

Manufacturing movements – moving rightshoring forward

A decision-making model for the manufacturing location- and
governance decision.

Final Version

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Abstract

The concept of rightshoring has recently been proposed to put a new perspective on related, but unidirectional phenomena such as backshoring. It has been argued that these phenomena focus on the outcome of a decision-making process, instead of focusing on the process itself. Within rightshoring, this decision-making process of firms is central. As the concept is in its infancy, this study aims to progress the rightshoring concept. This study divides the decision-making process into two phases: the initial offshoring decision and the consecutive decision-making process. Both phases have been integrated into a decision-making model, in which five general elements have been identified, knowingly: 1) the business strategy, 2) competitive advantage, 3) the location decision, 4) the governance decision and 5) human behaviour. These elements were examined empirically through a qualitative analysis of decision-making processes of three currently offshoring firms within the manufacturing industry. The findings suggest that the firm's decision-making process is very complex in nature, dependent on an interplay of various firm-specific and environmental factors that are more or less influenceable. The way forward is to acknowledge and study the complexity and interconnections of the elements that were identified. This study takes a first step to shift away from contrasting tendencies that are oversimplified and outcome-oriented.

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1. Introduction

1.1 Motivation, problem statement & relevance

The relocation of the manufacturing industry back to its country of origin has been an issue of particular interest in western countries in recent years (Barbieri et al., 2017). The phenomenon, often labelled ‘reshoring’ or ‘backshoring’, has been picked up by the mainstream press as a process which could potentially revive the western manufacturing industry.¹ Headlines like “*Jobs back to home*” (Volkskrant, 2013) and “*Coming home*” (The Economist, 2013) exemplify the appeal of the phenomenon. Such appeal is enhanced by firms known worldwide (e.g. Apple and General Electric) relocating foreign production back to their home country (Cohen et al., 2016; Gray et al., 2013). As a matter of fact, organizations that strongly encourage backshoring have gained a substantial foothold, mainly in the United States (U.S.). For example, the message of the U.S. based ‘Reshoring Initiative’ is unequivocal as their mission is to “*bring manufacturing back home*” (www.reshorennow.org).

However, the phenomenon is as appealing as it is contested. Considerable disagreement on the importance of the backshoring phenomenon exists. While several studies have not found any evidence of a backshoring trend, e.g. De Backer et al. (2016); Veugelers (2017), other studies have concluded differently. For example, Dutch survey-based research estimated that between 10 and 17 percent of firms once active abroad have relocated their activities back to their country of origin (Van Gorp, 2010; FD, 2013). For the German manufacturing industry, Kinkel (2014) concluded that every fourth to sixth offshoring decision is countered by a backshoring decision within two to five years after the initial shift. Contrasting this perspective, De Backer et al. (2016) have argued that offshoring did not come to a hold. As a matter of fact, there are still more firms engaging in offshoring activities than that there are backward movements (Cohen et al., 2016).

The quantitative evidence for offshoring and backshoring shows a strong multidirectional movement. Nonetheless, the academic literature is predominantly focused on an assumed direction of manufacturing movement, i.e. offshoring *or* backshoring (Stentoft et al., 2016). Indeed, even in the academic literature writers have been pushing rather one-sidedly to bring manufacturing back home (e.g. Benstead et al., 2017; Tate et al., 2014). As a response to such unidirectional perspectives, phenomenological disagreement among academia and

¹ Although different understandings of the phenomena exist, in this study, backshoring will be used to refer to the relocation of production activities back to the country of origin, whereas reshoring will be used to refer to any generic change of location with respect to a previous offshoring country. For an extensive explanation of the related concepts, see section 2.1 and Appendix I.

action-oriented organizations that are hyping backshoring, calls have been made to move beyond offshoring and backshoring towards a more balanced view.

In that sense, the concept of rightshoring, which has recently been proposed by several authors (e.g. Baroncelli et al., 2017; Joubioux & Vanpoucke, 2016; Tate, 2014; Tate & Bals, 2017), offers a new academic stance to the manufacturing location decision. It can be defined as “*the process that leads to identify the correct location for a specific firm, taking into account all the relevant factors*” (Baroncelli et al., 2017, p. 40). It does not consider the process as a matter of finding a way to bring everything back to a domestic location, but rather to find the right location for a given activity at a given moment in time (Benstead et al., 2017). As such, contrasting backshoring, rightshoring is not defined by the *result* of the firm’s location decision, but by the *process* leading up to that result. Backshoring still has value to label backward movements of production, however it needs to be dissociated from the view that considers backshoring as the ultimate and desired outcome.

Next to contributing to a more balanced view on global manufacturing (Stentoft et al., 2016), the rightshoring concept enables practitioners to make well-informed decisions about their future production location, whether or not the decision results in an offshoring or a backshoring activity (Joubioux & Vanpoucke, 2016). As location decisions have a long term influence on the competitiveness and the operational processes of the firm, they are of prime importance (Dunning, 2001; Joubioux & Vanpoucke, 2016). However, past offshoring decisions have often been made based on an ill-informed decision-making process, generating sub-optimal locations decisions. That is why 80 percent of the firms that repatriated production have characterized their backshoring decision as a short-term correction in response to a failed offshoring decision (Kinkel, 2014). Nevertheless, continuing to make ill-informed decision as a reaction to a hasty offshoring decision does not appear to be the way towards improvement (Wiesmann et al., 2017). The rightshoring perspective could potentially improve the firm’s decision making process, preventing firms to implement an offshoring decision that should not have been made in the first place. Besides, regarding already internationally active firms, a sound decision-making process could provide a more comprehensive view on firm performance and the firm’s possible alternatives and opportunities, considering backshoring as just one of the multiple options available to the firm. In that sense, research should combine both external factors as well as internal firm capabilities (Foerstl et al., 2016), potentially providing new insights into organizational learning through dynamic capabilities and the absorptive capacity of the firm (Bals et al., 2016; Gray et al., 2013). Such decision-making processes remain largely unexplored, but are acknowledged to provide interesting research opportunities (Bals et al., 2015; Barbieri et al., 2017).

1.2 Research objective, scope & research questions

As defined, rightshoring aims to identify the *correct* location for an individual firm. However, rightshoring is still in its infancy and literature on the backshoring decision-making remains scarce (Fratocchi et al., 2013). Therefore, by gaining insight into actual decision-making processes of currently offshored manufacturing firms, the main aim of this study is to progress the rightshoring concept.

