

## **A Multi-Theory Framework for Understanding the Reshoring Decision**

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### **ABSTRACT**

Recently firms have been reconsidering offshoring decisions, and have been reshoring activities back from offshore locations to domestic locations. The aim of this paper is to develop a framework for understanding location and governance choice in the reshoring decision. Employing the eclectic paradigm, the resource-based view and transaction cost economics as a theoretical basis, this research highlights the value of integrating location-specific factors with process- and firm-specific factors for understanding location and governance choice in the reshoring decision. Moreover, the framework highlights the value of understanding the interaction of the location-, firm- and process-specific factors on the reshoring decision.

### **Keywords:**

Reshoring; Eclectic Theory; Resource-based View; Transaction Cost Economics

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## 1. Introduction

Outsourcing and offshoring have been important strategies for firms for decades (Doh, 2005; Hätönen & Eriksson, 2009), and continue to attract scholarly interest from both international business (IB) and Operations and Supply Chain Management (OSCM) scholars (Albertoni et al., 2017; Ellram, 2013; Foerstl et al., 2016; Hätönen & Eriksson, 2009; McIvor, 2013). Many offshoring decisions have been based on the need to reduce costs and transfer risks and responsibilities to suppliers located offshore (Bals et al., 2016). However, more recently firms have been increasingly reconsidering previous offshoring decisions, and begun to bring activities back from offshore locations to domestic locations (Ellram, 2013; McIvor, 2013). Decisions to transfer offshored activities back to domestic locations, or to re-integrate outsourced activities back into their organisations are often referred to as reshoring and insourcing respectively (Ellram et al., 2013; Foerstl et al., 2016; Gray et al., 2013; Stentoft et al., 2016b; Tate & Bals, 2017).

From a practice perspective, the European Reshoring Monitor (2019), for example, reported on 250 cases of reshoring over 4 years (2014-2018), and in 2018 the number of US companies reporting new reshoring was at its highest level in recorded history (Moser, 2019). More recently, beyond more typical competitiveness aspects, the potential of sustainability to drive additional reshoring has been emphasized (Fratocchi and Di Stefano, 2020; Reshoring Institute, 2020), a trend which began a few years ago (Ashby, Leat & Hudson-Smith, 2012). Moreover, in light of the COVID-19 pandemic, the benefits of shortened supply chains with production located close to markets has become a strategic imperative for improving supply chain resilience (Gereffi, 2020; Seric and Winkler, 2020; Strange, 2020).

Reshoring research has been carried out spanning multiple domains, as it relates to issues in strategic and operations management, international business and also to the role of institutions (Srai and Ané, 2016). There are a number of strands to this literature including defining types of reshoring (Ellram, 2013; Foerstl et al., 2016; Gray et al., 2013); drivers for reshoring including the influence of offshoring failure and performance shortcomings of offshoring (Albertoni et al., 2017; Fratocchi et al., 2016; Srai and Ané, 2016); consumer influences on reshoring (Grappi et al., 2018) and changes in the offshore country environment such as rising labour and/or energy costs (Tate et al., 2014). Understanding why firms reshore provides a useful basis for understanding why certain activities are reshored, where activities are located and how they are governed (Benito, 2015). As multi-national enterprises (MNEs) increasingly consider reversing offshore outsourcing decisions, reshoring is a useful context for combining knowledge of both location decision and governance literature (Kedia & Mukherjee, 2009).

Turning to the reshoring drivers, three categories have been highlighted in the literature including managerial mistake recognition (Kinkel, 2014; Kinkel and Maloca, 2009), change in the external environment (Martínez-Mora & Merino, 2014), and strategic shift (Bals et al., 2016; Baraldi et al., 2018; Di Mauro et al., 2018). How these different drivers and their underlying decision making processes<sup>1</sup> should be integrated into a theory-based framework remains an opportunity which this paper seeks to address.

Moreover, there are multiple reshoring scenarios possible, depending on the combinations of location and governance choices, such as reshoring to local suppliers

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<sup>1</sup> In terms of decision making processes in scope of this research, this paper focuses on the the first part of the reshoring process model proposed by Bals et al. (2016), i.e. sourcing decision making processes, and not the subsequent implementation stage.

or reshoring and investing in the necessary resource to perform the activity inhouse (e.g. Foerstl et al., 2016; Gray et al., 2013). But why are companies choosing either option, and how can a theoretical framework inform the decision making process? The following examples illustrate that such decisions are complex, and are not just focused on cost reduction. Whilst General Electric reshored manufacturing from China to the US for quality reasons (Bals et al., 2016), Prada decided to invest in new factories in Italy, to reshore parts of its production in order to transfer production know-how to future generations (European Reshoring Monitor, 2019).

Therefore, the aim of this research is to present a conceptual paper which offers a framework for understanding location and governance choice in the reshoring decision. Previous literature suggested that location-specific factors should be combined with factors at the process- and firm-level to explain location and governance model choice in sourcing decisions (Doh et al., 2009; Graf & Mudambi, 2005; Jensen & Pedersen, 2011). Employing the eclectic paradigm, the resource-based view (RBV) and transaction cost economics (TCE) as a theoretical basis, the research here integrates location-specific factors with process- and firm-specific factors to develop a framework for explaining the reshoring decision. Analysis at the process level is particularly important given that features of the process such as the level of standardised requirements are likely to influence the ease with which a process can be reshored back to the firm in the home country (Ellram et al., 2013). Moreover, firm-specific factors such as the need to develop critical capabilities locally may lead to a firm reshoring processes back to the home country (Di Mauro et al., 2018).

The research makes a number of contributions. Firstly, the framework highlights the value of understanding the interaction of location-, firm- and process-specific factors on the reshoring decision-making process, and how different

combinations of these factors lead to different location and governance combinations. Illustrations from reshoring practice are introduced into the framework to highlight how these factors interact to influence each of the different combinations.

Secondly, the research adopts a multi-theory approach to understanding the reshoring decision, and is a response to those who have argued for frameworks that bring together strands of strategic management theories, economics and geographic location theories (Grappi et al., 2018; Buckley & Lessard, 2005). Moreover, the framework is based on robust theoretical foundations, which can be tested in future empirical studies.

Finally, the research in this paper addresses an important area for practitioners. As organisations increasingly reshore business processes due to performance problems in the offshore location, they are also seeking to use reshoring as a strategy for competitive differentiation through having processes performed in-house locally or by local suppliers (Foerstl et al., 2016). The reshoring framework developed in this paper provides a mechanism for understanding which processes should be reshored, based on firm- and process-specific considerations rather than on location influences alone.

The remainder of the paper is organized as follows. The following section briefly outlines the methodology of this research. The subsequent section reviews the current literature and provides a rationale for employing the theories as a basis for the reshoring framework. The framework is then presented along with the influencing factors and sourcing options. Finally, the discussion and conclusions section summarises the contribution of the research along with implications for practitioners, policy makers and further research.

## **2. Research Approach**

This paper seeks to address how different reshoring drivers and their underlying decision making processes might be integrated into a theory-based framework. For that purpose, this paper is not engaging in a systematic literature review methodology or any empirical data collection, but is classified as a conceptual paper. Therefore, the aim of the next section is to provide a concise, yet comprehensive overview on the reshoring drivers literature as the basis for theoretical framework development. As Gilson and Goldberg (2015, p. 128) note in their very insightful editorial on differences between review papers and conceptual papers: “In a conceptual paper, the review section should be relatively brief, as the piece then moves to tackle one area in need of attention from a theoretical lens”.

Conceptual papers are not just papers without data, but “provide an integration of literatures, offer an integrated framework, provide value added, and highlight directions for future inquiry [and] are not expected to offer empirical data” (Gilson and Goldberg, 2015, p. 127). Conceptual papers do not seek to propose new theory at the construct level unlike theory papers (Cropanzano, 2009). Instead, they aim to integrate existing theories in ways that are interesting, provide inter-disciplinary linkages, multi-level insights and broaden the scope of thinking in the field; and in order to achieve this they should follow a problem-based approach, clearly addressing the “what’s new” question (Gilson and Goldberg, 2015).

Whetten (1989) offered seven questions as criteria that conceptual papers should be judged on. Although conceptual papers do not need to address all seven question in the same detail (Gilson and Goldberg, 2015), the related insights from this research are shown in Appendix A. Furthermore, although it is not a formal requirement of a conceptual paper to have a figure (Sutton & Staw, 1995), we later offer our synthesized understanding of the reshoring decision-making process based on

theoretical considerations as a figure, in line with the notion that figures are almost universally used in conceptual work (Fulmer, 2012).

The development process of the framework in this paper is outlined as follows. Although literature on the reshoring decision highlighted a number of categories of reshoring drivers, we found there was an absence of a framework that brought together these different strands in the reshoring literature. Therefore, our aim involved developing a synthesizing reshoring framework. We selected the relevant theories, TCE, the RBV and eclectic theory, on the basis of their alignment with the drivers highlighted in the literature, as outlined in the following section.

### 3. The reshoring phenomenon

#### 3.1 Reshoring literature

Based on a recent comprehensive literature review of the reshoring field (Barbieri et al., 2018) reshoring drivers have been classified into the following three categories:

- *Managerial mistake recognition* (Kinkel, 2014; Kinkel and Maloca, 2009) - Firms often offshore without fully considering the cost and performance implications, which can lead to reshoring (Kinkel, 2014). In this category, reshoring is often as a result of failure in the offshoring operation (Albertoni et al., 2017; Bals et al., 2016; Foerstl et al., 2016; Kinkel, 2014; Kinkel and Maloca, 2009).
- *Change in the external environment* (Martínez-Mora & Merino, 2014) - This category can include factors such as deteriorating supplier delivery and lead times, and a reduction in the labour advantage between the home and host country (Barbieri et al. 2018).
- *Strategic shift* (Bals et al., 2016; Baraldi et al., 2018; Di Mauro et al., 2018) - In this category a firm may decide to reshore a process from an offshore location as a result of a strategic decision to market its products as being manufactured locally or achieve greater flexibility (Di Mauro et al., 2018). Strategic shift includes tactical reshoring that is based on the temporary availability of capabilities and/or resources in the home country (Joubioux and Vanpoucke, 2016 ), and where reshoring is used to upgrade reshored products (Bettioli et al., 2017, 2019).

There are often a host of factors at play in these types of reshoring decisions, and there are differing levels of emphasis on the factors across the IB and OSCM literatures. For example, Albertoni et al. (2017), in their study of reshoring from an IB



perspective, considered factors such as new market penetration, labour cost savings, availability of talent, political, cultural and geographical distance. Alternatively, Foerstl et al. (2016), in their analysis of reshoring from an OSCM perspective, highlighted factors such as cost and performance problems, prior offshoring experience, inter-firm relationships, supply chain complexity, and task uncertainty. There are a few studies that combine factors from the IB and OSCM literatures including Barbieri et al. (2018) and Srari and Ané (2016). In particular, through analysing the IB, OSCM and political economy reshoring literature streams Srari and Ané (2016) have identified seven categories of reshoring drivers including quality and brand image, country factor costs, reconfiguration and restructured costs, enhanced innovation, responsiveness and resource efficiency, risk management and dependability and institution. Table 1 summarises some of the influencing factors associated with each of these seven categories.

Although research in the reshoring area has been intensifying and the factors that influence the reshoring decision are well understood in the literature, limited research has been undertaken on understanding how these factors interact to influence the reshoring decision (e.g. Bals et al., 2016; Barbieri et al., 2018; Benstead et al, 2017; Boffelli and Johansson, 2020; Wiesmann et al., 2017). There is an opportunity to add theoretical depth to our understanding of how the reshoring decision is made.

A key aspect of the reshoring decision is the reversal of a location choice (Gray et al., 2013). Some authors have highlighted the value of Dunning's (1988, 1990) eclectic paradigm as a theoretical basis for analysing how country factors influence the location aspect of the reshoring decision (Grappi et al., 2018). However, location factors alone cannot explain the reshoring decision, and additional theoretical perspectives are required (Bals et al., 2016). Beyond the relocation decision, firms still

have to decide on the governance mode to be employed, making this phenomenon relate to two key considerations for MNEs, namely location choice and governance structure choice (Buckley et al., 2007). Location and governance model choice in the reshoring decision depends on the fit between both location factors and characteristics of the reshored processes (Albertoni et al., 2017). For example, process-specific characteristics such as the need for increasing customisation and complexity in requirements beyond what was required when the initial offshoring decision was made, can also influence the reshoring decision (Di Mauro et al., 2018; Fratocchi et al., 2016).

<b>Drivers of reshoring</b>	<b>Influencing factors</b>
Quality and brand image	Ability to deliver good quality products Location branding for quality image Location branding for local social impact Location branding for traceability of the product
Country factor costs	Labour costs Energy costs Ease of automation Local incentives Labour productivity
Reconfiguration and restructured cost	Currency fluctuations Taxes and import duties Reduced costs of transportation Reduced costs of inventory Reduced costs of communication Reduced administrative costs Vertical integration
Enhanced innovation	Technology clusters and spillover benefits Defining a new product mix or new value proposition
Responsiveness and resource efficiency	More rapid product development More rapid replenishment Proximity to customers Proximity to R&D
Risk management and dependability	Diversification of the supply base Political stability IP protection Increased certainty around delivery times Better traceability of products Access to local know-how
Institution	Availability of skilled workforce Availability of natural resources Availability of infrastructure

**Table 1. Drivers of reshoring and influencing factors  
(Adapted from Srari and Ané, 2016)**

Firm-specific factors can also influence location and governance model choice in the reshoring decision (Bals et al., 2016). These factors can include changes in

strategic priorities, corporate restructurings, behavioural influences and resource allocation and investment decisions across the firm (Boffelli et al., 2020; Hätönen, 2009). For example, the need for increasing customer responsiveness as a competitive differentiator can lead to a firm pursuing a strategy of reshoring processes back to local suppliers from offshore locations (Foerstl et al., 2016). Moreover, a fear of losing innovation potential at the firm level can also lead to a firm reshoring certain processes (Di Mauro et al., 2018).

