifici – Italian Footwear Manufacturers' Association; Sistema Moda Italia – an Italian association of fashion companies; Founder of the Reshoring Initiative; and Unindustria Como – an Italian association of companies in the area of Como) were conducted to validate and enrich the case studies by providing contextual background. Consistent with Gibbert, Ruigrok, and Wicki (2008), validity and reliability were considered while conducting the case study selection and analysis, as summarised in Table 3.

All data collected were analysed using within-case and cross-case analysis. For within case analysis, a transcript of each case was produced using a common template and shared amongst the research team. Cases were coded using frameworks from the literature for drivers of reshoring decisions, reshoring decision types and involvement of purchasing, giving rise to dimensions shown below in Table 4. Case coding and analysis were cross-checked by the research team and the companies involved.

Findings on type, direction and drivers of reshoring

To answer *RQ1* that investigates how drivers of reshoring decisions relate to the type of reshoring, first findings on type are provided, followed by findings on patterns of relationships between drivers and type of reshoring decisions.

Type of reshoring decisions

Each case was analysed to understand whether reshoring decisions made bi- or mono-dimensional changes; a summary is provided in Table 5.

Six cases were of reshoring decisions involving a bi-dimensional change where location was backshored or nearshored and the change of ownership involved insourcing. However, most of the cases (19 out of 25) made mono-dimensional changes; whilst this finding is inconsistent with existing literature that suggests that these choices are often synergistic (Bals, Daum, and Tate 2015; Foerstl, Kirchoff, and Bals 2016), in practice this may be a deliberate decision as highlighted in the following quote:

> In our company, we tend to separate reshoring decisions concerning the location change, and aspects linked to the ownership (Purchasing Manager, Tractor)

When comparing the reshoring decision to the original offshoring decision, in seven of the 25 cases the original offshoring decision retained ownership in-house and continued in-house when they were subsequently backshored or nearshored.

Table 4. Case coding dimensions.

Coding dimension	Description	Coding value
Direction of change	Countries involved in the decision	from Country X to Country Y
Reshoring decision scope	Type of changes implemented with the decision (ownership, location)	Bi-dimensional (B) Mono-dimensional (M)
Reshoring decision type	Reshoring initiative classification	Backshore & outsource (B) Backshore & insource (B) Nearshore & outsource (B) Nearshore & insource (B) Backshore & stay outsourced (M) Backshore & stay in-house (M) Nearshore & stay outsourced (M) Nearshore & stay in-house (M)
Reshoring driver(s) category	Reshoring driver(s) classification	Cost; Operational; Organisational; Brand Reputation; Risk reduction; Government policy
Reshoring driver	Reshoring driver description	Specific driver
Purchasing strategic involvement	If purchasing is involved in most of the company strategic planning processes	Involved Not involved
Purchasing strategic focus	If purchasing objectives are set with a short-term or long-term perspective	Short term Long term
Strategic recognition of purchasing	How purchasing is recognised in its role by senior management (and other departments)	Good Low
Purchasing role in offshoring decisions	Role played by purchasing in the reshoring decision phases	Role in feasibility Role in planning Role in the implementation

Table 5. Links between drivers and reshoring decisions.

Reshoring scope	Reshoring types	Drivers of the reshoring decision	Cases
Bi-dimensional change – both location and ownership	• Backshore & insource • Nearshore & insource	• Operational drivers (operational flexibility) • Organisational drivers (availability of qualified workers) • Brand reputation (Made in effect)	Child 1 Child 2 Travel luggage Trousers Home appliances Electric bikes
Mono-dimensional change – ownership constant, location changes to near	• Nearshore & stay in-house • Nearshore & stay outsourced	• Cost drivers (labour cost; logistics cost) • Risk (currency exchange)	Work luggage Knitwear 1 Sport shoes 1 Jackets 2
Mono-dimensional change – ownership constant, location changes to home	• Backshore & stay outsourced • Nearshore & stay outsourced	• Operational drivers (lead time reduction; operational flexibility) • Brand reputation (Romania and Turkey)	Shirt Knitwear 2 Sport shoes 2 Sport shoes 3 Sport shoes 4 Casual shoes Jackets 1 Jackets 3 Ski pole
Mono-dimensional change – ownership constant, location changes to home	• Backshore & stay in-house • Nearshore & stay in-house	• Brand reputation (Made in effect) • Operational (Proximity to the home base R&D) • Governmental (Tax incentives)	Tractor Automotive Elevators Sitting room Washing machine Formal suit

In contrast, nine of the 25 cases managed their original offshoring choices with an outsourced approach, moving their supply bases abroad; when they backshored or nearshored, they continued with outsourced ownership. In five cases a bi-dimensional change was made twice, switching from domestic in-house to offshore outsourcing, then moving back to their original situation of in-house production. In these cases, the initial decision of offshoring was presented as a mistake, and the new decision of reshoring was presented as a willingness to rectify the business strategy and recover from this mistake.