The scope of this study needs elaboration. First, the focal point of this study is on the decision processes of firms actively offshoring. However, the initial offshoring decision plays a vital role as well, as this process is inextricably linked to the offshoring activity and its subsequent decision-making processes (Joubioux & Vanpoucke, 2016). Second, the focus is on high-tech firms as the propensity for this industry to backshore is higher than for low-tech firms (Dachs & Zanker, 2015). Third, while rightshoring, and therefore this study, mostly refers to the decision-making process as a location decision, it needs to be emphasized that the governance decision (i.e. whether to produce inhouse or outsource production) plays a crucial role in the rightshoring decision-making process. Indeed, it has been recognized that both decisions are embedded in the same context and that they are often combined strategies (Foerstl et al., 2016; Tate & Bals, 2017). As rightshoring considers all relevant factors, combining the governance decision and the location decision makes possible to study not only environmental conditions, but also firm-internal factors and buyer-supplier relationships relevant to the process. Fourth, as the firm is able to influence relevant factors to a greater or lesser extent, this study explores how firms respond to changing (internal or external) circumstances. This provides insight into the perceived and realistic alternatives available to the firm. Finally, although rightshoring ultimately aims to find the best possible production location and governance mode for a firm, the study integrates human and behavioural factors as well. Integrating these factors into decision-making has been proposed by Foerstl et al. (2016), as these factors potentially influence the decision-making process.

Following the research objective and the defined scope, the main research question is formulated as follows:

“In what way do the elements of the decision-making process of manufacturing firms contribute to rightshoring?”

The following sub-questions assist this study’s main research questions:

1. *“What is the role of the firm’s business strategy within the rightshoring concept?”*
2. *“What is the role of competitive advantage within the rightshoring concept?”*
3. *“What is the role of the location decision within the rightshoring concept?”*

4. *“What is the role of the governance decision within the rightshoring concept?”*
5. *“What is the role of human behaviour within the rightshoring concept?”*

1.3 Research design

This study uses qualitative research methods to answer the defined research questions. Although, during the study, it has been recognized that firms are relatively cautious and non-cooperative when it comes to sharing their internal decision-making processes, in the end, three firms were found ready to cooperate. These three firms have been integrated in a multiple-case study. Each of the three firms are active in the electrical engineering industry, benefitting the empirical analysis. The interviewees are people active on the management- or board level of the firm and are considered to be decision-makers with regard to the offshoring site. On the one hand, the empirical insights from each firm are described and analysed to progress the rightshoring concept. On the other hand, where possible the firms are compared to each other to explore differences and similarities regarding the full scope of their offshoring activities. In the end, to progress rightshoring, this comparison intends to value the specific similarities and differences among the offshoring practices of each case.

1.4 Thesis outline

The remainder of this study is structured as follows. Chapter 2 discusses the main existing theories and concepts and lays out relevant prior research regarding the international manufacturing location and governance decision. Firstly, a concise discussion on the understanding of the concepts is provided. Secondly, the developed decision-making model used in this study is displayed and its distinctive components are discussed. Thirdly, the decision-making model is substantiated theoretically in order to provide the right basis for the empirical analysis. Following, chapter 3 discusses the methodology used in this study. Chapter 4 describes and explains the results of the empirical research. The insights of the firm's decision-making processes are described and, where possible, compared to each other. Chapter 5 provides a concise conclusion, which is discussed in more detail in Chapter 6: the discussion. Finally, the reflection of chapter 7 gives a deeper insight into the research process and the main hurdles that were confronted.

2. Theoretic Framework

2.1 Refining the concepts

The use of clear and consistent terminology is necessary to assess the manufacturing location decision unambiguously. Unfortunately, despite the growing popularity of the phenomena among scholars, the current literature has by no means arrived at a state of consensus regarding the meaning and use of the multiple interrelated concepts like *offshoring*, *reshoring*, *backshoring*, *nearshoring*, and *onshoring*. A first issue with these concepts is that authors differs in their understanding regarding the phenomena in question, leading to disagreement in the debate (Wiesmann et al., 2017). A second issue is the confusion that has surrounded the concepts, as several terms are being used interchangeably, leaving the definitions open to multiple interpretations (De Backer et al., 2016). Competing terms impede clarity and limit the discussion on these concepts, hindering academic progress. As Wacker (2008, in Foerstl et al., 2016) has put it: “ill-defined or assumed definitions will yield ill-defined theoretical concepts in academic research”.

Therefore, a necessary discussion on the disagreement and confusion surrounding the phenomenological concepts is provided in Appendix I. It contributes to the understanding of what the concepts are and what they are not, echoing Gray et al. (2013). However, to maintain focus, this section proceeds with just a brief discussion and explanation of the concepts relevant in this study.

Offshoring. We define offshoring as the relocation of (parts of) production abroad: to own locations, to foreign suppliers or to any hybrid alternative in between. This definition shows similarities with the offshoring definition of Kinkel & Maloca (2009), however the current definition adds hybrid alternatives as these modes of organization need to be acknowledged as an important class on the governance spectrum (Foerstl et al., 2016; Riordan & Williamson, 1985). In this sense, offshoring always involves a geographical shift, independent of the chosen governance structure.

Reshoring. Reshoring is referred to as “a generic change in location with respect to the previous offshoring location” (Fratocchi et al., 2014, p. 56). This interpretation is distinctively unrelated to other popular interpretations that consider reshoring to refer to home country relocations (see for example Bailey & De Propris (2014); Ellram et al. (2013)).

Backshoring. Backshoring is denoted as the re-concentration of parts of production from own foreign locations, foreign suppliers or any hybrid alternative in between to the domestic production site of the firm. Again, the definition shows similarities with Kinkel & Maloca (2009),

but now includes the hybrid alternative. Contrasting reshoring, backshoring does imply the return of production. However it should be noted that backshoring does not necessary imply the repatriation of the whole subsidiary. Therefore, backshoring can occur on both the functional and the institutional level of the firm (Fratocchi et al., 2013; 2014).

Governance. According to Gray et al. (2013), reshoring and backshoring are fundamentally location decisions, which means that they exclude the governance decision from the phenomenon. This view is not adopted in this study, as the location decision (domestic or offshore) is combined with any alternative on the governance spectrum (Table 1). In that sense, the governance and the location decision are not mutually exclusive. In fact, the two are often combined strategies embedded in the same context (Foerstl et al., 2016; Tate & Bals, 2017).

Table 1. Alternatives on the governance spectrum.