Currently, there is an absence of theoretical frameworks in the literature that explain the interaction of location, process-specific and firm-specific factors in the reshoring decision. There are often a number of interrelated factors at the location, process and firm-levels that influence the reshoring decision, and these cut across a number of streams of literature including IB and OSCM. There is a need to synthesise these factors and streams of literature into a framework that integrates these factors for understanding location and governance choice in the reshoring decision.

### ***3.2. Theoretical basis for the reshoring framework***

The eclectic paradigm, the RBV and TCE were employed as a theoretical basis for integrating location-specific factors with process- and firm-specific factors to develop a framework for explaining the reshoring decision. Using the reshoring driver categories identified by Srari and Ané (2016) we highlight how the eclectic paradigm, the RBV and TCE relate to some of the influencing factors in each of the drivers as shown in Table 2. This provides a rationale for selecting each of the theoretical perspectives for explaining the reshoring decision, and the logic of this rationale is outlined below.

<b>Drivers of reshoring</b>	<b>Influencing factors</b>	<b>Link with theoretical perspective</b>
Quality and brand image	Ability to deliver good quality products Location branding for quality image Location branding for traceability of the product	RBV RBV RBV RBV
Country factor costs	Labour costs Energy costs Local incentives Labour productivity	Eclectic Eclectic Eclectic Eclectic
Reconfiguration and restructured cost	Currency fluctuations Taxes and import duties Reduced costs of communication Reduced administrative costs Vertical integration	Eclectic Eclectic TCE TCE RBV/TCE
Enhanced innovation	Technology clusters and spillover benefits Defining a new product mix or new value proposition	RBV RBV
Responsiveness and resource efficiency	More rapid product development More rapid replenishment Proximity to customers Proximity to R&D	RBV RBV RBV/TCE RBV/TCE
Risk management and dependability	Diversification of the supply base IP protection Increased certainty around delivery times Access to local know-how	TCE TCE TCE RBV
Institution	Availability of skilled workforce Availability of natural resources Availability of infrastructure	Eclectic Eclectic Eclectic

**Table 2. A summary of the link between the eclectic paradigm, the RBV and TCE and drivers of reshoring and influencing factors (Adapted from Srari and Ané, 2016)**

Dunning's eclectic paradigm is primarily a theory of how firms choose between exports, licensing and foreign direct investment (FDI) as alternatives for serving overseas markets (Dunning, 1988, 1980). The eclectic paradigm posits that multinational activities are driven by *ownership*, *location* and *internalisation advantages* (OLI). Ownership advantages are firm-specific advantages that are directly related to the resources owned or controlled by a firm. A firm attains internalisation advantages when it eliminates the transaction costs associated with market interaction, and internalises these activities with the firm's hierarchy. Location-specific advantages are based on resources, networks, institutional structures or other advantages that are specific to a geographic entity and are immovable.

The location, ownership and internalization advantages determinants of the eclectic paradigm have been applied widely in the IB literature to explain the origin, level, pattern and growth of MNEs' offshore activities (Eden & Dai, 2010), including international production and foreign-owned activities including FDI (Dunning, 1988; 2001; Stoian & Filippaios, 2008). The value of applying the location advantages determinant of the eclectic paradigm to the reshoring location decision is being increasingly acknowledged in the IB literature (Albertoni et al., 2017; Barbieri et al., 2019; Grappi et al., 2018). Dunning's eclectic paradigm can assist with understanding the location attractiveness influences on the reshoring decision. For example, Dunning (2001) identified three categories of factors affecting location advantages including infrastructure (physical and digital capabilities related to communication, production and transportation), country risk (economic and political risk factors), and government policy (costs and location incentives).

Graf and Mudambi (2005) extended Dunning's framework, that exclusively encompassed host country level factors, by integrating an additional human capital dimension to explicitly account for specific skilled labour requirements to explain the location decision for IT-related business processes. Although the eclectic paradigm can explain location factors such as host location attractiveness, it does not consider critical factors at the firm and process level that influence the reshoring decision including poor supplier quality, supplier dependence, loss of control and reputation effects. For example, reshoring has been driven by higher costs associated with offshoring in the form of poor quality, supplier dependence and excess coordination and monitoring poorly performing suppliers (Bals et al., 2016). Moreover, the loss of control over suppliers that behave opportunistically can lead to severe financial and reputation costs (Gray et al., 2013).

Therefore, additional theoretical perspectives are required for a more fine-grained analysis of how process- and firm-level factors influence reshoring decisions. Indeed, a number of authors have highlighted the importance of augmenting the eclectic paradigm with theories that require the analysis of sourcing decisions at the firm and process levels (Albertoni et al., 2017; Gerbl et al., 2015; Schmeisser, 2013; Hätönen, 2009).

In addition to the eclectic paradigm, the RBV and TCE were employed to analyse the influence of process-level and firm-level factors on the reshoring decision. Both theories have been widely applied to outsourcing in previous studies (Arnold, 2000; McIvor, 2009). TCE specifies the conditions under which an organization should manage an economic exchange internally within its boundaries (hierarchies) and the conditions suitable for managing an economic exchange externally (markets) (Williamson, 1975). Hierarchies involve performing processes inside the firm, whilst markets involve relatively short-term, bargaining relationships between independent buyers and suppliers. Production costs are the direct costs in creating a product and include labor and infrastructure costs. Transaction costs involve the costs of monitoring, controlling, and managing the contract with the supplier. Influences on transaction costs include the level of specific investments involved, uncertainty, and performance measurement difficulties, and the number of suppliers (Williamson, 1985). These influences on transaction costs are closely related to process-level factors and will influence switching costs in the reshoring decision.

The RBV is regarded as a valuable theoretical framework for analysing the influence of both firm- and process-level factors such as the strategic importance of the process and the need to develop internal capabilities on the reshoring decision (Ancarani et al., 2015; Grappi et al., 2018). The RBV views the firm as a bundle of

assets and resources that if employed in distinctive ways can create competitive advantage (Barney, 1991). Proponents of the RBV argue that heterogeneity in an organisation's knowledge-based resources and capabilities explain differences in performance and the sustainability of a competitive advantage (Barney, 1991). The RBV is important to the study of outsourcing, as superior performance achieved in organisational processes relative to competitors would explain why such processes are performed internally (McIvor, 2009). Therefore, it is not surprising that in previous work on location decisions, the influence of 'human capital' has been considered along with additional influences such as 'infrastructure', 'country risk' and 'government policy' associated with the eclectic paradigm (Graf & Mudambi, 2005). Therefore, this research is also closely linked with the RBV. For example, reshoring decisions can be employed to improve production quality and also ensure higher levels of flexibility and avoid supply volatility (Ancarani et al., 2015; Wu & Zhang, 2014).

#### **4. A framework for the reshoring decision**

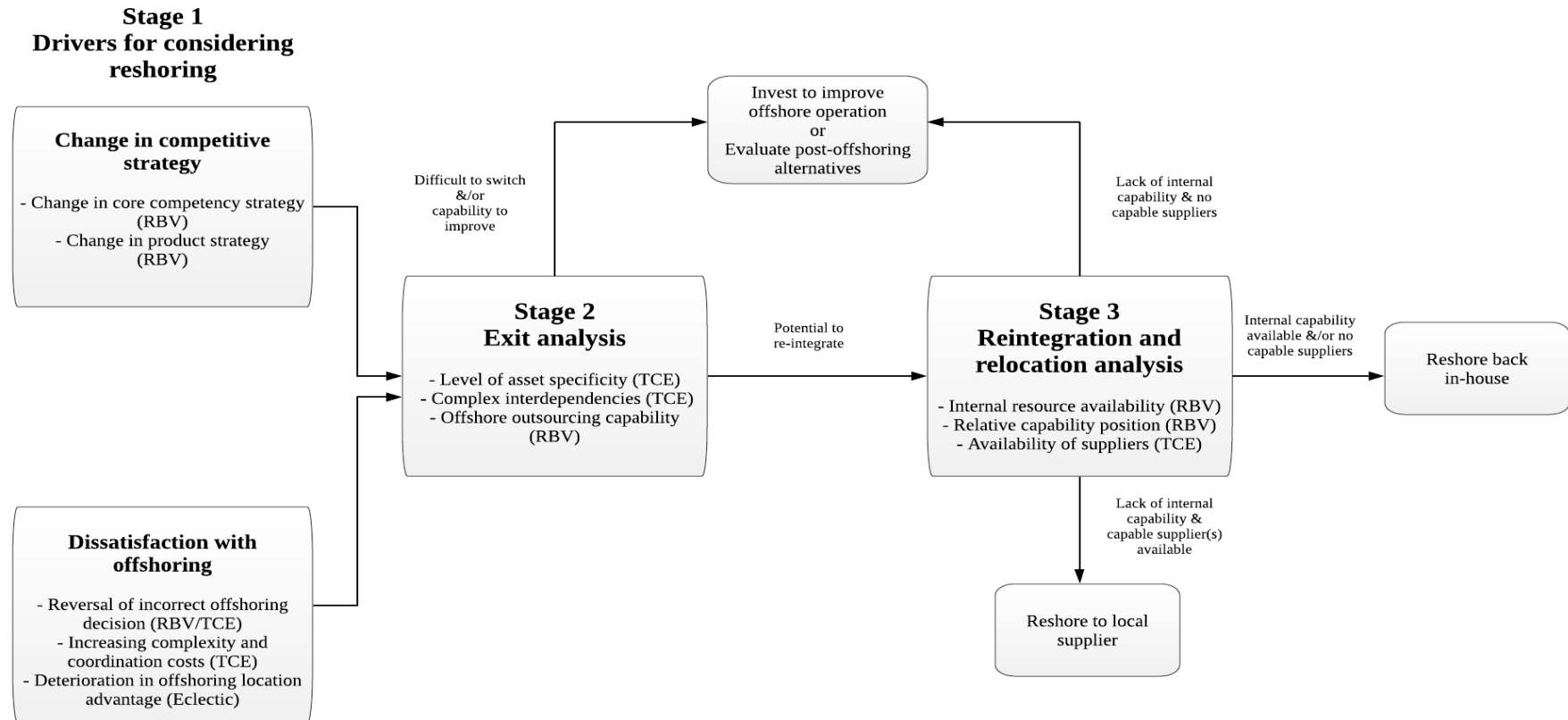
The logic of eclectic theory, the RBV and TCE are integrated into a three stage prescriptive framework for the reshoring decision as illustrated in Figure 1. It is important to highlight that this framework focuses on the reshoring decision-making process, and not the implementation stage. The decision-making process considers some aspects of the implementation stage, which has been the subject of more recent analysis in the literature (Nujen & Halse, 2017; Nujen et al, 2018a). However, our framework offers more in-depth analysis particularly on steps 2 and 3 in the reshoring process model proposed by Bals et al. (2016). This process model considers issues such as mapping the current boundary of the firm, performance and cost analysis, and evaluating potential sourcing options.

However, the logic of the reshoring framework is that each stage should be considered, as well as the relationship between each stage. The subsequent stages of the reshoring framework can be applied regardless of the initial driver. Nevertheless, it is important to highlight that the framework covers reversal of all three governance modes of previous offshore decisions including make, hybrid or buy (Jahns et al., 2006). The framework focuses on the reshoring decision in a manufacturing context and support for the logic of the framework is based predominantly on examples from the manufacturing literature.

The framework is applicable to firms that have previously offshored processes to an offshore location as a result of a make-or-buy decision. From that point onwards, it focuses on the decision relating to whether there should be another change in location and/or governance model.

The unit of analysis is at the process level (Bals et al., 2016; Fratocchi et al., 2014), meaning that multiple decision paths for various activities could be chosen in one firm at the same time. The paths are an important means of validating the reshoring framework, and illustrate both the presence of, and interrelationship between the factors in the reshoring decisions. Although the framework may appear sequential in nature, including multiple paths in the framework in Figure 1 illustrates the iterative nature of the reshoring decision making process. For example, where reshoring is considered on the basis of the offshore location being less attractive and the focal firm having a weaker resource position in the process, the high level of transaction costs in the local supply market may mean outsourcing is not possible, which may lead to the “reshore back in-house” option being chosen, implying reshoring and developing the process in-house.





**Figure 1. A framework for the reshoring decision**

#### **4.1 Stage 1: Drivers for considering reshoring**

The supporting literature on *Drivers for considering reshoring* along with examples from reshoring practice are summarized in Table 3.

##### **4.1.1 Change in firm strategy (RBV)**

An often-cited driver for firms reshoring is a shift in competitive strategy, which can include a shift in core competency strategy and the need to reintegrate processes in-house (Bals et al., 2016; Delis et al. 2019; Di Mauro et al., 2018; Foerstl et al., 2016), or the need to bring production back home due to reputational impacts and the need to have high-end products made locally (Fratocchi et al., 2016; Gerbl et al., 2015; Joubioux & Vanpoucke, 2016; Srai & Ané, 2016).