The link between drivers and reshoring initiatives

The most common drivers of the reshoring decisions were operational reasons and brand reputation. Most of the reshoring decisions in the cases involved relocation from Eastern or Far Eastern countries to Italy. The primary motivation for this was to recover the 'Made in Italy' reputation.

> The management realized that an Italian company, only having the role of a trader, and not the producer, won't have any chance to be successful abroad. (CPO Travel Luggage)

> When we decided to bring production back from France to Italy, we did it because we fe[lt] we were losing the "Made in Italy" effect which has a value also for our industry. (Purchasing Manager, Tractor)

Consistent with other insights from literature (e.g. Fratocchi et al. 2016) it was found that in some cases the motivation to offshore to reduce costs declined as costs then started to increase in the offshore country. The need for greater control and to reduce increasing risk factors highlighted in the literature (e.g. Manuj and Mentzer 2008; Hartman, Ogden, and Hazen 2017; Hartman et al. 2017) also drove backshoring or nearshoring decisions.

> In the past, we decided to move our production activities to China mainly for cost reasons. After a while, not only labour cost in China started increasing, but we also started facing several unexpected challenges, such as the inability to be flexible to customer requirements, to quickly react to market request keeping lead time short, to limit the risk of suppliers start copying our products. (CPO of Child)

In seven of the 25 cases the original offshoring decision retained ownership in-house in the past because of their willingness to rely on their own plants available abroad for a variety of reasons (e.g. labour cost, government incentives). After a period, the companies decided to return to or near their home country with no change in the ownership status as these conditions no longer existed or the situation no longer met their needs due to the emergence of new elements. This transaction cost-based choice is coherent with Ketokivi et al. (2017) on the basis of Williamson (1985). Another critical driver of reshoring found in the cases is the need to move operations closer to domestic research and development (R&D), to improve innovation performance and reduce time to market (Carrincazeaux, Lung, and Rallet 2001; Ketokivi et al. 2017). Some companies mentioned organisational or government policy drivers. Organisational factors included the search for qualified workers; in some cases, workers were perceived as less skilled than expected in offshored countries, resulting in technical and quality problems. Government factors in the cases related to tax incentives to rebuild local supply chains, such as offered in the US and Switzerland (Tate 2014).

The cross-case analysis revealed recurring patterns between drivers and reshoring decisions. Table 5 shows the four main patterns discovered.

The first pattern involves bi-dimensional change reshoring. For all six cases that changed both location and ownership when reshoring, the drivers focused on the desire to regain control along the supply chain, improve brand reputation, and improve operational flexibility. The possibility of relying on their qualified local workers, compared to those with lower competences available in the offshore location, also motivated these companies to insource activities in or near their home country.

A second pattern can be identified for nearshoring where either insourced or outsourced arrangements were maintained. In the four cases making this reshoring decision their aim was to reduce costs, risks or improve quality control. For example, increasing labour and logistics costs and quality issues in Romania caused the reshoring decision. Risk of currency fluctuation caused reshoring decisions to nearshore into the Eurozone. The cases in this second group are in highly cost-competitive industries with high labour intensity (work luggage, sport shoes, jackets).

The third pattern relates to cases reshoring and staying outsourced. This decision is mainly driven by lead time reduction and the need for greater flexibility. It involves companies operating in volatile industries, such as the fashion industry, where the ability to respond quickly and react to market requests is crucial, factors that justified the original offshoring outsourcing option. However, brand reputation is fundamental in fashion; all these cases reported the importance of recovering the 'made in' effect as a leading driver of reshoring.

The fourth pattern refers to companies reshoring and retaining in-house production. Here the 'made in' effect was so important, the reshoring decision was promoted to improve image in the domestic country and presented as a byword for

Table 6. Patterns of involvement of purchasing in the decision-making process.