Governance spectrum	Implementation process	Governance mode
Hierarchy	Insourcing; Internalisation	Captive production; Inhouse production; Internalised production; “Make”
Hybrid		E.g. Joint ventures; Relational contracting; Strategic partnerships
Market	Outsourcing; Externalisation	Outsourced production; Third party providers; External suppliers; “Buy”

Rightshoring. In section 1.1, rightshoring has been defined as “the process that leads to identify the correct location for a specific company, taking into account all the relevant factors” (Baroncelli et al., 2017, p. 40). Contrasting some popular definitions of reshoring, the concept of rightshoring is inclusive of the governance decision as governance is regarded to play a pivotal role in identifying the right location for a firm (Tate & Bals, 2017). Moreover, whereas backshoring and most understandings of the concept of reshoring focus on the geographical outcome, the decision-making process is central to rightshoring (Joubiou & Vanpoucke, 2016). Implicit, but essential, is the notion that a rightshoring decision does not necessarily include a geographical shift. Finally, it should be noted that the unit of analysis is on the component level of the firm and not on the organizational level (Gray et al., 2013), as firms might be involved in multiple location and governance decisions simultaneously (Foerstl et al., 2016).

2.2 A decision-making model

The rightshoring concept considers the decision-making process of manufacturing firms to be essential. Therefore, in line with the research objective, this study takes a rightshoring approach in which decision-making processes for the manufacturing location and governance decision are analysed. A decision-making model has been developed to analyse these processes, see Figure 1.

It needs to be emphasized that this model is not a prescriptive practical model per se, i.e. the model does not necessarily leads to identify the correct location and governance mode for a firm. In conceptual terms, the model is constructed to contain a comprehensive set of elements that are relevant to the firm's the decision-making process, which, in practical terms, *enables* rightshoring, but which does not *assure* rightshoring. This distinction is important considering the fundamental objective of this study, which is to progress rightshoring conceptually.

2.2.1 Explanation of the decision-making model

The model is constructed as follows. It consists out of two distinctive phases: 1) an initial offshoring decision-making process and 2) consecutive decision-making processes. The initial phase takes off from the domestically located firm. Prior to the determination of the offshoring business strategy, a firm needs to scrutinize its assets and resources in terms of competitive advantage. The possession of competitive advantage is regarded as a necessary condition to start considering an offshoring activity (see Section 2.3.1.2). If the condition is met, the firm determines its business strategy, which is either (a combination of) resource seeking, market seeking, efficiency seeking and/or strategic asset seeking. The following decision process is build up according to a joined location and governance decision, as these are combined strategies (Foerstl et al., 2016). Both decisions are embedded within the context of human behaviour, taking into account irrationalities, internal firm dynamics and biases in decision making. Alternative outcomes of the initial decision-making process are 'no shift' and an offshoring decision implementation, which include a decision on the mode of governance. A feedback loop is directed from the 'no shift' outcome towards the start of the decision process, as firms might enter the offshoring decision process again.

The second round decision-making can only be entered on the condition that an offshoring implementation has been the outcome of the first round. As is displayed in the model, the second round consists of the same elements as in the first round. However, competitive advantage has shifted to envelop the entire consecutive decision-making process. The implementation outcomes are specified as reshoring options, including backshoring, nearshoring and further offshoring. 'No shift' might again be a viable alternative. Each outcome has a feedback loop directed back to the start of a consecutive decision-making process. Even

the backshoring implementation loops back to the second phase, as the offshored experience and learning is too valuable to set a firm back to the initial offshoring phase.

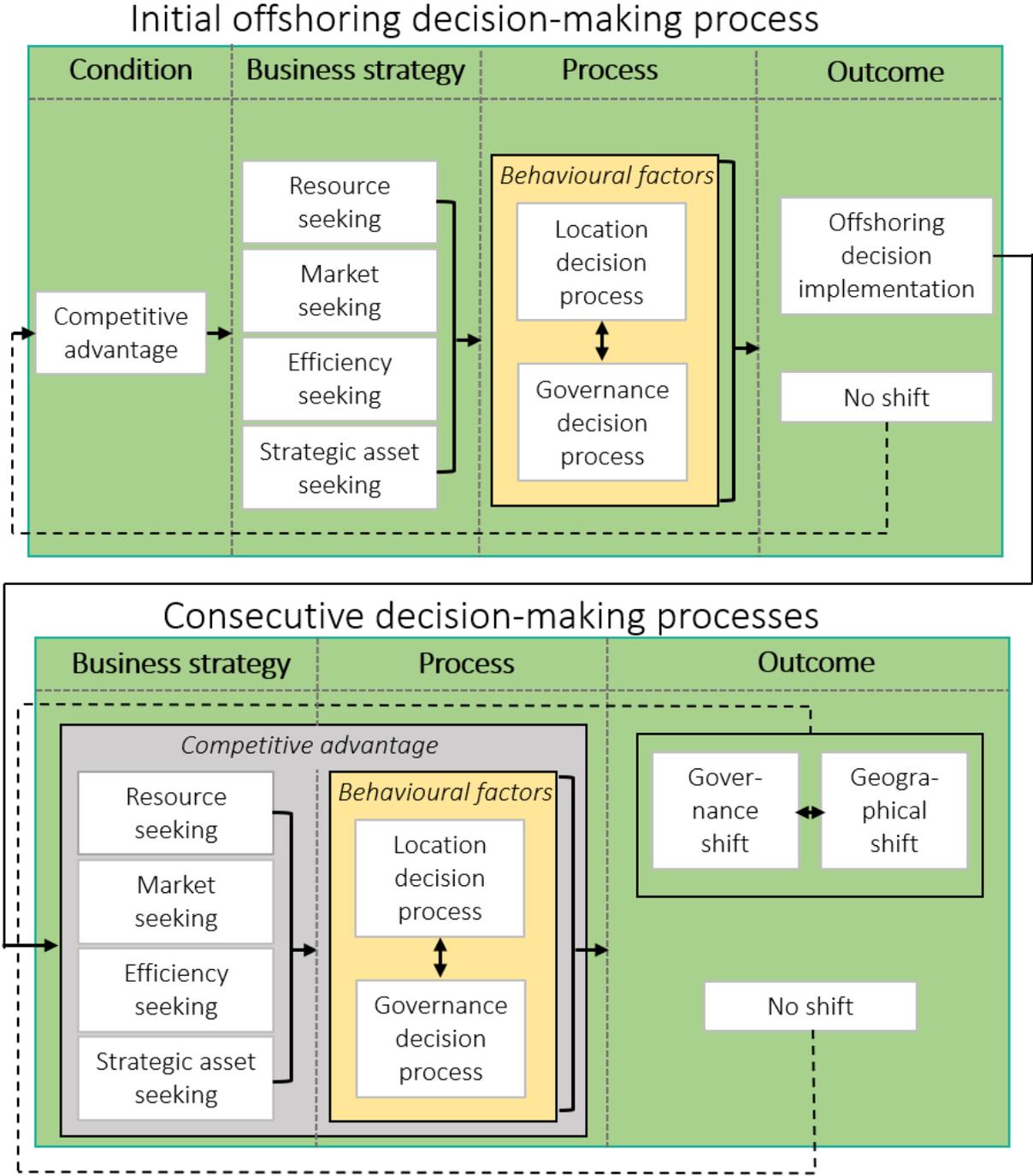


Figure 1. A decision-making model for international manufacturing.