The RBV can be employed to explain this logic in the context of reshoring. Resource-based theorists argue that firms attain competitive advantage by building superior performance positions in processes that are valued by customers (Barney, 1991). Processes that have a high level of strategic value to the firm are likely to be retained internally, as they make a significant impact on competitive advantage. Alternatively, processes with a lower level of strategic value are more likely to be externalized as they have a limited impact on the firm's competitive position. Many offshore outsourcing decisions in practice have followed this logic where processes with low strategic value have been offshore outsourced (Gerbl et al., 2015).

However, the basis of competitive differentiation for a firm can change, which necessitates a shift in firm strategy and strategic priorities. These changing strategic priorities of the firm can influence the strategic value of the offshored process, and in turn lead to reshoring. For example, Varta Microbattery GmbH reoriented their business away from mass produced heavy industrial batteries to micro-batteries (Foerstl et al., 2016).

Influence	Description	Supporting literature	Examples from reshoring practice
<b>Change in firm strategy (RBV)</b>			
Change in core competency strategy	Includes a shift in core competency strategy	Bals et al., 2016; Delis et al. 2019; Di Mauro et al., 2018; Foerstl et al., 2016; Fratocchi et al., 2016; Gerbl et al., 2015; Joubioux & Vanpoucke, 2016.	<p><b>Lechpol:</b> Lechpol decided to back-shore to Poland the assembling phase earlier performed in China, since the company would improve its competitiveness in term of price and obtain higher margins (European Reshoring Monitor, 2019).</p> <p><b>Glunz &amp; Jensen Holding A/S:</b> Glunz &amp; Jensen relocated production activities with the aim of increasing its focus on profitability and effectiveness, and optimizing the available production capacity (European Reshoring Monitor, 2019).</p> <p><b>Bosch:</b> As competition increased and it became difficult for the location in Knowsley to compete on a global scale, Bosch moved production back to plants in Germany. (European Reshoring Monitor, 2019).</p> <p><b>Tikkurilla:</b> Tikkurilla decided to implement an efficiency program and optimize the production network to enhance the company profitability. Within this efficiency project, the company decided to relocate the production of energy-efficient roof coating from a small production unit in Denmark to Finland (European Reshoring Monitor, 2019).</p>
Change in product strategy	Includes a shift to bring production back home due to reputational impacts and the need to have high-end products made locally.	Bals et al., 2016; Bettiol et al., 2017, 2019; Boffelli et al., 2020; Delis et al., 2019; Fratocchi et al., 2016; Srai & Ané, 2016.	<p><b>Roncanto:</b> As it was not possible to maintain the required quality levels in the Far East, Roncato backshored production from China to Italy to realize a new positioning of its brand (Di Mauro et al., 2018).</p> <p><b>Ska Italia:</b> As Ska Italia's top customers required high quality products fully manufactured in Italy, they decided to reshore the high-end lines to Italy (Di Mauro et al., 2018).</p> <p><b>Sportswear1:</b> Sought to exploit high-quality competencies and the country-of-origin effect related to a "made in Italy" product, considered crucial for the new (eco-shoes) brand value proposition (Bettiol et al., 2019).</p> <p><b>Case B (Zip fasteners):</b> Decided to move some of its manufacturing back to Italy to extend the core business to high-end products (e.g. other accessories and zips for clothing and leather items) for luxury brands (Boffelli et al., 2020).</p>

<b>Dissatisfaction with offshoring</b>			
<b><i>Reversal of incorrect offshoring decision (RBV/TCE)</i></b>			
Reversal of incorrect offshoring decision	Refers to reshoring a process where the initial offshoring decision was not made correctly	Barbieri et al., 2018; Bettiol et al., 2019; Kinkel, 2014; Kinkel and Maloca, 2009.	<p><b>Biomedical1:</b> Its decision to close the foreign plant was mainly a result of inadequate evaluation of the offshoring decision and the over-estimation of the Chinese market potential, resulting in a relocation back to Italy (Bettiol et al., 2019).</p> <p><b>Coyote:</b> Coyote decided to reshore to France the manufacturing activities earlier offshored and outsourced to China. One driver of the relocation decision was poor product quality (European Reshoring Monitor, 2019).</p> <p><b>Ska Italia:</b> As operational flexibility was not possible in Chinese plants and there were problems with the flexibility of shipped quantities, Ska Italia backshored its production (Di Mauro et al., 2018).</p>
<b><i>Increasing complexity and coordination costs (TCE)</i></b>			
Uncertainty	Supply chain disruption risks, political uncertainties, environmental issues and currency fluctuation	Bailey & De Propriis, 2014; Bals et al., 2015; Bals et al., 2016; Benstead et al., 2017; Di Mauro et al., 2018; Ellram et al., 2013; Fratocchi et al., 2016; Gray et al., 2013; Joubioux & Vanpoucke, 2016; Kinkel, 2012; Martínez-Mora & Merino, 2014; Moutray & Swift, 2013; Pearce, 2014; Tate et al., 2014; Wiesmann et al., 2017.	<p><b>Deutsche Bank:</b> Due to Brexit uncertainties, Deutsche Bank relocated some of its financial services from London to Frankfurt (European Reshoring Monitor, 2019).</p> <p><b>Ymer Technology AB:</b> Ymer Technology relocated the assembling phase of some product lines to its Swedish plant in Ljungby to reduce its exposure to the exchange rate risk (European Reshoring Monitor, 2019).</p> <p><b>Cartronic:</b> The German toy company Cartronic decided to bring back production activities earlier offshored to its plant in China, as they were counterfeiting risks in transferring the new technology to China (European Reshoring Monitor, 2019).</p>
Complexity	Increasing difficulty to control production and supply chain,	Bahli & Rivard, 2005; Bals et al., 2015; Di Mauro et al., 2018; Ketokivi & Ali-Yrkkö, 2009; Ketokivi et al., 2017; Kinkel & Maloca, 2009; Srai & Ané, 2016; Pearce, 2014.	<p><b>Renault:</b> As production volumes were reduced in their plant in Sandouville and capacities were not fully utilised, Renault invested in Sandouville and relocated production of two offshored plants there to lower transaction costs (European Reshoring Monitor, 2019).</p>

	manage interdependencies		
Total costs	Costs for: quality control and coordination, product development and staff coordination and rework	Bals et al., 2016; Benstead et al., 2017; Boffelli et al., 2020; Di Mauro et al., 2018; Joubioux & Vanpoucke, 2016; Kinkel, 2012; Kinkel & Maloca, 2009; Lippert & Hutzler, 2014; Srai & Ané, 2016.	<p><b>Aku:</b> Aku selected Eastern Europe because of its growing competitiveness, lower labour costs and lucrative total costs of ownership (Di Mauro et al., 2018).</p> <p><b>Case A (clothing):</b> Sought to improve customer brand perception and use a low labour-demanding technology that enabled it to reduce the cost gap between Croatia and Italy (Boffelli et al., 2020).</p> <p><b>Bati-Réno:</b> Bati-Réno reshored the production activity to its new plant in Varaize (France) to reduce costs (European Reshoring Monitor, 2019).</p> <p><b>Pöyry:</b> Pöyry moved its financial service centre back to Finland in 2017, as Finland is considered competitive in terms of costs (European Reshoring Monitor, 2019).</p> <p><b>Axactor:</b> Axactor announced the relocation of its registered office from Stockholm to Oslo to reduce administrative costs (European Reshoring Monitor, 2019).</p> <p><b>BLM:</b> BLM reshored production activities due to the reduced labor costs gap between Asia and France, and due to the potential for decreasing transportation costs (European Reshoring Monitor, 2019).</p> <p><b>Sennheiser electronic GmbH &amp; Co.:</b> Sennheiser decided to relocate part of its production from China to Romania to reduce the total cost of ownership (European Reshoring Monitor, 2019).</p>
<b><i>Deterioration in offshore location advantage (Eclectic paradigm)</i></b>			
Geographical distance	Can lead to rising costs such as transportation and/or increasing lead time difficulties.	Arlbjørn & Mikkelsen, 2014; Ashby et al., 2012; Bailey & De Propriis, 2014; Bals, Daum & Tate, 2015; Bals, Kirchoff & Foerstl, 2016; Canham & Hamilton, 2013; Di Mauro et	<p><b>Outdoor Greatroom Company:</b> The Outdoor Greatroom Company searched for suppliers near to their sales markets to shorten the geographical scope (Bals et al., 2016).</p> <p><b>NCR:</b> NCR relocated their production sites from India to Hungary to produce closer to their headquarters in Europe (Foerstl et al., 2016).</p> <p><b>Adidas:</b></p>

		al., 2018; Ellram et al., 2013; Fratocchi et al., 2016; Gray et al., 2013; Gylling et al., 2015; Joubioux & Vanpoucke, 2016; Kinkel, 2012; Kinkel, 2014; Kinkel & Maloca, 2009; Lippert & Hutzl, 2014; Martínez-Mora & Merino, 2014; McIvor, 2010; Moutray & Swift, 2013; Pearce, 2014; Srai & Ané, 2016; Tate et al., 2014; Wiesmann et al., 2017.	<p>Due to rising costs of labour in Asia and long shipping times Adidas reshored to Germany and established a robotized plant (European Reshoring Monitor, 2019).</p> <p><b>Bati-RénoV:</b> Bati-RénoV reshored the production activity in its new plant in Varaize (France) to shorten delivery times and be closer to final customers (European Reshoring Monitor, 2019).</p> <p><b>Huddly AB:</b> Huddly decided to backshore in 2016 to achieve greater proximity between engineering and production activities and reduce delivery times (European Reshoring Monitor, 2019).</p>
Human capital	Deterioration in labour cost difference and/or labour quality and/or loyalty in offshore location.	Arlbjørn & Mikkelsen, 2014; Bailey & De Propriis, 2014; Bals et al., 2016; Benstead et al., 2017; Bettiol et al., 2019; Boffelli et al., 2020; Canham & Hamilton; 2013; Di Mauro et al., 2018; Gerbl et al., 2015; Grappi et al., 2018; Joubioux & Vanpoucke, 2016; Kedia & Mukherjee, 2009; Graf & Mudambi, 2005; Kinkel, 2012; Kinkel, 2014; Kinkel & Maloca, 2009; Lippert & Hutzl, 2014; Martínez-Mora & Merino, 2014; Pearce, 2014; Srai & Ané, 2016; Tate et al., 2014; Wiesmann et al., 2017.	<p><b>Aku:</b> Human capital was a key factor in the offshoring decision process as one goal was to maintain the quality standards of the domestic production (Di Mauro et al., 2018).</p> <p><b>SealSkinz:</b> SealSkinz decided to move it back in 2018 in its old plant in King's Lynn (UK) which created the potential to re-employ many of its previous workers (European Reshoring Monitor, 2019).</p> <p><b>enquiryMAX Ltd:</b> EnquiryMAX relocated from India in 2017 as they had skilled people within the city and they needed to improve in flexibility and reactivity to market (European Reshoring Monitor, 2019).</p> <p><b>Jacuzzi Europe SPA:</b> In 2017, the European headquarters decided to move the production of whirlpool tubs for the European markets from North America to an Italian plant. The main reason was due to the high quality of production skills in the Italian plant (European Reshoring Monitor, 2019).</p> <p><b>Carggo:</b> Carggo announced the relocation of the software development center from Moscow to Vilnius (Lithuania) during summer 2018, after opening a new local subsidiary. The Baltic country was chosen because of the availability of highly skilled technicians (European Reshoring Monitor, 2019).</p>

			<p><b>Pöyry:</b> Pöyry moved its financial service center back to Finland in 2017 as it was easy to recruit highly skilled workforce (European Reshoring Monitor, 2019).</p> <p><b>Sportswear2:</b> Offshored low-end product lines to Vietnam and near-shored some medium to high end lines to Portugal, Bulgaria and Romania, based mostly on the availability of skilled employees in the new host countries and the risks of political and social issues, as well as intellectual property concerns in China (Bettiol et al., 2019).</p> <p><b>Case C (outerwear):</b> Main challenges to be overcome when reshoring part of the production from Romania to Italy was a lack of competencies in Italy (not enough people with the required sewing skills) and resulting higher labor costs, but these were partly compensated by the higher value attributed to a “Made-in Italy” product (Boffelli et al., 2020).</p>
Government policy	Less attractive subsidies and regulations	Ashby, 2016; Ashby et al., 2012; Bailey & De Propris, 2014; Bals et al., 2016; Joubioux & Vanpoucke, 2016; Di Mauro et al., 2018; Ellram et al., 2013; Gerbl et al., 2015; Graf & Mudambi, 2005; Pearce, 2014; Tate, 2014; Tate et al., 2014; Wiesmann et al., 2017.	<p><b>Otis Elevator:</b> Otis nearshored its production site to Mexico due to government incentives and ran into production problems and consequently they backshored production to South Carolina (Foerstl et al., 2016).</p> <p><b>Caterpillar:</b> Due to unfavourable tax policies and the relaxing of intellectual property protections in Japan, Caterpillar backshored engine manufacturing to Victoria, Texas (Foerstl et al., 2016).</p> <p><b>Pegatron Corporation:</b> Pegatron Corporation relocated production from China to its facility in the Czech Republic and Mexico in 2018 as the US-China trade tensions coupled with the employees shortages and rising wages in China increased (European Reshoring Monitor, 2019).</p> <p><b>Amps Electric Bikes Ltd:</b> In July 2018, it opened a new facility in Kent to assemble high-end electric bikes it earlier imported from China. The decision to relocate final production phase to UK is - at least partially - the consequence of the recent decision of the European Union to collect duties from importers of e-bikes (European Reshoring Monitor, 2019).</p>

**Table 3. Drivers for considering reshoring**

Varta needed close integration of product development and production located in Germany in order to manage the shorter product lifecycles in the micro-battery market. Indeed, recent research has revealed that whilst a common driver for offshoring is cost reduction, reshoring can be driven by a strategy aimed at enhancing customer perceived value (Di Mauro et al., 2018; Srai & Ané, 2016).