	Involvement in feasibility	Involvement in decision plan	Involvement in the implementation	Cases
No involvement	Not involved	Not involved	Not involved	Sport shoes (1, 2, 3, 4) Formal suit
Operational involvement	Not involved	Not involved	Redesign the supply base; Managing relationships with suppliers	Tractor Shirt Travel luggage Work luggage Knitwear (1, 2) Ski pol Electric bikes
Early involvement	Verifying cost and time constraints; Evaluating impacts on the supply base	Not involved	Redesign the supply base; Managing relationships with suppliers	Automotive Elevators Casual shoes Sitting room Home appliances Jackets (1, 2, 3) Washing machine
Strategic involvement	Verifying cost and time constraints; Evaluating implications on the supply base	Data analysis and reshoring type decision	Redesign the supply base; Managing relationships with suppliers	Child (1, 2) Trousers

quality. Operational drivers that were stressed as important were centred on getting R&D and operations closer together for greater collaboration and sharing or ideas. Government tax incentives to restore domestic supply chains were also key drivers.

In addition to showing connections between individual drivers and reshoring decisions, these four patterns help to explain broader, more strategic motivations behind reshoring decisions and groups of drivers that relate to the sector and country context as well as the companies. Having explored how drivers of reshoring are integrated in the process of reshoring decisions, the next set of findings examine the involvement of purchasing in these decisions.

Findings on involvement of purchasing in the reshoring decision-making process

Involvement of purchasing in stages of reshoring decision-making

Here purchasing involvement in the three main stages of reshoring decision-making – feasibility, decision planning and implementation – are examined. Most of the companies involved purchasing in the feasibility stage of decision-making to verify costs, lead times, relative merits of options and potential impact on the supply base. Several companies also involved purchasing in the implementation stage, especially when a redesign of the supply base was necessary as this involved managing critical supplier relationships, negotiation, and renewing relationships with previous suppliers. However, most of the companies did not involve purchasing in reshoring decision planning activities. Only in two cases – 'Child' and 'Trousers' – were purchasing involved in decision planning activities such as data analysis and making the actual reshoring decision. In the 'Automotive' case, whilst purchasing was not party to making the reshoring decision, they were consulted in the later parts of the process to check the proposed reshoring design.

Four types of involvement of purchasing were identified, namely no involvement, operational involvement (limited to implementation activities), early involvement (consultation in the feasibility stage), and full strategic involvement (where purchasing is an active promoter of the reshoring decision and involved throughout). Table 6 shows these patterns of purchasing involvement at different stages of reshoring decision-making.

The limited involvement of purchasing is somewhat surprising, given the profound impact reshoring decisions have on the supply base. As the central role of purchasing is to create and manage contracts and relationships with suppliers, their knowledge and experience should be invaluable in planning and assessing the impact of reshoring on a company's supply base.

Table 7. Involvement of the purchasing department for a different path of offshoring-reshoring initiatives (in **bold**, cases with a higher involvement of the purchasing department in offshoring decision; in *italics* cases with a lower involvement of procurement department in offshoring decision).

Path of the reshoring decision	Strategic involvement	Early involvement	Operational involvement	No involvement
Offshore in-house → backshore & stay in-house (M)		Washing machine Automotive Elevators Casual shoes Sitting room	Tractor	Formal suit
Offshore in-house → nearshore & stay in-house (M)			Work luggage	
Offshore & outsource → nearshore & insource (B)	*Child 1*			
Offshore & outsource → backshore & insource (B)	*Child 2* **Trousers**	*Home appliances*	*Electric bikes* **Travel luggage**	
Offshore & outsource → backshore & stay outsourced (M)		Jacket 1 Jacket 3	Shirt Knitwear 2 Ski Pole	Sport shoes 2 Sport shoes 3 Sport shoes 4
Offshore & outsource → nearshore & stay outsourced (M)		Jacket 2	Knitwear 1	Sport shoes 1

Relationship of type of reshoring initiative on purchasing involvement

In Table 7, type of reshoring is characterised as the decision path from A (the original offshoring decision) to B (the subsequent reshoring decision). For each case, the type of purchasing involvement – strategic, early, operational and no involvement – is shown.