2.2.2 Contribution of the decision-making model

The presented model, in its full scope, is composed of multiple, consecutive phases of decision-making to cover the full extent of offshoring- and reshoring decisions. The integration of multiple decision-making phases is crucial as a backshoring decision should always be explained as the reversion of a previous event, rather than an independent event (Baroncelli et al., 2017; Joubioux & Vanpoucke, 2016). As far as known, to this day, no models of this kind have been developed within the rightshoring literature, although, evidently, the model shows similarities with other decision-making models. The distinctive elements of the presented model are that the model is 1) *comprehensive*, as it is inclusive of both offshoring and reshoring processes and as it considers the governance decision to play an important role. In fact, the only other model integrating both the offshoring and reshoring decision-making processes has been developed by Joubioux & Vanpoucke (2016).

Another distinctive element is that the model is 2) *continuous*, i.e. a process which is not necessarily aimed at reaching an ultimate outcome such as backshoring. Regarding the location decision as a continuous process, the model dissociates itself from the patriotic hunches expressed by the popular media and academics that backshoring is the final outcome to be pursued (e.g. Foerstl et al., 2016; The Economist, 2013). In other words, whereas other models like the one of Joubioux & Vanpoucke (2016) have considered two rounds of decision-making (offshoring and reconsideration), the current model is extended beyond these two rounds, treating the firm as an entity that is not simply deciding on whether or not to backshore, but that is rather in a continuous search to place particular activities in particular locations (Baroncelli et al., 2017).

Moreover, the continuous process gives opportunity for the model to integrate a decision-making outcome which requires 3) *no shift*. Most current literature on the offshoring and backshoring decision have been trying to explain why one of both decisions have been made (e.g. Benstead et al., 2017), disregarding the firms that have been through the same decision process and have decided not to shift within the geographic or governance dimension. Incorporating the decision outcome of 'no shift' into the model shows the priority of the process over the decision outcome and can potentially provide valuable insights as firms not been taken into account before are now included to play a significant role in the manufacturing location decision. However, it needs to be emphasized that 'no shift' does not imply 'no action'. A shift occurs either within the geographical dimension, the governance dimension or within a combination of both dimensions, however the firm may decide to implement internal change as a result of the decision-making process.

Furthermore, the conceptual model approaches both the governance and the location decision-making processes from a 4) *co-evolutionary perspective*, which sets the model apart from the model developed by Joubioux & Vanpoucke (2016). Their model follows a path that advances step-by-step. For example, in their model, the governance decision makes its entry after a phase of analysing the risks, opportunities and constraints that come with the potential offshoring location.

Lastly, the consecutive decision-making phase is geared towards the ability of firms to maintain and develop competitive advantage in an unfamiliar and rapidly changing environment. It does so by integrating the concepts of 5) *dynamic capabilities and absorptive capacity*, as was suggested by Bals et al. (2016). These concepts are positioned as key to a firm's survival abroad, but might also favour backshoring alternatives (Teece & Pisano, 1994; Bals et al., 2016).

2.3 Theoretical foundation of the model

Schmeisser (2013) stressed that no single theory explains how and why firms offshore and why differences in firm's offshoring practices exist. In order to grasp these processes and dynamics, this study will derive its theoretical foundation from multiple theories and concepts. It needs to be emphasized that the discussed theories and concepts in the section on the initial offshoring decision are by no means less relevant for the phase of the consecutive decision-making process. However, most theories and concepts make their appearance in the initial phase and these will therefore be discussed extensively in the initial phase with minor or no additions in the consecutive phase. The initially discussed theories are the OLI-paradigm, the Resource-Based View (RBV), Transaction Cost Economies (TCE) and the Organizational Buying Behaviour (OBB). The concepts that make their entrance in the consecutive phase are dynamic capabilities and absorptive capacity (section 2.3.2.1).

2.3.1 The initial offshoring decision-making process

2.3.1.1 The OLI-paradigm of international production

The eclectic paradigm of international production provides the broad theoretical foundation for the offshoring decision. The theory has been established by Dunning (1980, 1988) and has been one of the leading paradigms in the international business literature (Eden & Dai, 2010). The paradigm is eclectic as it draws upon a variety of economic streams of thought. Exactly because of this general approach, it offers the right setting to take off from as it provides the theoretical boundaries according to which the offshoring decision process will be further specified.

In his theory, Dunning distinguishes three main determinants that lead to international production: Ownership advantages, Location advantages, and Internalisation advantages (OLI).

Ownership advantage (competitive advantage)

The first determinant is ownership advantage. However, the remainder of this study uses the term 'competitive advantage'.² Competitive advantage is considered to be an essential attribute of any firm, not only to produce internationally, but for the firm to have a right to exist in the first place. Competitive advantages are shaped by the extent to which the firm possesses (or can acquire) assets. Assets are defined as "anything capable of generating a future income stream" (Dunning, 1980). A firm wishing to produce internationally, must possess additional competitive advantages in an unfamiliar and distant environment in order to gain a cost advantage over foreign locally-embedded firms (Dunning, 1980), as local embeddedness is a source of competitive advantage itself (Urzalai & Puig, 2017). In this sense, the possession of sufficient competitive advantage is regarded as a *condition* for offshoring. Section 2.3.1.2 specifies competitive advantage through the RBV.

Location advantage

The second determinant refers to existing spatially immobile factors present in a foreign country that can provide additional benefits for a firm when combined with spatially transferable products produced in the home country (Dunning, 1988). This determinant is called the location advantage. Such immobile factors can for example consist of the presence of natural resources or regional trading clusters. The more a firm needs to exploit their competitive advantage through immobile factors present in foreign countries, the more a firm will engage in offshore production. Within this study, the location advantage is encompassed within the location decision (see section 2.3.1.4).