Reshoring has also been driven by the ‘made-in’ phenomenon in order to enhance brand image by promoting a local connection and a high-quality signaling geography (Bals et al., 2016; Delis et al., 2019; Srai & Ané, 2016). This has been particularly relevant for industries such as high-end fashion where perceived quality is increasingly influenced by production location (Fratocchi et al., 2016). For example, Reitzel France decided to launch a new product line entirely ‘made in France’ in 2017 given the growing market demand for ‘local products’. Therefore, it reduced the length of its supply chain by sourcing vegetables from suppliers located in Conneré (France) (European Reshoring Monitor, 2019).

#### *4.1.2. Dissatisfaction with offshoring*

A further driver for considering reshoring is dissatisfaction with the offshoring operation where the anticipated performance objectives have not been met (Bhagwatwar et al., 2011; Delis et al., 2019; Handley, 2012; Veltri et al., 2008). There are a number of factors that can influence dissatisfaction with offshoring.

##### *4.1.2.1 Reversal of incorrect offshoring decision*

This refers to reshoring a process where the initial offshoring decision was not made correctly. This factor is similar to ‘managerial mistake recognition’ in the context of reshoring decisions (Barbieri et al., 2018; Kinkel, 2014; Kinkel and Maloca, 2009). Firms often make offshoring decisions without fully accounting for costs and performance implications (Larsen et al, 2013; Larsen, 2016), and this can be an



important driver for reshoring (Kinkel, 2014; Kinkel and Maloca, 2009). This factor is influenced by both the RBV and TCE.

From the perspective of the RBV, when making the initial offshoring decision a firm may not have had the internal capabilities to effectively assess the costs associated with offshoring a process (Foerstl et al., 2016). Moreover, incomplete knowledge and analysis of the offshoring location and the supplier base when making the offshoring decision can influence reshoring the process (Fratocchi et al., 2016). For example, where the wrong location and supplier have been selected, this can lead to performance problems and cost increases that negate any cost benefits from offshoring.

In relation to TCE, an important behavioural assumption is bounded rationality, which refers to the cognitive limitations of the human mind. This can increase the difficulties of understanding fully the complexities of all possible decisions (McIvor, 2009). In the case of offshoring decisions bounded rationality can make it difficult to anticipate all the potential contingencies involved in a buyer-supplier relationship and rationalise all the potential outcomes (Foerstl et al., 2016).

In making the offshoring decision, the inability to accurately assess performance can lead to higher than expected costs, poor quality, supplier dependence, and excess coordination and monitoring of suppliers during the contract (Fredriksson and Jonsson, 2009; Tate et al., 2009). Cost estimation errors have been found to be more pertinent in offshore outsourcing than captive offshoring (Larsen et al., 2012). In offshore outsourcing scenarios, the loss of control over suppliers that behave opportunistically can also lead to serious financial and reputational costs associated with product defects and recalls (Gray et al., 2013).

#### *4.1.2.2 Increasing complexity and coordination costs (TCE)*

Over time the needs of a firm in relation to the offshore operation can become increasingly complex and less standardized as a result of uncertainty in the business environment. Uncertainty can influence reshoring decisions as a result of factors such as changing buyer requirements for the offshore supplier, which creates difficulties, as the buyer and supplier have to adapt to unexpected changes, and these difficulties can be amplified over greater geographic distances. This can provide challenges for the offshoring supplier and can lead to quality problems (Bals et al., 2015; Di Mauro et al., 2018; Ketokivi & Ali-Yrkkö, 2009; Ketokivi et al., 2017). Rapid advances in technology associated with the outsourced process can create high uncertainty, and this means that it is not possible to write complete contracts and renegotiation and frequent amendments are required as circumstances change (Williamson, 1975). For example, in 2017 Reno de Medici SPA decided to relocate production of "Serviboard" from Germany to Santa Giustina, as this made the firm less prone to supply chain risk (European Reshoring Monitor, 2019).

The additional complexity and co-ordination costs of dealing with these issues can affect the viability of the offshoring operation, and can be an important driver for considering reshoring (Ellram et al., 2013; Gray et al., 2013). For example, changes in technology may mean that the buyer's requirements are more customised than when the process was initially offshored. For example, the McLaren Technology Group relocated the production of carbon-fibre "tubs" in 2017, which was previously offshored to Austria. One of the main reasons for the relocation decision was the higher control over the manufacturing processes (European Reshoring Monitor, 2019).

#### 4.1.2.3 *Deterioration in offshore location advantage (eclectic theory)*

Using the location advantages determinant of the eclectic paradigm as a theoretical basis, there are a number of location factors that can influence a firm's dissatisfaction with an offshoring arrangement.

Rises in transportation costs and/or increasing lead time difficulties, that were not present when the offshore outsourcing decision was initially made, can lead to problems with geographical distance (Arlbjørn & Mikkelsen, 2014; Ashby et al., 2012; Bailey & De Propriis, 2014). For example, Roncato experienced excessive lead times for transportation due to the geographical distance between China and Europe, leading it to reshore many activities (Di Mauro et al., 2018). Moreover, Prada has planned to open up new plants in Italy in order to reduce time-to-market (European Reshoring Monitor, 2019).

There are a number of aspects of the human capital dimension including labor costs and labor quality. Labor arbitrage has been recognized as a dominant motive for many companies in their global outsourcing strategies in the IB literature (Graf & Mudambi, 2005; Kedia & Mukherjee, 2009). However, market changes have been narrowing the differentials between emerging and advanced economies in terms of labour costs, and this has forced companies to consider reshoring as the initial production cost benefits of offshoring have reduced (Arlbjørn, & Mikkelsen, 2014).

Moreover, as locations become popular locations for outsourcing this can both increase labour costs and labour turnover as competition increases for labour, leading to firms being dissatisfied with offshore outsourcing arrangements (Grappi et al., 2018).

Related to human capital is the quality of available human capital, as this is a further influence on reshoring. Quality of human capital can include technical expertise,

educational levels, interpersonal attributes such as competence in the language, and general communication skills (Gerbl et al., 2015). Some firms have found that the combination of increasing human capital cost and decreasing human capital quality can lead to both increased costs and poor service quality from the offshoring operation.

In this context, it is also worth noting that location attractiveness is relative to the home country attractiveness, so not only a deterioration in the host country, but also improvements in the home country can lead to reshoring (Baraldi et al., 2018). For example, in 2018 Fine Scandinavia AB decided to move some product lines manufactured in the South East Asia plant back to Sweden. The company CEO declared the company based its decision mainly on the availability of high skilled workforce in the Anderstorp region (European Reshoring Monitor, 2019).

Government policy is an important influence on the offshore location advantage and includes factors such as tax rates, employment legislation, and government investment in education and general skills development. Governments can influence the extent and form of foreign investment through imposing barriers, or by providing investment incentives (Graf & Mudambi, 2005). For example, US government incentives encouraged Ford to backshore processes (Bals et al., 2016). Clearly, changes in government policy in the offshore location can be an important influence on the competitiveness of the offshore operation.

For example, the lack of investment by government in skills development can lead to skills shortages, which can affect both product and service quality from the offshore operation (Gerbl et al., 2015). Moreover, changes in government assurances of security such as intellectual property protections can lead to dissatisfaction with reshoring (Tate, 2014). Government policy can influence firms on sustainability, and in turn reshoring. For example, reshoring processes back from globally dispersed

suppliers to local suppliers can lead to improvements in areas such as carbon emissions (Bals et al., 2016). For example, as the USA imposed tariffs on Chinese imports of automotive products, Volvo backshored the production of the Volvo XC60 to Sweden (European Reshoring Monitor, 2019).

#### **4.2 Stage 2: *Exit analysis***

Once a firm considers reshoring a process it should analyse the difficulties of switching the process from the offshore location, and this is referred to as *Exit analysis* as shown in Figure 1. *Exit analysis* is likely to involve a number of important considerations. A firm should consider the switching costs of transferring a process back reshore from an offshore supplier or captive offshore operation. For example, as over time dependency can be built into the relationship with the offshore supplier, which can make switching locations costly (Foerstl et al., 2016). Moreover, the technical difficulty of reintegrating an offshored operation, and the financial losses and decline in product quality, in the case of where an offshore contract is terminated, will be an important influence on *Exit analysis* and whether a firm decides to reshore the process (Oshri et al., 2019). The supporting literature on *Exit analysis* along with examples from reshoring practice are summarized in Table 4. There are a number of factors that can inform this analysis, and each of these is now considered.

<b>Influence</b>	<b>Description</b>	<b>Supporting literature</b>	<b>Examples from reshoring practice</b>
Level of asset specificity (TCE)	Increased (switching) costs if higher specificity	Ancarani & Di Mauro, 2018; Arlbjørn & Mikkelsen, 2014; Barbieri et al., 2018; Bals, Daum & Tate, 2015; Foerstl et al., 2016.	<b>Siteco GmbH:</b> As the production of high efficiency light bulbs demanded a high level of customization, Siteco reshored its production from Slovenia to Germany. This reduced coordination and rework efforts (Foerstl et al., 2016).
Complex interdependencies (TCE)	Increase production and supply chain control, manage interdependencies	Bahli & Rivard, 2005; Bals et al., 2015; Boffelli et al., 2020; Di Mauro et al., 2018; Ketokivi & Ali-Yrkkö, 2009; Ketokivi et al., 2017; Kinkel & Maloca, 2009; Pearce, 2014.	<b>Renault:</b> As production volumes were reduced in their plant in Sandouville and capacities were not fully utilised, Renault invested in Sandouville and relocated production of two offshored plants there to lower transaction costs (European Reshoring Monitor, 2019). <b>Arkopharma:</b> Arkopharma closed its manufacturing sites in Italy and Ireland and centralized the production activities in Carros (France) to reduce its production over-capacity increasing its efficiency level. It also aimed to leverage the 'made in' effect (European Reshoring Monitor, 2019). <b>Case C (outerwear):</b> The reshoring part of the production from Romania to Italy decision was driven by the difficulty of producing small batches in Romania, high technological content of the products and the need to maintain linkages between manufacturing and high value-added activities (Boffelli et al., 2020).
Offshore outsourcing capability (RBV)	Experience the customer firm has in dealing with offshore outsourcing operations	Hätönen, 2009 and Ørberg Jensen and Pedersen, 2007.	<b>Tata Motor:</b> As British sites have allowed the start the production of a new car each 20 seconds, Tata needed to maintain British site production and invested in those plants (European Reshoring Monitor, 2019).

**Table 4. Exit analysis**

#### 4.2.1 *Level of asset specificity (TCE)*

Asset specificity refers to the level of customisation associated with an outsourcing arrangement. High asset-specific investments represent costs that have little or no value outside the sourcing arrangement (Williamson, 1985). The presence of investments in assets specific to a particular relationship will create switching costs for the buyer. These costs can be in the form of physical asset specificity (level of product or service customization), human asset specificity (level of specialized knowledge involved in the transaction) or site specificity (location). Asset specificity can be non-specific (highly standardized), idiosyncratic (highly customised to the organization) or mixed (incorporating standardized and customised elements in the transaction). TCE asserts that the potential for opportunistic behaviour is most likely in an outsourcing situation when one or both parties have to make significant transaction-specific investments (Williamson, 1985).

A firm should consider the level of asset specificity associated with the current offshoring operation as this will impact the switching costs of reshoring the process. Where the level of asset specificity is low with the current offshore operation it may be worth considering reshoring the process to a local supplier, as there will be low switching costs, and the supplier should be able to specialise and achieve economies of scale.

Alternatively, in the case of moderate to high levels of asset specificity a firm will have to consider a number of options. A potential option is reshoring the process back in-house to avoid the potential for opportunism from using a local supplier (Williamson, 1985). A further option involves attempting to improve performance problems with the offshore operation rather than reshoring the process.

For example, Siteco GmbH, a manufacturer of lighting technology, reshored its in-house production of high efficiency light bulbs from Slovenia to Germany, as a result of a change in product technology that required less labour, but greater customization (Foerstl et al., 2016). Reduced rework and coordination efforts favored manufacturing and final assembly in Germany.

#### *4.2.2 Complex interdependencies (TCE)*

Complex interdependencies refer to the inter-connections between processes, business units and tasks, and have an important influence on the ease with which a process can be moved. The presence of interdependencies means that performance in one process is dependent upon the execution of other processes, which can have a negative or positive impact upon performance (Di Mauro et al., 2018). For example, governance and location decisions can be considered interrelated and simultaneous (Rugman & Verbeke, 2001). High levels of interdependencies between processes increase the need for co-ordination, joint problem solving and mutual adjustment, which in turn increase transaction costs (Bahli & Rivard, 2005).