In the case of in-house activities (i.e. from in-house offshoring to in-house backshoring or nearshoring), companies are likely to involve the purchasing department early, in order to understand whether the new supply base is ready and engaged in the activities. Although ownership does not change (so the supply base is constant), purchasing is involved in early stages to verify availability of supply back to the original production location, and the continuity of quality of these existing suppliers. The senior vice president for supply and sourcing in the 'Elevator' case explained the different levels of involvement of the purchasing staff saying:

> For the offshoring decision, the purchasing department was mainly informed, but not actively involved. Now (i.e., for reshoring), we need to change this approach: the purchasing department has been involved mainly because the supply base was supposed to be the same before and after reshoring (because most of the suppliers operate at the global level). The purchasing department had to nurture and defend the relationships with active partners [who were] asked to switch their supply from the Mexican plant to the U.S. one. (SVP Supply, Elevator)

The findings show a much stronger involvement of purchasing is necessary when a bi-dimensional change, changing location and ownership, is proposed. In particular, for cases where a movement from an offshore & outsource to backshore or nearshore & insource is happening, purchasing is deeply involved and integrated in the reshoring decision-making process. For example, the Child 2 case highlights the importance of involving purchasing in the choice from the preliminary phases onwards:

> Purchasing was heavily involved in the decision to reshore, as we expect strong knowledge support in a project of this type. [. . .] They guided the project not because they were the most affected role, but because they were the closest to market needs and ability to create a strong and responsive supply network, in a period where many of them have disappeared due to the Italian economic downturn. (CPO, Child 2)

In cases where purchasing had limited involvement in the original outsourcing decision, they were involved more in the insourcing (e.g. Child). Here the role of purchasing was to assist in assessing whether the company had capacity and capability to produce what had been outsourced. This signals learning by the company that some important variables had not been considered sufficiently in the original offshoring outsourcing decision.

In contrast to this, some cases showed only operational involvement of purchasing to verify supply availability to support the reshored production operations. This was discussed by the marketing manager of 'Travel Luggage', who described the role of purchasing during the relocation process:

> We have a purchasing department in Italy and one in China, responsible for operational decisions. A strategic involvement was not necessary because recreation of a supply base for raw material in Romania was not an obstacle; some new relationships with suppliers were created by the company directly (the project manager of the reshoring initiative) whereas some other relationships were maintained in China. (Marketing manager, Travel Luggage)

In cases where production is outsourced and after reshoring remains so, purchasing is either not involved or has limited involvement in the reshoring part of this decision-making process. They were used to scout and evaluate suitability of new suppliers and support redesign of new insourced supply chains, but not to decide to reshore. In the Sport Shoes cases there was high purchasing involvement in the original offshoring decision-making, but much lower involvement in four reshoring decisions made by the company, as explained by the head of global operations:

> Managing Asian suppliers was extremely onerous given also the difficulties of communication and the cultural and social differences, so the involvement of purchasing was necessary. With Italian suppliers instead, the task is simpler. (Head of Global Operations, Sports Shoe)

The influence of purchasing recognition on its role in reshoring decisions

Despite arguments for purchasing to be recognised in organisations as having strategic value (Paulraj, Chen, and Flynn 2006), in these cases this did not seem to be a strong factor in determining the involvement of purchasing in reshoring decisions. In the cases where purchasing did play a role in the reshoring decision, there was evidence of high and low levels of recognition of strategic relevance, as highlighted in Table 7. Whilst purchasing may not be represented on boards of companies, and therefore be recognised as strategically relevant, their strategic role in certain decisions may still be appreciated in some circumstances (Luzzini and Ronchi 2016). However, the cases did show that in most companies where the strategic relevance of purchasing was low, in the main purchasing tended to have no or little involvement in the reshoring decision, thereby reducing internal decisional complexity by involving fewer stakeholders. However, purchasing can add new perspectives and result in more effective decision-making (Luzzini et al. 2014). For companies that want to receive full benefits from the early involvement of purchasing in reshoring decisions, organisational perceptions of them as strategically relevant may ease the decision to include them.

Conclusions and future developments

Contribution to theory and practice

This research contributes to the reshoring literature in two main ways. First, it contributes to understanding of drivers of reshoring decisions. Whilst there is an extensive literature on defining drivers of reshoring decisions (Fratocchi et al. 2014, 2016), providing typologies and taxonomies of drivers (Foerstl, Kirchoff, and Bals 2016), the link between these drivers with types of reshoring decisions has not been clearly made until now. This study relates specific drivers of reshoring decisions with four types of reshoring typified by changed location (a mono-dimensional reshoring decision) or both location and ownership (bi-dimensional). The empirical findings relating to drivers and types of reshoring decisions enhance the mainly conceptually-based research previously conducted.