Internalisation advantage

The final determinant, the internalisation advantage, focuses on the benefits to internalise production abroad. A firm will internalise its international production when the perceived benefits of making use of its assets itself are higher than the benefits for outsourced production. This particular decision is discussed in the governance decision (section 2.3.1.5) and will be specified through TCE and OBB.

² Ownership advantage is the term originally used as the O in the OLI-paradigm, however the term can be regarded as a synonym to competitive advantage (Dunning, 1988). This study prefers and adopts the term competitive advantage, because some authors (e.g. Gray et al., (2013); Joubioux & Vanpoucke, (2016)) use ownership to refer to a governance decision. This potentially leads to confusion regarding what is meant by ownership (see also Appendix 1). Therefore, this study does not adopt ownership as a term, but uses 'competitive advantage' and 'governance decision'.

These determinants together make up this three-legged eclectic theory. The first two determinants need to be present in any case in order for a firm to consider an offshoring activity to be considered. On the one hand, if the firm possesses insufficient competitive advantage, the firm will struggle to survive in the home country, let alone abroad. On the other hand, if the advantages associated with a particular foreign location are insufficient, there is no reason for a firm to select that location over the home country location. In these cases, no offshoring activity should be pursued. By contrast, in the absence of internalisation advantages, a firm could proceed on offshoring production, albeit outsourced production.

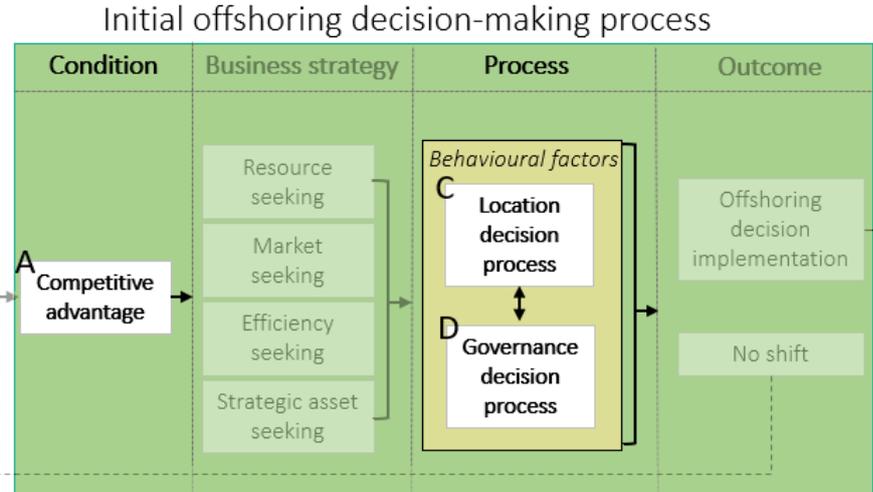


Figure 2. Integration of the OLI-paradigm in the initial decision-making phase.

The main components of the initial offshoring decision-making phase have been discussed in general at this particular point in the theoretic framework. These components – the condition of competitive advantage, the location decision and the governance decision (highlighted and displayed as A, C and D in Figure 2) – have been identified on the basis of the eclectic OLI-paradigm. As mentioned earlier this section, the theoretic framework will now proceed by discussing relevant theories and concepts that fit within these components. This provides structure for the developed decision-making model. The contributions of each specific theory and concept within the decision-making model to progress the rightshoring concept are discussed in several ‘boxes’ throughout the theoretic framework. The first box (Box 1) is provided to demonstrate the contribution of the eclectic paradigm to the rightshoring concept.

Box 1. Contribution of the eclectic paradigm to rightshoring.

Scientific contribution. In its generality, the eclectic paradigm of international production provides the conceptual boundaries for the offshoring decision-making framework. Three of the essential components within offshoring decision-making (competitive advantage, location decision and governance decision) are derived from the three legs of the OLI-paradigm, structuring the model.

Practical contribution. Firms considering offshoring need to focus (at least) on three aspects. Firstly, considerations need to be made regarding whether or not the firm possesses sufficient competitive advantage to survive in a distant and unfamiliar environment. Secondly, the firm should investigate whether or not the foreign location provides the right location advantages needed to exploit its competitive advantage. Finally, the firm needs to pay attention to the benefits of internalizing *vis à vis* outsourcing the potentially offshored production.

2.3.1.2 The RBV within competitive advantage and the governance decision

As we have determined that competitive advantage serves as condition within the initial offshoring decision-making process, we now turn to the RBV as the leading theory to identify what competitive advantage exists of (A in Figure 3). According to Fratocchi et al. (2016), this theory is in line with the competitive advantages of the eclectic paradigm. The RBV highlights the importance of firm-internal factors, as it focuses on the firm's search for competitive advantage through deploying the firm's own unique assets, capabilities and resources (Barney, 1991; McIvor, 2009). These resources and capabilities are a bundle of tangible and intangible assets, such as the firm's organizational processes and routines, management skills and the knowledge it controls (Barney, 2001). Four distinctive criteria need to be met to potentially create a sustainable competitive advantage (Barney, 1991):

- 1) Most essential, a resource must have *value*.
- 2) The resource must have some degree of *rarity*, which is related to the number of competitors that possess such resources.
- 3) The ease with which competitors can replicate a particular rare and valuable resource is covered by the *imitability* criterion. The easier to replicate a resource, the easier to replicate, the less durable the resource.
- 4) Finally, the firm must be *organized* to successfully exploit the particular resource.

Another contribution of the RBV that needs to be mentioned is its analysis on the governance decision (D in Figure 3; more specifically examined in section 2.3.1.5). As the RBV focuses on the development and possession of resources and assets, the firm should perform its core activities internally and outsource non-core activities (McIvor, 2009). For example, the firm's unique value creating tasks should rather be produced internally, while component assembly might be more effectively conducted through outsourcing (Foerstl et al., 2016). Moreover, next to using outsourcing as a mechanism for cost reduction, it can also be pursued to leverage the specialist capabilities of suppliers. Specialist suppliers might be more efficient and develop greater knowledge depth (McIvor, 2009). In this respect, outsourcing is to be seen as a strategic decision (Holcomb & Hitt, 2007). The contribution of the RBV for rightshoring is provided in Box 2.