In a case where there are high complex process interdependencies a firm can consider a number of options. Firstly, where there is likely to be considerable upheaval and a detrimental impact on product and service quality from moving the process, it may be more appropriate to keep the process with the offshore supplier and improve performance. Secondly, reshoring a process in-house means complex interdependencies can be more straightforward to manage because business units are located on the same site, and an understanding of the interdependencies can be built up more readily internally than with an offshore supplier. For example, NCR reshored offshore production closer to its European headquarters as a result of interdependencies between production processes (Ketokivi & Ali-Yrkkö, 2009). This allowed NCR to



reduce the amount of coordination effort and cost between the design, logistics and production functions.

In a case where process interdependencies are low a firm can consider a number of options including transferring the process to another offshore supplier or bring the process back to the home location either inside the firm or with a local supplier.

#### *4.2.3 Offshore outsourcing capability (RBV)*

Offshore outsourcing capability refers to the firms' prior experience with offshoring and the skills required to effectively manage offshore outsourcing arrangements. Firms with greater offshore outsourcing experience are likely to have a greater ability to specify contracts more precisely, and develop organizational routines that allow collaboration to address problems with suppliers (Bahli & Rivard, 2005; Gopal et al., 2003; Boyson et al., 1999). Prior experience of outsourcing is acknowledged in the literature as an important influence on effective outsourcing (Hätönen, 2009), and is particularly important with regard to offshore outsourcing (Jensen & Pedersen, 2007). Extensive experience means that the customer firm may be able to work with the supplier to deal with any performance problems with the offshore outsourcing operation.

Once a firm has considered asset specificity, level of interdependencies and offshore outsourcing capability it will have one of the following options to select as shown in Figure 1.

- *Potential to re-integrate* – in this instance a firm has judged that it is possible to transfer the process back reshore, and associated upheaval and impact on quality is manageable. Therefore, a firm should consider whether it is appropriate to either bring the process back in-house locally, or use a local

supplier to deliver the process. The factors that influence this decision are considered in the *Reintegration and relocation analysis* stage.

- *Invest to improve the offshore operation* – in this case a firm has judged that there are considerable switching costs and impacts on product and service quality from transferring the process from the offshore operation. Therefore, it may be more appropriate to attempt to address problems in the offshore operation. Crucially, this option will be influenced by the offshore outsourcing capability of the firm, and its potential to address problems with the offshore operation.

### ***4.3 Stage 3: Reintegration and relocation analysis***

Once a firm has decided that the exit costs from the offshore operation are manageable it should assess whether it is appropriate to re-shore the process back in-house or to a local supplier. The supporting literature on the reintegration and relocation analysis along with examples from reshoring practice are summarized in Table 5. There are a number of factors that inform this analysis, and each of these is now considered.

#### ***4.3.1 Internal resource availability (RBV)***

The availability of internal resource is an important influence on whether to reshore a process back in-house or employ a local supplier. Resource-based theorists argue that firms should focus scarce resource on processes that are valuable, rare and difficult to imitate, and therefore should allocate scarce internal resource to these processes as they are of high strategic value (Barney, 1991). Therefore, where a firm is considering bringing an offshore outsourced process back in-house it should assess whether it has the internal resource available to build a capability that is difficult to replicate.

Influence	Description	Supporting literature	Examples from reshoring practice
Internal resource availability (RBV)	Availability of internal resource will influence whether the firm reshores the process back in-house or to a local supplier.	Bals et al., 2016; Di Mauro et al., 2018; Fratocchi et al., 2016; Wiesmann et al., 2017.	<p><b>Prada:</b> In order to transfer production know-how to future generations, Prada invested in new factories in Italy to backshore parts of its production (European Reshoring Monitor, 2019).</p> <p><b>Mersen:</b> In order to improve its performance and flexibility, while expanding its innovation and investment capabilities for the future, Mersen designed a global reorganization plan and relocated numerous of its production plants in Europe (European Reshoring Monitor, 2019).</p> <p><b>Lino Manfrotto + Co., S.p.A.:</b> Lino Manfrotto made a significant investment in their Italian facility in order to support a high level of production automation and organize production processes according to the lean manufacturing philosophy. At the end of this process, in 2017 the company also backshored to Italy some of the production formerly done in China (European Reshoring Monitor, 2019).</p> <p><b>Ypsomed Holding AG:</b> The reshoring decision was implemented after huge investments in technology; among them, the adoption of automated production process - within the company and its suppliers - and the digitalization of selected production processes through the 5G telecommunication technology (realized in partnership with Swisscom) (European Reshoring Monitor, 2019).</p> <p><b>Ewes Stålfjäder AB:</b> The company implemented investments in their Swedish plant to automate the production process and improve the operational efficiency. Other reshoring drivers have been the improvement in flexibility and the reduction in delivery times (European Reshoring Monitor, 2019).</p>
Relative capability position (RBV): Quality	Increase product and/or delivery quality	Bailey & De Propris, 2014; Bals et al., 2015; Bals et al., 2016; Benstead et al., 2017; Di Mauro et al., 2018; Joubioux & Vanpoucke, 2016; Kinkel, 2012; Kinkel & Maloca, 2009; Lippert & Hutzl, 2014; Martínez-Mora & Merino, 2014; McIvor, 2009;	<p><b>Bati-Rénov:</b> Bati-Rénov reshored production in its new plant in Varaize (France) to reduce costs and improve quality due to the introduction of automated production lines (European Reshoring Monitor, 2019).</p> <p><b>Amps Electric Bikes Ltd:</b> In July 2018, Amps Electric Bikes opened a new facility in the Kent county where it already had its administrative offices. In the new plant the company will assemble the high-end electric bikes it earlier imported from China, and the company aims to improve product quality (European Reshoring Monitor, 2019).</p> <p><b>Van Merksteijn International B.V.:</b> Van Merksteijn International B.V. decided to in-source and reshore wire rods production, with the aim of improving supply continuity and quality control (European Reshoring Monitor, 2019).</p>

Flexibility	Increase production and customization flexibility	Robinson & Hsieh, 2016; Srai & Ané, 2016; Tate et al., 2014.	
		Ancarani et al., 2015; Bals et al., 2016; Benstead et al., 2017; Di Mauro et al., 2018; Fratocchi et al., 2016; Gylling et al., 2015; Joubioux & Vanpoucke, 2016; Kinkel & Maloca, 2009; Lippert & Hutzl, 2014; Moradlou, Backhouse & Ranganathan, 2017; Srai & Ané, 2016; Stentoft et al., 2016b; Tate et al., 2014; Wiesmann et al., 2017.	<p><b>Mersen:</b> In order to improve its performance and flexibility while expanding its innovation and investment capabilities for the future, Mersen designed a global re-organization plan and relocated a number of its production plants in Europe (European Reshoring Monitor, 2019).</p> <p><b>enquiryMAX Ltd:</b> EnquiryMAX relocated from India in 2017 as they needed to improve flexibility and responsiveness in the market (European Reshoring Monitor, 2019).</p> <p><b>Pöyry:</b> Pöyry moved its financial service center back to Finland in 2017. According to the Group's CFO, the re-insourcing will increase the firm's flexibility (European Reshoring Monitor, 2019).</p> <p><b>Ypsomed Holding AG:</b> Ypsomed reshored production of insulin pens to Switzerland. As new technologies allowed simpler, safer, and more efficient processes, increasing the company's flexibility (European Reshoring Monitor, 2019).</p> <p><b>SealSkinz:</b> SealSkinz moved it back in its old plant in King's Lynn (UK) to improve the supply chain effectiveness to increase the firm's organizational flexibility (European Reshoring Monitor, 2019).</p> <p><b>Orientis Gourmet:</b> Orientis Group relocated all tea packaging activities to France as this improved the flexibility and responsiveness to market (European Reshoring Monitor, 2019).</p> <p><b>Electrostar GmbH:</b> Electrostar will backshore all the production activities by the end of 2020 due to higher flexibility offered by producing in Germany (European Reshoring Monitor, 2019).</p> <p><b>Ewes Stålfjäder AB:</b> Ewes decided to relocate its Serbian based production to its Swedish plant in Bredaryd in 2017. The relocation decision was mainly based on the willingness to improve flexibility and reduce delivery times (European Reshoring Monitor, 2019).</p>
Innovation	Increase product and process development as	Bailey & De Propris, 2014; Bals et al., 2016; Benstead et al., 2017; Di	<p><b>Aku:</b> The fear of losing innovation potential was one of the main factors for Aku reshoring processes (Di Mauro et al., 2018).</p>

	well as product-related services	Mauro et al., 2018; Fratocchi et al., 2016; Joubioux & Vanpoucke, 2016; Lippert & Hutzl, 2014; McIvor, 2009; Tate, 2014; Pearce, 2014; Robinson & Hsieh, 2016; Srai & Ané, 2016.	<p><b>Ska Italia:</b> For Ska Italia, the potential of innovation loss was a risk in offshored locations since there was no appropriate protection of ID (Di Mauro et al., 2018).</p> <p><b>Roncato:</b> By backshoring and co-locating production and R&amp;D, Roncato increased its innovation potential (Di Mauro et al., 2018).</p> <p><b>Fitwell:</b> Fitwell decided to backshore their medium-end segments because of innovation requirements, while the low-end products stayed offshore (Di Mauro et al., 2018).</p> <p><b>Mango</b> Mango intends to reshore its production from Asia to Europe as new technologies like robots can help them shorten the supply chain (European Reshoring Monitor, 2019).</p> <p><b>Multicut:</b> Multicut relocated some of its production activities from Lithuania to Denmark as the new location and technological innovations assured a highly product quality, improved flexibility and shorter delivery times (European Reshoring Monitor, 2019).</p>
Availability of suppliers (TCE)	Increased costs if few sourcing options	Williamson, 1985.	<p><b>Aku:</b> As there were high costs involved in identifying local suppliers in Romania, Aku backshored production. (Di Mauro et al., 2018).</p>

**Table 5. Reintegration and relocation analysis**

The availability of internal resource will make it more straightforward for a firm to meet the substantial costs of terminating the offshored operation and bringing it back in-house (Overby, 2005). It should also allow the firm to absorb more easily the costs of acquiring the physical assets for the processes, recruiting and training the required personnel, and meeting the additional workload on the support functions including human resources, finance, accounting, and procurement. For example, as Interbake had the know-how to construct machines for their production on their own, they reshored production and were able to perform better than their manufacturer from Canada did (European Reshoring Monitor, 2019).

Allocating internal resources to an offshore outsourced process should allow a firm to strengthen its core competencies internally (Bals et al., 2016). However, it should be stressed that due to the initial offshoring decision the firm has lost internal capabilities in the process, and thus will have to commit significant time and financial resources to allow the offshore operation to be re-integrated inside the firm's internal operations (Bhagwatwar et al., 2011; Ejodame & Oshri, 2018). Such expertise may need to be re-acquired, either because a firm has lost domain and functional knowledge in the process over time as a result of a process being offshored, or because management attention in the firm has focussed on other more critical processes (Bhagwatwar et al., 2011).

However, it may not be possible for a firm to invest scarce resource in all internal processes, firms have to prioritize resources for processes that have high strategic value. Moreover, there are risks in focusing scarce internal resource on processes that have lower strategic value, as this will divert resource from areas that have a higher level of strategic value. Therefore, a firm should consider using local

suppliers for offshore outsourced processes where it lacks the internal resources to perform them internally.

#### 4.3.2 *Relative capability position – quality, flexibility, innovation capability (RBV)*

When deciding whether to bring an offshore outsourced process in-house or using a local supplier for the process, it is important to consider the performance implications of each option, and the RBV can assist with this analysis. A central premise of the RBV involves understanding why one firm differs in performance from another (Barney, 1991). Some firms gain advantage over others because they conduct certain processes in a superior manner relative to their competitors. Superior performance in the process is considered sustainable where it is difficult for competitors to replicate, and these processes should be performed in-house (McIvor, 2009).

Therefore, in the context of reshoring a firm should evaluate potential performance levels that can be attained in-house with that of potential local suppliers located in the home country. This will involve considering the following performance issues:

- *Relative quality* - relates to the level of quality that can be attained in-house locally versus that of local suppliers. For example, Fastweb decided to reshore its customer care activities from Romania back to Italy to increase the quality of the service (European Reshoring Monitor, 2019).
- *Relative flexibility* - refers to aspects such as relative lead time advantages (Gray et al., 2017), responsiveness (Moradlou et al., 2017) or more generally the ability to deliver on time (Kinkel, 2012). Walmart took back control of part of its supply chain infrastructure from various logistics providers in order to safeguard its related capabilities in a volatile supply market for such services (Bals et al., 2016).

- *Relative innovation* - refers to how quickly innovations can be integrated into the firm's processes and products (Fratocchi et al., 2016). For example, JP Morgan Chase reintegrated parts of its information systems services previously contracted out to IBM back in-house in order to speed up innovation (Bals et al., 2016).

When assessing relative capability position, it is important to understand both the type and source of advantage in the process either the firm or local supplier can achieve (McIvor, 2009). The type of advantage can be based on attributes such as lower costs, superior quality, flexibility and/or innovation capability (e.g. Ancarani et al., 2015; Bals et al., 2015; Bals et al., 2016; Tate, 2014).