Second, whilst research has examined the process of reshoring decision-making (Bals, Kirchoff, and Foerstl 2016), the role of purchasing in this process has not been examined sufficiently. As location of a supply base is a key aspect of offshoring/reshoring decisions (Van den Bossche et al. 2014), the role of purchasing should be significant. In this study four types of purchasing involvement in the reshoring decision-making process are identified, namely no involvement, operational involvement, early involvement, and strategic involvement; these are shown to relate to decision pathways from offshored production to various types of reshoring. The strategic role of purchasing within the cases helps, in part, to explain variation of involvement in reshoring.

In practice, as the trend of reshoring production is rising among manufacturers, previous offshoring decisions should be re-evaluated, as drivers of offshoring such as lower labour costs and proximity to customer markets, have changed. Decision makers involved in reshoring might be guided by understanding the different types of reshoring and how they relate to various drivers of these decisions. A novel contribution to practice is made through explaining the value of involvement of purchasing in different stages of the reshoring decision-making process.

Limitations and future developments

While this research provides useful insight into the reshoring decision-making process and the strategic role of purchasing in those decision, there are limitations. The patterns identified are based on qualitative research of a set of case studies, limiting generalisability of findings. The cases were selected on the basis of their publicised reshoring activities, then screened and filtered to provide variety of size, country, turnover and what drove them to outsource production. Prior empirical studies

had focused mainly on cost drivers (Gray et al. 2017) so this spread of cases is more ambitious but could impact on generalisability.

Patterns of types of reshoring and level of purchasing involvement in reshoring decisions require further examination and validation. A quantitative study of a larger number of reshoring decisions could improve generalisability of findings from this study. Also, the research study was performed close in time to the implementation of each reshoring initiative; further reflection over time may change the views of the senior practitioners involved in the research as circumstances and learning develop. Temporal studies provide a different perspective by tracking how reshoring decisions are developed over time (Ketokivi et al. 2017); more longitudinal case study research to highlight milestone decision points and their causes, and purchasing's changing involvement in these decisions would be valuable. Snapshot research relying on memories and perceptions of historical involvement in decision-making can be influenced by critical incidents that dominate perceptions (Bitner, Booms, and Tetreault 1990). Action research studies (Reason 2006) would enable engagement with the evolution of decision-making through the stages of a reshoring decision.

In this research, intellectual property and its management within reshoring decisions was not explored, however in cases where R&D performance drove the outsourcing decision this would be critical in decision implementation. Further research studies on R&D driven reshoring and impact on intellectual property would provide depth of understanding in these particular types of reshoring. Finally, government policy to attract domestic investment may encourage manufacturers to reconsider offshoring through the use of incentives such as grants and tax benefits; research from a public policy perspective might examine effectiveness of various mechanisms used by governments to stimulate reshoring.

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Appendix. Cross case analysis (RQ1)

Case	Direction of change	Reshoring decision scope	Reshoring type	Description	Driver classification	Driver
Case tractor	France – Italy	Mono-dimensional change	Backshore & stay in-house	Production and assembly from the French plant to the Italian plant	Operational; brand reputation	Proximity to home base R&D; made in Italy
Case child – 1	China – Romania	Bi-dimensional (combined) change	Nearshore & insource	Car seat production from Chinese suppliers to Romanian plant	Operational; brand reputation; risk reduction	Operational flexibility; lead time reduction; customer proximity; spillover risk
Case child – 2	China – Italy	Bi-dimensional (combined) change	Backshore & insource	High chair production from Chinese suppliers to Italian plant	Operational; brand reputation; risk reduction	Operational flexibility; lead time reduction; customer proximity; spillover risk
Shirt	Romania – Italy	Mono-dimensional change	Backshore & stay outsourced	Production of capsule collections from Romanian suppliers to Italian suppliers	Brand Reputation	Made in effect
Travel Luggage	China – Italy	Bi-dimensional (combined) change	Backshore & insource	Production activities from Chinese suppliers to Italian plant	Organisational; brand reputation	Made in effect; availability of qualified workers
Automotive	Poland – Italy	Mono-dimensional change	Backshore & stay in-house	Production activities from Polish plant to Italian plant	Operational; brand reputation	Proximity to home base R&D; made in Italy
Work luggage	China – Romania	Mono-dimensional change	Nearshore & stay in-house	Production activities from the Chinese plant to the Romanian plant	Risk reduction; cost; operational	Volatility in currency value; labour cost; logistics cost; lead time
Knitwear – 1	China – Romania	Mono-dimensional change	Nearshore & stay outsourced	Production of knitwear from Chinese suppliers to 12 Italian entrepreneurs in Romania	Risk reduction; cost; operational	Labour cost; volatility in currency value; cost of quality control
Knitwear – 2	Turkey – Italy	Mono-dimensional change	Backshore & stay outsourced	Knitting activities from Turkey suppliers to Italian suppliers	Brand reputation; operational	Made in effect; operational flexibility
Trousers	Romania – Italy	Bi-dimensional (combined) change	Backshore & insource	Production of 'luxury' lines from Romanian suppliers to the Italian plant	Brand reputation; Organisational; Operational	Made in effect; quality and product safety problems; availability of qualified workers