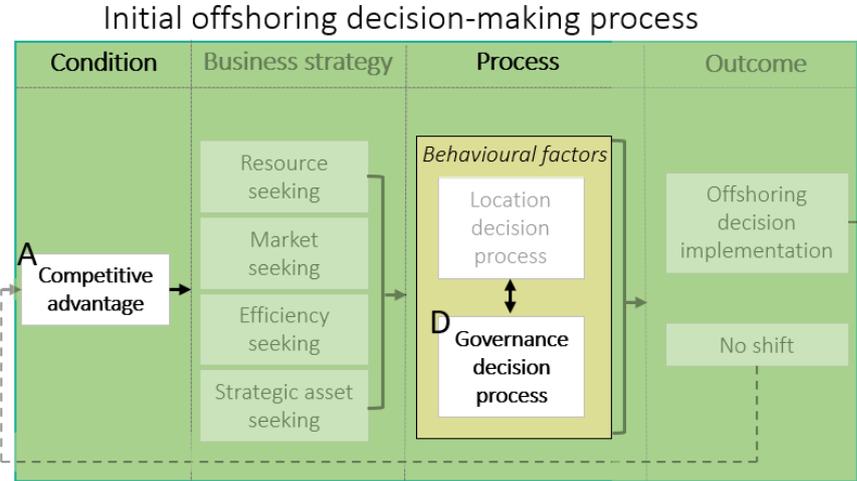


Figure 3. Integration of the RBV within the initial decision-making model.

Within the initial offshoring process, competitive advantage should be framed as a condition as opposed to a decision. Competitive advantages, therefore, do not sufficiently explain why firms start offshoring (Dunning, 1980). However, it is essential for the firm to be able to maintain competitive advantage in a foreign context (see section 2.3.2.1). The theoretic framework now proceeds with the firm's determination of its business strategy, prior to discussing the other two OLI-based components which are the location- and governance decision (section 2.3.1.4 and 2.3.1.5).

Box 2. Contribution of the RBV to rightshoring.

Competitive advantage. The RBV can be used to explore whether or not a firm's resource fulfils the criteria to provide sustainable competitive advantage. This serves to improve the decision-making process and, hence, to develop a better understanding of rightshoring, as a firm that cannot meet the condition of competitive advantage should not offshore production activities.

Governance decision. Understanding the relationship between internal/outsourced production for core/non-core competencies advances the rightshoring concept. The RBV provides a frame of reference for firms that are in the decision-making process of deciding which alternative on the governance spectrum should be pursued for a specific production activity.

2.3.1.3 The offshoring business strategy

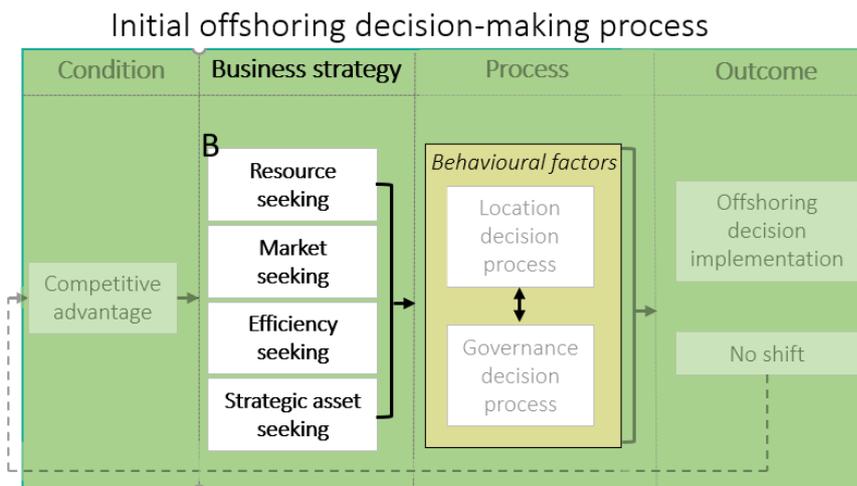


Figure 4. Integration of the firm's business strategy within the model.

The firm's business strategy is considered to be both the first and the most influential factor in explaining the initial offshoring decision (Baroncelli et al., 2017; Joubiou & Vanpoucke, 2016). Following the condition of competitive advantage, it is the first decision to be made by the firm. Based on this strategy the firm will select a potential host country or region, the location decision. Dunning (1988; 2001) considers four types of international production strategies, which are:

1. Resource seeking advantage. It includes the availability of raw materials, infrastructure, and also a network of local partners.

2. Market seeking advantage. The market seeking advantage addresses the availability of local suppliers, access to domestic markets and government policies.
3. Efficiency seeking advantage. Efficiency advantages pertain the combination of production and cost-related factors.
4. Strategic asset-seeking advantage. It evaluates the knowledge related assets, gathering of market intelligence and economies of agglomeration to keep a local presence.

These four strategies are included in the decision making model, see B in Figure 4. The determination of the business strategy precedes the actual location decision. Nonetheless, firms have locational needs that directly originate from their competitive strategy (Dunning, 1998). Box 3 describes what rightshoring needs to adopt from the offshoring business strategy.

Box 3. Contribution of the offshoring business strategy to rightshoring.

Conceptually, it needs to be recognized that a wide variety of business strategies exist that provide the basis for the offshoring consideration. Each of the possible (combinations of) strategies will have distinctive consequences in terms of the advantages that firms are seeking in a foreign location. This means that the location- and governance decision-making process are to some extent tied to the chosen business strategy. Rightshoring should take into account that firms follow a distinctive path dependent on the chosen business strategy.

2.3.1.4 The offshoring location decision-making process

The determination of the actual offshoring location is very much dependent on the chosen business strategy. In the past, many firms have made an offshoring decision predominantly based on cost-cutting motivations (i.e. efficiency seeking), for example the low-labour costs in East Asia (Wiesmann et al., 2017). However, recent studies have witnessed a shift away from cost-cutting motivations, towards more market oriented strategies (Cohen et al., 2016; Joubioux & Vanpoucke, 2016). Also, according to Dunning (1998), strategic-asset seeking advantages, such as knowledge-related assets have become more important. These business strategies can be related to the attributes of several dimensions of environmental factors, also illustrated in the construction of the model, see B and C in Figure 5.

Initial offshoring decision-making process

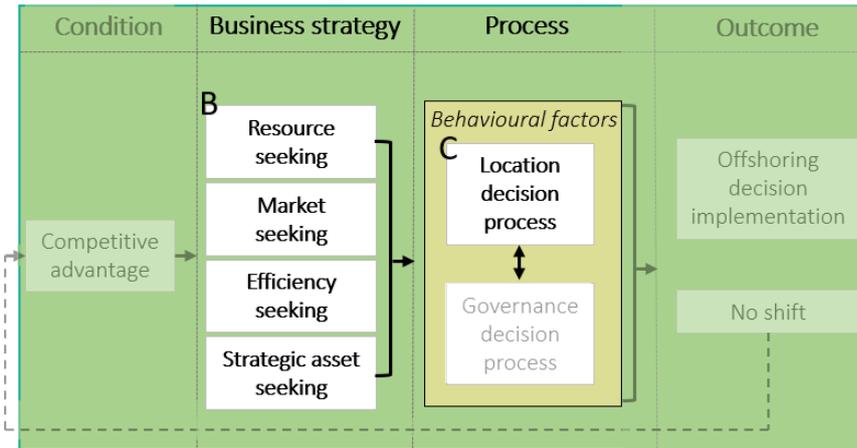


Figure 5. Integration of the location decision in relation with the offshoring business strategy.