Changes in the technological base can also influence 'relative innovation'. Whilst the Internet and other technological advances have been important drivers of offshoring as they have reduced transaction costs (Jahns et al., 2006), current digitization and industry 4.0 developments have been also spurring reshoring (Bals et al., 2015; Dachs and Seric, 2019; Fratocchi and Di Stefano, 2020). For physical production processes, additive manufacturing such as 3D printing, and the advancement of cyber-physical systems have been important developments related to innovative production processes (Fratocchi, 2018). For example, additive manufacturing enables a highly-automated production of finished products steered by the product itself, thereby making the assembly of different parts obsolete (Moradlou and Tate, 2018). Fittingly, Ancarani and Di Mauro (2018) have recently found that firms that reshore and invest in automation, transfer the activities mostly inhouse locally instead of selecting new local local suppliers. For example, Ypsomed Holding AG embarked on reshoring after huge investments in technology, the adoption of automated production processes and the digitalization of certain production processes



through the 5G telecommunication technology, realized in partnership with Swisscom (European Reshoring Monitor, 2019).

Determining the source of the advantage involves understanding how superior performance is achieved, and ease of replication. Potential sources of advantage include scale economies or experience in the process. Understanding both the type and source of advantage in the process can assist with determining whether a firm should bring a process back in-house or use a local supplier. Adhering to the logic of the RBV, an organisation should reshore a process back in-house where it can build a superior performance position that is difficult to replicate (McIvor, 2009). Alternatively, where a local supplier can achieve higher levels of performance in quality, flexibility and innovation, such a process should be reshored to a capable local supplier.

#### *4.3.3 Availability of suppliers (TCE)*

This refers to the number of capable local suppliers the firm can employ to deliver the offshore outsourced process. The presence of a limited number of local suppliers means that the firm is in a weak position when negotiating a contract and will incur additional costs when switching to another supplier. Such conditions make the buyer prone to opportunism during the contract, and at the time of contract renewal (Williamson, 1985). Alternatively, the presence of a number of capable local suppliers will increase the attractiveness of transferring the process to one of these suppliers. For example, Aku backshored production as there were high costs with identifying local suppliers in Romania. (Di Mauro et al., 2018)

#### *4.4 Reshoring decision options*

Once the analysis of these reintegration and relocation factors is undertaken a firm has the following sourcing options to select as shown in Figure 1. Table 6 summarises these sourcing options, and provides examples from reshoring practice.

	<b>Drivers for considering reshoring</b>	<b>Exit analysis</b>	<b>Reintegration and relocation analysis</b>
<b>Reshore back in-house</b>	<ul style="list-style-type: none"> <li>• Geographic distance leading to increased costs</li> <li>• High uncertainty</li> <li>• Human capital disadvantage in offshore location over local location</li> <li>• More favourable government policy in local location</li> </ul>	<ul style="list-style-type: none"> <li>• Level of asset specificity not manageable with offshore supplier</li> <li>• Process interdependencies difficult to manage</li> <li>• Offshoring capability limited</li> </ul>	<ul style="list-style-type: none"> <li>• Internal resources available</li> <li>• Possible to invest and develop a strong relative capability position in-house</li> <li>• Not possible to effectively measure performance</li> <li>• Limited or no capable suppliers available</li> </ul>
<b>Examples from reshoring practice</b>	<p><b>Jacuzzi Europe SPA:</b> In 2017, the European headquarter decided to move the production of whirlpool tubs for the European markets from North America to an Italian plant to reduce logistics costs (European Reshoring Monitor, 2019).</p> <p><b>Siemens:</b> As the level of experience in Denmark on wind turbines is not as developed as in Germany, Siemens reshored the production to a factory Germany. The new plant will also help to reduce transport costs (European Reshoring Monitor, 2019).</p> <p><b>Saint-Gobain PAM:</b> In order to improve cost-efficiency, Saint-Gobain PAM reorganized its European production activities and relocated manufacturing of some product lines to plants in France (European Reshoring Monitor, 2019).</p> <p><b>Armani:</b> As Switzerland lost its location attractiveness by increasing local taxation, Armani relocated its administration centre to its site in Milan (European Reshoring Monitor, 2019).</p>	<p><b>Aku:</b> Aku backshored production to improve performance by linking production with R&amp;D (Di Mauro et al., 2018).</p> <p><b>Renault:</b> As production volumes were reduced in their plant in Sandouville and capacities were not fully utilised, Renault invested in Sandouville and relocated production of two offshored plants there to reduce transaction costs (European Reshoring Monitor, 2019).</p>	<p><b>General Electric:</b> After outsourcing production to China and encountering quality problems, General Electric invested \$800 million into their abandoned production site in Louisville (Bals et al., 2016).</p> <p><b>SeaBird Designs:</b> As SeaBird Designs experienced several quality concerns, they relocated manufacturing activities to a new highly automated plant in Østfold (Norway)</p> <p><b>Roy Lowe &amp; Sons Ltd:</b> The company re-shored 10% of its production to achieve higher product quality, reduction in delivery times, and to be able to better protect its innovation capabilities (European Reshoring Monitor, 2019).</p> <p><b>Stouby Furniture A/S:</b> The company decided to backshore all production activities to its plant in Denmark to achieve proximity to customers, and by that the reduction of transportation costs and delivery times (European Reshoring Monitor, 2019).</p> <p><b>Premier Is Meierigaarden A/S:</b> Manufacturing was back-shored to Denmark to ensure food quality and safety (European Reshoring Monitor, 2019).</p> <p><b>Eyewear2:</b> Due to limited numbers of capable suppliers at district level, the firm was pushed to invest in advanced technological solutions (i.e. 3 printing, robotics) within its new factory (Bettiol et al., 2019).</p>

<b>Reshore to local supplier</b>	<ul style="list-style-type: none"> <li>• Geographic distance leading to increased costs</li> <li>• Low to medium uncertainty</li> <li>• Human capital disadvantage in offshore location over local location</li> <li>• More favourable government policy in local location</li> </ul>	<ul style="list-style-type: none"> <li>• Level of asset specificity manageable with local supplier</li> <li>• Process interdependencies manageable</li> <li>• Offshoring capability limited</li> </ul>	<ul style="list-style-type: none"> <li>• Not possible to invest and develop a strong relative capability position in-house</li> <li>• Internal resource unavailable</li> <li>• Possible to effectively measure performance with the local supplier</li> <li>• Capable suppliers available</li> </ul>
<b>Examples from reshoring practice</b>	<p><b>Lemken GmbH &amp; Co. KG:</b> Due to high logistical uncertainties, Lemken GmbH &amp; Co. KG relocated their assembly of agricultural machinery from Russian subsidiaries to a longer-term supplier arrangement in Germany (Bals et al., 2016).</p>	<p><b>Berry Alloc:</b> Berry Alloc halted purchasing aluminum products from Chinese suppliers and started to purchase aluminum products from a Norwegian supplier Sapa instead. This made the company more profitable, as automation and technologies were better implemented at Sapa (European Reshoring Monitor, 2019).</p>	<p><b>Katjes Fassin GmbH &amp; Co.KG:</b> As Katjes was dissatisfied with the produced quality in their acquired plants in Finland and Italy they switched this task to a long term strategic supplier in Germany (Bals et al., 2016).</p> <p><b>Rosenberg WorleyParsons AS:</b> As Norwegian suppliers are currently very competitive internationally in terms of quality and delivery capability, Rosenberg WorleyParsons decided to move its Production from Poland to Norway (European Reshoring Monitor, 2019).</p>
<b>Invest to improve offshore outsource operation or evaluate post-offshoring alternatives</b>	<ul style="list-style-type: none"> <li>• Geographic distance not leading to increased costs</li> <li>• Low to medium uncertainty</li> <li>• Human capital advantage in offshore location over local location</li> <li>• Favourable offshore government policy</li> </ul>	<ul style="list-style-type: none"> <li>• Level of asset specificity low with offshore supplier</li> <li>• Process interdependencies manageable</li> <li>• Offshoring capability medium to high</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of internal resource available to develop strong relative capability position in-house</li> <li>• Process not of high strategic value</li> <li>• Possible to effectively measure performance with offshore supplier</li> <li>• Other capable offshore suppliers available</li> </ul>
<b>Examples from reshoring practice</b>	<p><b>Aku:</b> Aku selected Eastern Europe because of its growing competitiveness, lower labour costs and lower total costs of ownership (Di Mauro et al., 2018).</p>	<p><b>Aku:</b> One goal was to maintain the quality standards of domestic production (Di Mauro et al., 2018).</p>	<p><b>Fitwell:</b> Fitwell decided to backshore their medium-end segments because of innovation requirements, while the low-end products stayed offshore. Fitwell offshored to retain the ability to reduce total costs and better compete (Di Mauro et al., 2018).</p>

**Table 6 Illustrating the reshoring framework with practical examples**

#### *4.4.1 Reshore back in-house*

This sourcing option involves reshoring and developing the process back in-house. The offshore location may have lost its competitiveness in terms of labour cost and quality, and an analysis of the relative capability position in the process may reveal that the firm can build a strong performance position in the process where it decides to reshore it back in-house. Moreover, such a process should be of high strategic value to the organisation and reflect a shift in the strategy of the firm from when the initial decision to offshore outsource the process was made. Of course, the firm should ensure that it has the internal resource available to invest in, and develop its capability in this process over time to sustain its superior performance position.

#### *4.4.2 Reshore to local supplier*

This sourcing option involves reshoring the process back to a local supplier. The offshore location has lost its competitiveness, which makes reshoring a potential option. Analysis of the relative capability position of a firm in the process may reveal that it cannot achieve the levels of performance of external suppliers locally. This option is likely to be chosen where there are internal resource constraints, and the process is not of high strategic value and there are local suppliers with the required capabilities.

Reshoring to a local supplier over an offshore supplier offers a number of advantages in managing transaction costs. Moreover, reshoring to a local supplier allows the buyer to reshore a process with high transaction costs. Although influences on transaction costs such as asset specificity, complex interdependencies and uncertainty can exist, reshoring to a supplier located in close proximity can allow the firm to mitigate these transaction costs through adopting a relational contracting arrangement (Poppo & Zenger, 2002, 1998).

A relational contracting arrangement allows the buyer to reshore a process that has high levels of asset specificity, as it can establish and build a mutually beneficial relationship with the supplier. The focus in relational contracting is moving beyond a contractual mind set and developing a trust-based and mutually beneficial relationship.

#### *4.4.3 Invest to improve offshore operation or evaluate post-offshoring alternatives*

In this case, there are few capable suppliers available locally to deliver the process. Furthermore, the firm does not have any internal capability in the process, and lacks the internal resource to develop a capability in the process. Therefore, it may be more appropriate for a firm to attempt to address problems in the offshore operation. Crucially, this option will be influenced by the offshore outsourcing capability of the firm, and its potential to address problems with the offshore operation.

In some instances it may not be possible to address the problems with the offshore operation and it may be necessary to evaluate alternative post-offshoring alternatives including selecting another supplier in the current offshore location, moving to a supplier in another offshore location or selecting a supplier in a nearshore location (Barbieri et al. 2018; Bettiol et al. 2019). Moving beyond the location and governance mode changes, options without actual relocation of production activities could also be chosen, such as the launch of an alternative product line, ramping up home production as a source of process/product innovation or extending home country production capacity for high-end products (Bettiol et al. 2019).

Where the firm decides to opt for the offshore alternatives it should ensure it has the required offshore outsourcing capability to achieve the required performance levels. Moreover, moving to another supplier or moving to a nearshore location will be influenced by the level of switching costs involved in implementing these options.

## 5. Discussion and Conclusions

The research presented in this paper makes a number of contributions to our understanding of the reshoring decision, which is of interest to both the IB and OSCM fields.

Firstly, current research on reshoring can benefit from additional theoretical depth. The framework in this paper adopted a multi-theory approach to the reshoring decision. Employing eclectic theory, the RBV and TCE has also allowed us to link the reshoring phenomenon with location-, process- and firm-specific factors. The framework is based on robust theoretical foundations. Each dimension of the framework can be examined in greater detail in future empirical work.

Secondly, the framework proposed in this paper considers two critical issues of IB research including location and governance choices (Kedia & Mukherjee, 2009). Employing the eclectic paradigm, the RBV and TCE as a theoretical basis, the study integrates location-specific factors with process- and firm-specific factors to develop a framework for understanding location and governance choice in the reshoring decision. Employing the RBV allows the reshoring decision to be linked with strategic concerns such as building capabilities and competitive advantage, changing strategic priorities, and resource allocation. TCE can link the reshoring decision with switching costs and the governance options of captive/hierarchy or external supplier governance arrangements (Bals et al. 2016). Eclectic theory can enrich the analysis through providing an understanding of location variables such as human capital, infrastructure, country risk and government factors (Gerbl et al., 2015).

Thirdly, the framework highlights the value of understanding the interaction of the location-, firm- and process-specific factors on the reshoring decision for both IB and OSCM research. Illustrations from reshoring practice have highlighted how these

factors can interact to influence each of the different combinations of location and governance structures. Misalignment of these factors can explain when it is appropriate to reverse offshore outsourcing decisions. For example, misalignment of these factors can explain failure, and why reshoring is likely to be an appropriate sourcing option as shown in the examples below:

- A fall in labour productivity in the offshore location (eclectic theory) harms quality, which increases transaction costs via rework (TCE).
- Investment in manufacturing equipment and technology locally (RBV) leads to higher productivity and lower costs in the local operation than in the offshore location (eclectic theory).
- Government policy in the offshore location changes (eclectic theory), which increases transaction costs (TCE) and/or affects the advantage of the supplier or captive model (RBV).
- Relationship failure with the offshore supplier increases transaction costs (TCE) leading to poor quality, which harms competitive position (RBV).