(*Continued*).

Appendix. Continued.

Case	Direction of change	Reshoring decision scope	Reshoring type	Description	Driver classification	Driver
Elevators	Mexico – US	Mono-dimensional change	Backshore & stay in-house	Production activities from Mexican plant to American plant	Operational; brand reputation; risk reduction	Proximity to home base R&D; environmental risk; customer proximity
Sport shoes – 1	China – Serbia	Mono-dimensional change	Nearshore & stay outsourced	Production of a model of footwear from Chinese supplier to Serbian supplier	Cost; operational	Labour cost; order fragmentation
Sport shoes – 2	China – Italy	Mono-dimensional change	Backshore & stay outsourced	Production of work shoes from a Chinese supplier to an Italian supplier	Operational	Lead time reduction; operational flexibility
Sport shoes – 3	China – Italy	Mono-dimensional change	Backshore & stay outsourced	Production of tennis collection from a Chinese supplier to an Italian supplier	Operational	Proximity to home base R&D, lead time reduction, operational flexibility
Sport shoes – 4	China – Italy	Mono-dimensional change	Backshore & stay outsourced	Production of soccer clothes from Chinese suppliers to an Italian supplier	Operational	Lead time reduction; operational flexibility; proximity of raw materials
Casual shoes	Asia – Europe	Mono-dimensional change	Backshore & stay outsourced	Production of 'civil' shoes from Asian suppliers to European suppliers	Organisational; brand reputation; risk reduction	Lead time reduction, transportation cost, availability of qualified personnel
Sitting room	Romania – Italy	Mono-dimensional change	Backshore & stay in-house	Overall production of living room from Romanian plant to Italian plant	Brand reputation; Organisational	Made in effect; brand reputation; availability of qualified personnel
Home appliances	Slovakia – Italy	Bi-dimensional (combined) change	Backshore & insource	Production of components from Slovakian suppliers to Italian plant	Operational; brand reputation	Automation level; operational flexibility

(*Continued*).

Appendix. Continued.

Case	Direction of change	Reshoring decision scope	Reshoring type	Description	Driver classification	Driver
Jackets – 1	China – Italy	Mono-dimensional change	Backshore & stay outsourced	Production of knitwear from Chinese suppliers to Italian suppliers	Cost; operational; risk reduction	Volatility in currency value; labour cost; logistics cost; lead time; customer proximity
Jackets – 2	China – Romania	Mono-dimensional change	Nearshore & stay outsourced	Production of pants from Chinese suppliers to Romanian suppliers	Cost; operational; risk reduction	Volatility in currency value; labour cost; logistics cost; lead time; customer proximity
Jackets – 3	Romania – Italy	Mono-dimensional change	Backshore & stay outsourced	Production of pants, jackets, shirts and dresses but knitting from Romanian suppliers to Italian suppliers	Brand Reputation	Made in effect; quality
Ski pole	China – US	Mono-dimensional change	Backshore & stay outsourced	Purchasing of components from Chinese suppliers to America suppliers	Organisational; operational; risk reduction	Availability of qualified personnel, lead time reduction, supply chain risk
Electric bikes	China – Italy	Bi-dimensional (combined) change	Backshore & insource	Production from Chinese suppliers to Italian plant	Brand reputation; Organisational	Made in effect; quality and product safety problems; availability of qualified workers
Washing machine	Mexico – US	Mono-dimensional change	Backshore & stay in-house	Production activities of washing machines for US market from Mexican plant to American plant	Government policy	Tax incentives
Formal suit	Switzerland – Italy	Mono-dimensional change	Backshore & stay in-house	Cutting activities for jackets from the Suisse plant to the Italian plant	Government policy	Tax incentives