Environmental factors

The competitive strategies that underlie the search for related locational advantages are very much of a microeconomic nature and have mainly been emerging and developing out of macro-economic changes. To the latter we refer to as environmental factors, which can be defined as “changes in exogenous factors that can affect the outcome of a location decision” (Baroncelli et al., 2017, 44). According to Jahns et al. (2006), These factors can be distinguished across four dimensions, namely: 1) economic driving forces, 2) political-legal conditions, 3) socio-demographic driving forces, and 4) technological driving forces.

Economic driving forces. According to Joubioux & Vanpoucke (2016), the presumed cost benefits of foreign low-income countries has been a primary driver of the offshoring decision. Next to wage differentials, the development of capital markets and the emergence of technology centres are also mentioned as economic driving forces. These centres make it easier for firms to find their required resources, but may also be essential to strengthen the firm’s competitive advantage through innovation (Jahns et al., 2006).

Political-legal conditions. Improved political-legal conditions gave rise to the increase in offshoring activities. Global organisations and national governments have pushed to liberalise international trade and liberalise economies. Through international trade agreements and treaties, trade barriers have been lifted, making it easier to deploy cross border activities (Jahns et al., 2006).

Political-legal conditions also include national labour laws as well as taxation laws (Jahns et al., 2006). Low labour costs as a result of flexible labour laws have been an incentive for firms to move production abroad. However, through recent media attention, disclosing the exploitation of labour conditions, the topic has become a serious concern (Jahns, 2006), potentially damaging the reputation of firms (Ellram, 2013). In line, soft environmental

regulations have been driving offshore activities in early years, though repeated environmental violations and the more recent standardization of environmental regulations have diminished the associated benefits (Gray et al., 2013; Tate et al., 2014). Nevertheless, Cohen et al. (2015) argued that sustainability issues hardly play a role in production location decisions.

Socio-demographic driving forces. Within this category factors such as population size, age structure and education levels are considered. Especially rising education levels in developing countries are driving offshoring activities. Improvements in this sense have been providing the necessary workforce at offshore locations (Jahns et al., 2006).

Technological driving forces. The basic technological driving forces for offshoring have been the developments in telecommunication and transport technologies. These technologies have been enabling offshoring as both logistic costs and information cost have been decreasing over the last decades (Jahns et al., 2006; Nachum & Zaheer, 2005).

Decision-making for a location

While these environmental factors and driving forces are essential in explaining *why* firms consider to offshore activities, it is not yet clear *how* firms decide on a particular manufacturing location. It is not only to know what is needed or desired when producing in a foreign location (e.g. low labour cost; customer markets), but even more to know what to expect when producing in a foreign location. In other words, a firm needs to assess whether or not location alternatives provide the right circumstances to benefit firm performance. Although not everything can be predicted and calculated upfront, a firm can deploy several assessment tools to make the right location decision. For example:

- *Scenario planning.* The foreign business environment is a dynamic one, with sometimes rapidly changing circumstances that affects doing business abroad. Although environmental uncertainty (section 2.3.1.3) has its influence, firms should be able to react to certain changes. One way to anticipate on future events is through 'scenario planning' (Kinkel & Maloca, 2009). By deploying scenario planning as an assessment tool, firms can calculate systematically if some factors develop more positively or negatively than originally expected. As the location decision is a long-term decision, firms should also focus on possible alternative futures in multiple ranges of time (Tate et al., 2014). However, it has been observed that scenario planning yet hardly plays a role in business analysis (Kinkel & Maloca, 2009; Bals et al., 2015).

- *Total cost approaches.* Total cost approaches goes beyond mere single factor cost advantages such as low labour costs. It goes hand-in-hand with scenario planning as it analyses the implications of different factors under different scenarios (Tate et al., 2014). Total cost approaches provides insight into which location might be most favourable under which circumstances, both in the home land and offshore.

Box 4. Contribution of the location decision to rightshoring.

Although extensive analysis has been conducted on the factors and driving forces behind the offshoring location decision, less is known about how firms consider location alternatives. The role of environmental uncertainty and business risks needs to be assessed by firms before making the decision to offshore. Not only considering present circumstances, but also by making projections for alternative possible futures, both positively and negatively. Rightshoring should therefore not only consider relevant factors that are sought to explain offshoring strategies, but should also focus on the firm's methods of analysis towards identifying its correct location. In this regard, it is considered that the current knowledge within academic research is incomplete, which might also be reflected in the limited use of such methods in the business practice. As a consequence this had led to suboptimal location decisions, reflected in the relatively large numbers of firms backshoring as a correction to a prior offshoring misjudgement (Kinkel & Maloca, 2009).

2.3.1.5 The governance decision-making process

The decision-making process of international production consists next to a location decision also of a governance decision. Processes of this kind result in a decision to make (inhouse production), buy (outsourced production) or a hybrid variant (Foerstl et al., 2016) (see Table 1). The decision depends on the presence of internalization advantages as opposed to externalization advantages. The theories of TCE and OBB are put forward to explain the decision of firms to either outsource production or to produce inhouse and their contributions will be discussed hereafter. Additionally, both theories integrate factors of human behaviour. Figure 6 shows the positioning of TCE and OBB in the offshoring decision-making model.