### ***5.1 Implications for practitioners and policy makers***

The reshoring framework provides a useful basis for practical prescription, and encompasses a number of factors that capture the complexities of the reshoring decision. The framework addresses a number of important questions for practitioners in the reshoring decision. For example, it highlights combinations of location and governance model choices that can be employed to deliver performance improvements in offshored processes. It highlights how the choice of location can be used to create value and reduce transaction costs in the reshoring decision, and, what key factors can influence the choice of reshoring to a local supplier or bringing the process back in-house. It sheds light on how firm-level capabilities influence the choice of governance

mode in the reshoring decision and illustrates whether an organisation should reshore a process back in-house in order to build a superior performance position in a process, or reshore the process and leverage the capabilities of a local supplier.

From a policy-making perspective, there are two aspects to consider. For policy making in countries that are the recipients of reshored processes (i.e. where the processes are returned to), the framework highlights the importance of upgrading factors such as the availability of skilled employees and transportation infrastructure. Investment by governments in legal and infrastructure conditions can lower transaction costs in the domestic/regional environment (e.g. improve IP protection, improve IT infrastructure such as bandwidth) and/or increase transaction costs in an international context (e.g. increase environmental and social standards required also of imported products, or the recently introduced data protection guidelines by the EU affecting accessibility of outside-EU services). Second, related to the resource position of a firm, providing incentives and potential stimuli for investments can improve firm capabilities (e.g. by promoting university-company collaborations on automation projects; budgets for higher education and/or apprenticeships in other new areas such as data science and/or man-machine interaction).

## ***5.2 Limitations and implications for research***

As this is a conceptual paper, the main limitation of the reshoring framework presented in this paper is that its applicability has not been assessed in a practical context. There is a need to assess the applicability of the framework in a number of organizational settings and across a number of business sectors. This would provide an understanding of how the three stages interact in the reshoring decision-making process. Such research could also be extended to applying the reshoring framework in both manufacturing and business service processes settings in order to understand how



the location-, firm- and process-specific factors can have differing levels of importance across manufacturing and business service processes. Therefore, the framework will not be fully assessed until it is rigorously tested by other researchers, and in a number of research settings.

Further, empirical research is required to explore the linkages between the location-, firm- and process-specific factors in reshoring practice. The eclectic paradigm, the RBV and TCE offer a useful theoretical basis for undertaking this research, for both IB and OSCM scholars. In particular, employing the RBV and TCE as theoretical frameworks can offer insights into whether more firms are reshoring due to changes in location attractiveness (following the logic of the eclectic paradigm), or to build competitive advantage (following the logic of the RBV), or reshoring to reduce transaction costs (following the logic of TCE). Such research would also respond to those who have called for a better understanding of whether firms are employing reshoring from a strategic perspective, or whether they are driven by failure in offshoring arrangements (Bals et al., 2016). This research would also contribute to the debate in the literature on the complementary and contradictory prescriptions of the RBV and TCE in sourcing decisions (Gerbl et al., 2015; McIvor, 2009). Such research would complement the work of those who have been calling for a better understanding of the implications of Industry 4.0 for international business theory through employing the eclectic paradigm in terms of the OLI advantages (Strange and Zuchella, 2017).

Also, the current COVID-19 pandemic raises questions about how shortened supply chains and supply chain resiliency might interrelate (Seric and Winkler, 2020). As reshoring is often employed to shorten supply chains, this might open up another area of reshoring drivers and/or alter the decision-making dynamics. The iterative nature of decision-making approaches in practice might be a particularly interesting

aspect, highlighted by recent research from a behavioural perspective (Boffelli 2018, 2020; Gray et al. 2017). This further research could also consider whether firms are reshoring to nearshore locations rather than domestic locations alone.

Furthermore, when deciding on the unit of analysis for reshoring, specific individual processes or even their single manifestation for a specific product could be the unit of analysis, recently termed “selective reshoring” (Baraldi et al., 2018, p. 164). This is an interesting aspect to consider as research in the IB field often focuses on a higher unit of analysis such as at the subsidiary level (Bettiol et al. 2019). The interlinkages between offshoring and reshoring decision drivers warrant additional research. For example, are the motives for reshoring linked to the original motives for offshoring, and the governance model (i.e. FDI or offshore outsourcing)?

Finally, recent research has highlighted the importance of learning in a reshoring context (Ciabuschi et al., 2019; Delis et al., 2019). The question also arises on how prior experience in offshoring outsourcing business process and/or relocating them back home can later build up certain capabilities. Therefore, future research could examine the influence of having an offshore outsourcing capability and whether successfully conducting reshoring projects actually builds up a reshoring capability. This would involve considering the role a pronounced offshore outsourcing capability would have during *Stage 2 Exit analysis* in our framework, as firms with such a capability might decide in favour of keeping the process offshore, but in a different offshore location. Similarly, the role of a pronounced reshoring capability during *Stage 3 Reintegration and relocation analysis* could be analysed, as firms with such a capability might favour relocating the business process under scrutiny.

## References

- Albertoni, F., Elia, S., Massini, S., & Piscitello, L. 2017. The reshoring of business services: Reaction to failure or persistent strategy?. *Journal of World Business*, 52(3): 417-430
- Ancarani, A., & Di Mauro, C. 2018. Reshoring and Industry 4.0: How Often Do They Go Together?. *IEEE Engineering Management Review*, 46(2): 87-96
- Ancarani, A., Di Mauro, C., Fratocchi, L., Orzes, G., & Sartor, M. 2015. Prior to reshoring: A duration analysis of foreign manufacturing ventures. *International Journal of Production Economics*, 169: 141–155
- Arlbjørn, J. S., & Mikkelsen, O. S. 2014. Backshoring manufacturing: Notes on an important but under-researched theme. *Journal of Purchasing and Supply Management*, 20: 60–62
- Arnold, U. 2000. New dimensions of outsourcing: a combination of transaction cost economics and the core competencies concept. *European Journal of Purchasing & Supply Management*, 6(1): 23-29
- Ashby, A. 2016. From global to local: reshoring for sustainability. *Operations Management Research*, 9(3-4): 75-88
- Ashby, A., Leat, M., & Hudson-Smith, M. 2012. Making connections: a review of supply chain management and sustainability literature. *Supply Chain Management: An International Journal*, 17(5): 497-516
- Bahli, B., & Rivard, S. 2005. Validating Measures of Information Technology Outsourcing Risk Factors, *OMEGA*, 33: 175-187
- Bailey, D., & De Propriis, L. 2014. Manufacturing reshoring and its limits: the UK automotive case. *Cambridge Journal of Regions, Economy and Society*, 7(3): 379-395
- Bals, L., Daum, A., & Tate, W. 2015. From Offshoring to Rightshoring: Focus on the Backshoring Phenomenon. *AIB Insights*, 15(4): 3-8
- Bals, L., Kirchoff, J. F., & Foerstl, K. 2016. Exploring the reshoring and insourcing decision making process: toward an agenda for future research. *Operations Management Research*, 9(3-4): 102-116
- Baraldi, E., Ciabuschi, F., Lindahl, O., & Fratocchi, L. 2018. A network perspective on the reshoring process: The relevance of the home-and the host-country contexts. *Industrial Marketing Management*, 70: 156-166
- Barbieri, P., Elia, S., Fratocchi, L., Golini, R., 2019, Relocation of second degree: Moving towards a new place or returning home?, *Journal of Purchasing and Supply Management*, 25:3.
- Barbieri, P., Ciabuschi, F., Fratocchi, L., & Vignoli, M. 2018. What do we know about manufacturing reshoring?. *Journal of Global Operations and Strategic Sourcing*, 11(1): 79-122
- Barney, J. B. 1991. Firm resources and sustained competitive advantage. *Journal of Management*, 17: 49-61
- Benito, G. 2015. Why and how motives (still) matter. *Multinational Business Review*,

23(1): 15-24

- Benstead, A. V., Stevenson, M., & Hendry, L. C. 2017. Why and how do firms reshore? A contingency-based conceptual framework. *Operations Management Research*, 10(3-4): 85-103
- Bettiol, M., Burlina, C., Chiarvesio, M., & Di Maria, E. 2017. From Delocalisation to backshoring? Evidence from Italian industrial districts. *Investigaciones Regionales- Journal of Regional Research*, 39: 137–154
- Bettiol, M., Chiarvesio, M., Maria, E., Stefano, C. and Fratocchi, L. 2019. What Happens After Offshoring? A Comprehensive Framework. Tulder, R., Verbeke, A. and Jankowska, B. (Ed.) *International Business in a VUCA World: The Changing Role of States and Firms (Progress in International Business Research, Vol. 14)*, Emerald Publishing Limited. 227-249.
- Bhagwatwar, A., Hackney, R., & Desouza, K. C. 2011. Considerations for information systems “backsourcing”: a framework for knowledge re-integration. *Information Systems Management*, 28(2): 165-173
- Boffelli, A., Golini, R., Orzes, G., Dotti, S. 2020. Open the box: A behavioural perspective on the reshoring decision-making and implementation process, *Journal of Purchasing and Supply Management*, <https://doi.org/10.1016/j.pursup.2020.100623>
- Boffelli, A., Golini, R., Orzes, G., & Dotti, S. (2018). "How to reshore": Some evidence from the apparel industry. *IEEE Engineering Management Review*, 46(4): 122-127.
- Boyson, S., Corsi, T., Dresner, M., & Rabinovich, E. 1999. Managing effective third party logistics relationships: what does it take? *Journal of Business Logistics*, 20(1): 73
- Buckley, P. J., Devinney, T. M., & Louviere, J. J. 2007. Do managers behave the way theory suggests? A choice-theoretic examination of foreign direct investment location decision-making. *Journal of International Business Studies*, 38(7): 1069-1094
- Buckley, P. J., & Lessard, D. R. 2005. Regaining the edge for international business research. *Journal of International Business Studies*, 36(6): 595-599
- Canham, S., & Hamilton, R. T. 2013. SME internationalisation: offshoring, „backshoring“, or staying at home in New Zealand. *Strategic Outsourcing: An International Journal*, 6(3): 277-291
- Ciabuschi, F., Lindhal, O., Barbieri, P., Fratocchi, L. 2019. Manufacturing Reshoring: A Strategy to Manage Risk and Commitment in the Logic of the Internationalization Process Model. *European Business Review*, 31(1):139-159, <https://doi.org/10.1108/EBR-02-2018-0046>
- Cropanzano, R. 2009. Writing nonempirical articles for Journal of Management: General thoughts and suggestions. *Journal of Management*, 35: 1304-1311
- Dachs, B. & Seric, A. (2019) Industry 4.0 and the changing topography of global value chains. *Department of Policy Research and Statistics Working Paper 10/2019*. Vienna: UNIDO
- Delis, A., Driffield, N., & Temouri, Y. 2019. The global recession and the shift to reshoring: Myth or reality?. *Journal of Business Research*, 103: 632-643

- Di Mauro, C., Fratocchi, L., Orzes, G., & Sartor, M. 2018. Offshoring and backshoring: A multiple case study analysis. *Journal of Purchasing and Supply Management*, 24(2): 108-134
- Doh, J. P. 2005. Offshore outsourcing: Implications for international business and strategic management theory and practice. *Journal of Management Studies*, 42(3): 695–704
- Doh, J. P., Bunyaratavej, K., & Hahn, E. G. 2009. Separable but not equal: The location determinants of discrete services offshoring activities. *Journal of International Business Studies*, 40: 926–943
- Dunning, J. H. 1988. The Eclectic Paradigm of international Production: A restatement and some possible extensions. *Journal of International Business Studies*, 19: 1-31
- Dunning, J. H. 2001. The eclectic (OLI) paradigm of international production: past, present and future. *International Journal of the Economics of Business*, 8(2): 173-190
- Dunning, J. H., 1980. Towards an eclectic theory of international production: some empirical tests. *Journal of International Business Studies*, 11(1): 9–31
- Eden, L., & Dai, L. 2010. Rethinking the O in Dunning’s OLI/eclectic paradigm. *Multinational Business Review*, 18(2): 13-34
- Ejodame, K., & Oshri, I. 2018. Understanding knowledge re-integration in backshoring. *Journal of Information Technology*, 33(2): 136-150
- Ellram, L. M. 2013. Offshoring, Reshoring and the Manufacturing Location Decision. *Journal of Supply Chain Management*, 49(2): 3-5
- Ellram, L. M., Tate, W. L., & Petersen, K. J. 2013. Offshoring and reshoring: an update on the manufacturing location decision. *Journal of Supply Chain Management*, 49(2): 14-22
- European Reshoring Monitor 2019. Reshoring Cases. Retrieved at: <https://reshoring.eurofound.europa.eu/reshoring-cases>, accessed April 18, 2019
- Foerstl, K., Kirchoff, J. F., & Bals, L. 2016. Reshoring and insourcing: drivers and future research directions. *International Journal of Physical Distribution & Logistics Management*, 46(5): 492-515
- Fratocchi, L. (2018). Additive manufacturing technologies as a reshoring enabler: a why, where and how approach. *World Review of Intermodal Transportation Research*, 7(3), 264-293.
- Fratocchi, L., & Di Stefano, C. 2020. Do Industry 4.0 Technologies Matter When Companies Backshore Manufacturing Activities? An Explorative Study Comparing Europe and the US. In: Bettiol, M., Di Maria, E. and Micelli, S. (Eds.) *Knowledge Management and Industry 4.0*, Volume 9, 53-83.
- Fratocchi, L., Ancarani, A., Barbieri, P., Di Mauro, C., Nassimbeni, G., Vignoli, M., & Zanoni, A. 2015. Manufacturing Back-Reshoring as a Non-Linear Internationalization Process. *The Future of Global Organizing*, 10: 365-304
- Fratocchi, L., Ancarani, A., Barbieri, P., Di Mauro, C., Nassimbeni, G., Sartor, M., Vignoli, M., & Zanoni, A. 2016. Motivations of manufacturing reshoring. An interpretative framework. *International Journal of Physical Distribution and*

- Logistics Management*, 46(2): 98-127
- Fratocchi, L., Di Mauro, C., Barbieri, P., Nassimbeni, G., & Zanoni, A. 2014. When manufacturing moves back: concepts and questions. *Journal of Purchasing and Supply Management*, 20(1): 54-59
- Fulmer, I. S. 2012. Editor's comments: The craft of writing theory articles—Variety and similarity in AMR. *Academy of Management Review*, 37: 327-331
- Gerbl, M, McIvor, R., Loane, S., & Humphreys, P. 2015. A Multi-theory approach to understanding the Business Process Outsourcing Decision. *Journal of World Business*, 50(3): 505-518
- Gereffi, G. 2020. "What does the Covid-19 pandemic teach us about global value chains? The case of medical supplies.", *Journal of International Business Policy*, <https://doi.org/10.1057/s42214-020-00062-w>
- Gilson, L.L., & Goldberg, C.B. 2015. Editors' Comment: So, What Is a Conceptual Paper? *Group & Organization Management*, 40(2): 127-130
- Gopal, A., Sivaramakrishnan, K., Krishnan, M. S., & Mukhopadhyay, T. 2003. Contracts in offshore software development: An empirical analysis. *Management Science*, 49(12): 1671-1683
- Graf, M., & Mudambi, S .M. 2005. The outsourcing of IT-enabled business processes: A conceptual model of the location decision. *Journal of International Management*, 11(2): 253-268
- Grappi, S., Romani, S., & Bagozzi, R. P. 2018. Reshoring from a demand-side perspective: Consumer reshoring sentiment and its market effects. *Journal of World Business*, 53(2): 194-208
- Gray, J. V., Esenduran, G., Rungtusanatham, M. J., & Skowronski, K. 2017. Why in the world did they reshore? Examining small to medium-sized manufacturer decisions. *Journal of Operations Management*, 49: 37-51
- Gray, J. V., Skowronski, K., Esenduran, G., & Rungtusanatham, M. J. 2013. The reshoring phenomenon: what supply chain academics ought to know and should do. *Journal of Supply Chain Management*, 49(2): 27-33
- Gylling, M., Jussi, H., Jussila, K., & Saarinen, M. 2015. Making decisions on offshore outsourcing and backshoring a case study in the bicycle industry. *International Journal of Production Economics*, 162: 92-100
- Handley, S. M. 2012. The perilous effects of capability loss on outsourcing management and performance. *Journal of Operations Management*, 30(1):152-165
- Hätönen, J. 2009. Making the locational choice: A case approach to the development of a theory of offshore outsourcing and internationalization. *Journal of International Management*, 15(1): 61-76
- Hätönen, J., & Eriksson, T. 2009. 30+ years of research and practice of outsourcing – Exploring the past and anticipating the future. *Journal of International Management*, 15: 142-155
- Jahns, C., Hartmann, E., & Bals, L. 2006. Offshoring: Dimensions and diffusion of a new business concept. *Journal of Purchasing and Supply Management* 12(4): 218-231

- Jensen, P. D. Ø., Larsen, M. M., & Pedersen, T. 2013. The organizational design of offshoring: Taking stock and moving forward. *Journal of International Management* 19(4): 315-323
- Jensen, P., & Pedersen, T. 2011. The economic geography of offshoring: The fit between activities and local context. *Journal of Management Studies*, 48(2): 352-372
- Joubioux, C., & Vanpoucke, E. 2016. Towards right-shoring: a framework for off-and re-shoring decision making. *Operations Management Research*, 9(3-4): 117-132
- Kedia, B. L., & Mukherjee, D. 2009. Understanding offshoring: A research framework based on disintegration, location and externalization advantages. *Journal of World Business*, 44: 250-261
- Ketokivi, M., & Ali-Yrkkö, J. 2009. Unbundling R&D and manufacturing: postindustrial myth or economic reality?. *Review of Policy Research*, 26(1-2): 35-54
- Ketokivi, M., Turkulainen, V., Seppälä, T., Rouvinen, P., & Ali-Yrkkö, J. 2017. Why locate manufacturing in a high-cost country? A case study of 35 production location decisions. *Journal of Operations Management*, 49: 20-30
- Kinkel, S. 2014. Future and impact of backshoring- Some conclusions from 15 years of research on German practices. *Journal of Purchasing and Supply Management*, 20 (1): 63-65
- Kinkel, S. 2012. Trends in production relocation and backshoring activities: Changing patterns in the course of the global economic crisis. *International Journal of Operations and Production Management*, 32(5-6): 696-720
- Kinkel, S., & Maloca, S. 2009. Drivers and antecedents of manufacturing offshoring and backshoring- A German perspective. *Journal of Purchasing and Supply Management*, 15(3): 154-165
- Larsen, M. M. (2016). Failing to estimate the costs of offshoring: A study on process performance. *International Business Review*, 25(1): 307-318
- Larsen, M. M., Manning, S., & Pedersen, T. (2013). Uncovering the hidden costs of offshoring: The interplay of complexity, organizational design, and experience. *Strategic Management Journal*, 34(5): 533-552
- Lippert, D., & Hutzel, T. 2014. *Bringing Jobs Back to the USA: Rebuilding America's manufacturing through reshoring*. Boca Raton: Taylor and Francis group
- Martínez-Mora, C., & Merino, F. 2014. Offshoring in the Spanish footwear industry: A return journey? *Journal of Purchasing and Supply Management*, 20(4): 225-237
- McIvor, R. 2009. How the transaction cost and resource-based theories of the firm inform outsourcing evaluation. *Journal of Operations Management*, 27(1): 45-63
- McIvor, R. 2010. *Global Services Outsourcing*. New York: Cambridge University Press
- McIvor, R. 2013. Understanding the manufacturing location decision: The case for the transaction cost and capability perspectives. *Journal of Supply Chain Management*, 49(2): 23-26
- Moradlou, H., & Tate, W. (2018). Reshoring and additive manufacturing. *World Review of Intermodal Transportation Research*, 7(3), 241-263.

- Moradlou, H., Backhouse, C., & Ranganathan, R. 2017. Responsiveness, the primary reason behind re-shoring manufacturing activities to the UK: an Indian industry perspective. *International Journal of Physical Distribution & Logistics Management*, 47(2/3): 222-236
- Moser, H. (2019). Reshoring Was at Record Levels in 2018. Is it enough? Accessed May 10, 2020. <https://www.industryweek.com/the-economy/article/22027880/reshoring-was-at-record-levels-in-2018-is-it-enough>
- Moutray, C., & Swift, K. 2013. Looking Ahead: Opportunities and Challenges for U.S. Manufacturers. *Business Economics*, 48(2): 121-133
- Nujen, B. B., & Halse, L. L. (2017). Global shift-back's: A strategy for reviving manufacturing competences. *Advances in International Management*, 30:245-267.
- Nujen, B. B., Halse, L. L., Damm, R., & Gammelsæter, H. 2018a. Managing reversed (global) outsourcing - The role of knowledge, technology and time. *Journal of Manufacturing Technology Management*, 29(4): 676-698
- Nujen, B.B., Mwesiumo, D.E., Solli-Sæther, H., Blindheim Slyngstad, A., Halse, L.L., 2018b. Backshoring readiness. *Journal of Global Operations and Strategic Sourcing*, 12(1): 172-195.
- Oshri, I., Sidhu, J. S., & Kotlarsky, J. 2019. East, west, would home really be best? On dissatisfaction with offshore-outsourcing and firms' inclination to backsource. *Journal of Business Research*, 103: 644-653
- Overby, S. 2005. Backsourcing Pain. Retrieved at: <http://www.cio.comlarchive/O9OIO5/whiplash.html>
- Pearce, J. A. 2014. Why domestic outsourcing is leading America's reemergence in global manufacturing. *Business Horizons*, 57(1): 27-36
- Poppo, L., & Zenger, T. 2002. Do formal contracts and relational governance function as substitutes or complements? *Strategic Management Journal*, 23(8): 707-725
- Poppo, L. & Zenger, T. 1998. Testing alternative theories of the firm: transaction cost, knowledge-based and measurement explanations of make-or-buy decisions in information services. *Strategic Management Journal*, 19(9): 853-877
- Reshoring Institute 2020. Reshoring and Sustainability – Beyond the Horizon, accessed May 10, 2020, <https://reshoringinstitute.org/reshoring-knowledge-library/reshoring-white-papers/>
- Robinson, P. & Hsieh, L. 2016, Reshoring: a strategic renewal of luxury clothing supply chains. *Operations Management Research*, 9(3): 89-101
- Rugman, A. M., & Verbeke, A., 2001. Subsidiary specific advantages in multinational enterprises. *Strategic Management Journal*, 22(3): 237-250
- Schmeisser, B. 2013. A systematic review of literature on offshoring of value chain activities. *Journal of International Management*, 19(4): 390–406
- Seric, A. & Winkler, D. 2020. Managing COVID-19: Could the coronavirus spur automation and reverse globalization? Accessed May 10, 2020, <https://iap.unido.org/articles/managing-covid-19-could-coronavirus-spur-automation-and-reverse-globalization>
- Srai, J.S. & Ané, C.2016. Institutional and strategic operations perspectives on



- manufacturing reshoring. *International Journal of Production Research*, 54(23), 7193-7211.
- Stentoft, J., Olhager, J., Heikkilä, J., & Thoms, L. 2016b. Manufacturing backshoring: a systematic literature review. *Operations Management Research*, 9(3-4): 53-61
- Stoian, C. R., & Filippaios, F. 2008. Dunning's eclectic paradigm: A holistic, yet context specific framework for analysing the determinants of outward FDI: Evidence from international Greek investments. *International Business Review*, 17(3): 349-367
- Strange, R. 2020. "The 2020 Covid-19 pandemic and global value chains." *Journal of Industrial and Business Economics*. <https://doi.org/10.1007/s40812-020-00162-x>
- Strange, R. & Zucchella, A. 2017. Industry 4.0, global value chains and international business. *Multinational Business Review*, 25(3): 174-184
- Sutton, R. I., & Staw, B. M. 1995. What theory is not. *Administrative Science Quarterly*, 40: 371-384
- Tate, W. L. 2014. Offshoring and reshoring: US insights and research challenges. *Journal of Purchasing and Supply Management*, 20(1): 66-68
- Tate, W. L., & Bals, L. 2017. Outsourcing/offshoring insights: going beyond reshoring to rightshoring. *International Journal of Physical Distribution & Logistics Management*, 47(2/3): 106-113
- Tate, W. L., Ellram, L. M., Schoenherr, T., & Petersen, K. J. 2014. Global competitive conditions driving the manufacturing local decision. *Business Horizons*, 57(3): 381-390
- Veltri, N. F., Saunders, C. S., & Kavan, C. B. 2008. Information systems backshoring: correcting problems and responding to opportunities. *California Management Review*, 51(1): 50-76
- Whetten, D. 1989. What constitutes a theoretical contribution? *Academy of Management Review*, 14: 490-495
- Wiesmann, B., Snoei, J.R., Hilletoft, P., & Eriksson, D. 2017. Drivers and barriers to reshoring: a literature review on offshoring in reverse. *European Business Review*, 29(1): 15-42
- Williamson, O. E. 1975. *Markets and Hierarchies*. New York: Free Press
- Williamson, O. E. 1985. *The Economic Institutions of Capitalism: Firms, Markets and Relational Contracting*. New York: Free Press
- Wu, X., & Zhang, F. 2014. Home or overseas? An analysis of sourcing strategies under competition. *Management Science*, 60(5): 1223–1240

**APPENDIX**

<b>Research criteria</b>	<b>What this paper has to offer in light of this criterion</b>
What's new?	Combination of the three theoretical lenses increases explanatory value/power beyond single theory lenses;
So what?	Reshoring drivers and decision making steps can be related to underlying theoretical bases, providing a more solid foundation for further empirical research; e.g. without RBV considerations, some decisions solely interpreted from TCE would be irrational
Why so?	The linkages of the theories to the drivers are highlighted in Table 2 and illustrative examples were added in Tables 3-5 to provide explicit views on organizational practice
Well done?	Linking the drivers to the respective theories and utilizing the overall framework for the chain of argumentation.
Done well?	The central ideas are reiterated throughout the paper, which has been crafted in line the journal's author guidelines.
Why now?	Reshoring has been gaining importance over the last years. With the very current COVID19 crisis, it is likely the topic will get another surge.
Who cares?	The paper is aimed at scholars in International Business, Supply Chain & Operations Management as well as Strategic Management.

**Appendix A: Research Criteria for Conceptual Papers (based on Whetten, 1989)**