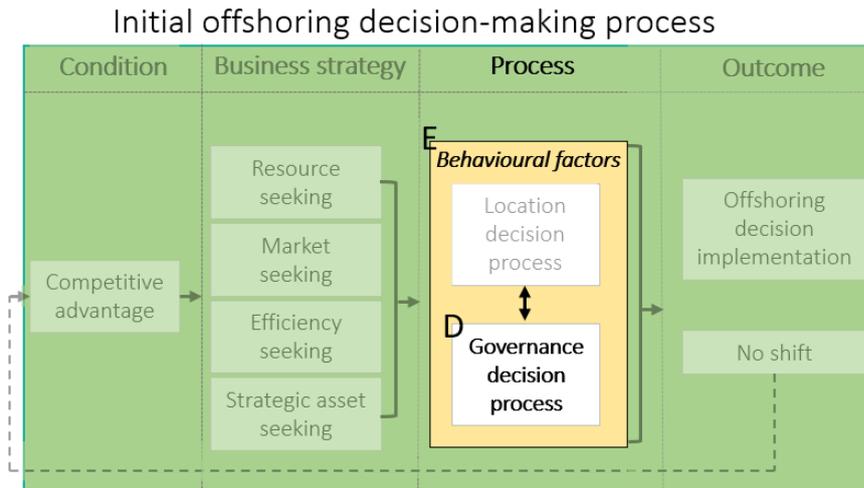


Figure 6. Integration and positioning of human behaviour and the governance decision in the model.

Transaction cost economies

According to Fratocchi et al. (2016), internalisation advantages are consistent with Transaction Cost Economies (TCE). TCE will therefore be used as the central theory to discuss the governance decision. TCE is grounded in the work of Coase (1937) and Williamson (1989; 2008). The theory considers the transaction and its attributes as the main unit of analysis (Riordan & Williamson, 1985). TCE specifies the conditions under which a firm should manage an economic exchange internally (high transaction-cost circumstances) versus managing an economic exchange externally (low transaction-cost circumstances), i.e. outsourcing (McIvor, 2009). In general, a firm attempts to balance the cost of market frictions and specific asset investments with the potential risk of buying the item rather than making it (Ellram et al., 2013).

Market frictions that complicate the economic exchange are:

1. *Bounded rationality*. Bounded rationality is a behavioural assumption and refers to the cognitive limitations of the human mind as environmental complexities restrict the bounds of knowledge (McIvor, 2009). Both the anticipation of future events and the resulting possible outcomes cannot be fully rationalized in buyer-supplier relationships (Foerstl et al., 2016).
2. *Opportunism*. Opportunism is a behavioural assumption as well and refers to the behaviour of decision makers when acting towards transaction partners who are driven by self-interest and dishonesty (McIvor, 2009). The possibility of such behaviour of transaction partners causes an increase in transaction costs, through higher efforts in information-seeking activities, coordination and control (Foerstl et al., 2016). In situations where the risk of IP leakages are high, it is argued that firms should opt for internal production alternatives over outsourced ones (Mártinez-mora & Merino, 2014).

Opportunistic behaviour could also be encouraged by situations of small numbers bargaining.

3. *Small numbers bargaining.* The concept of small numbers bargaining refers to the degree to which the buyer has options for an alternative sources of supply (Mclvor, 2009). In the situation in which these alternatives are scarce, the buyer becomes dependent on suppliers for its resources. In turn, suppliers may act opportunistic as the relational power has shifted towards them, creating the possibility for the supplier to demand higher prices for the same product.
4. *Information impactedness.* Information impactedness is a term referring to the presence of information asymmetries between the buyer and the supplier. Consequently, either party may have more knowledge than the other, which could also lead to opportunistic behaviour (Mclvor, 2009).

The associated costs with these four complicating factors are increased when transactions are characterized by asset specificity, uncertainty and frequency (Mclvor, 2009).

1. *Asset specificity.* The principal attribute of the transaction is asset specificity. Consequently, within TCE it is the most important factor in explaining variations in the make-or-buy decision (Mclvor, 2009, Riordan & Williamson, 1985). The concept is explained as the need to invest in specific assets to support certain activities, dependent on the level of customization associated with the transaction (Ellram, 1995; Mclvor, 2009). In general, the higher the asset specificity, the greater the transactional difficulties, implicating that firms will decide upon making the products internally when asset specificity is high as opposed to buying the products from external suppliers when asset specificity is low (Mclvor, 2009).

Nevertheless, a buyer-supplier relationship characterized by high asset specificity indicates a mutual interest of both parties in maintaining the relationship. Investments made to strengthen such relationships can take the form of human asset specificity, site specificity, or physical asset specificity (Mclvor, 2009). Human investments refers to the level of specialized knowledge involved in the transaction, whereas site specificity is bound to the location of production, i.e. investments made to improve the geographical proximity of different production stages. Physical investments are related to the level of product or service customization. In line, Foerstl et al. (2016) have argued that physical asset specific investments are high when the transaction is characterized by a high product and process complexity.

Investments within high-specificity assets are balanced on a spectrum between trust and opportunism. Investments made by the firm to build a strong relationship with a supplier increases the initial costs of the transaction, but such investments can be decreased over time because the accumulated experience between both parties shifts the partnership towards one of trust (Vivek et al., 2009). However, asset specificity can trigger opportunistic behaviour when one of both parties has made considerable investments, providing leverage over the other.

2. *Uncertainty*. Within the make-or-buy decision, environmental uncertainty plays a significant role. The importance of uncertainty as a factor is discussed within the context of the consecutive location decision (Section 2.3.1.3). Although the outcome between the location decision and the make-or-buy decision differs, the discussion develops along the same line. Namely, the higher the environmental uncertainty, the more likely production will be situated close-by, in terms of geography and in terms of the governance structure, respectively (McIvor, 2009).
3. *Frequency*. Frequency captures the number of transactions between exchange parties. When transactions fail to approach anticipated frequency and scale with offshore outsourcing partners, high logistic costs and low fixed cost digression result in less competitive cost positions compared to more locally centred alternatives (Foerstl et al., 2016). However, from the perspective of the buyer, low or uncertain demand for a specific transaction could result in an outsourcing decision, as the buyer benefits of the scale economies of the supplier (McIvor, 2009).

Box 5. Contribution of TCE to rightshoring.

TCE contributes to rightshoring by specifying which mode of governance has an advantage over the other in certain situations where transaction costs play a role. The distinction between low transaction-cost circumstances and high-transaction-cost circumstances provides guidance regarding the firm's offshoring decision-making process. However, most of the actual transaction costs will be identified through experience of the firm with the foreign location. In this sense, the effect of a governance decision will be known in the process of the consecutive decision-making phase, although the firm decides on a governance mode during the initial offshoring phase. Therefore, firms can only anticipate on expected transaction costs e.g. by analysing the possible risks of IP leakages and other forms of opportunism.

For rightshoring, the influence of possible negative factors of human behaviour and environmental uncertainty needs to be taken into account when considering a governance mode. However, it needs to be noted that considerable initial investments within buyer-supplier relationships can reduce opportunism and increase trust between both parties, which in time lowers the associated transaction costs. Indeed, being aware of transaction costs associated with buyer-supplier relationships and being aware of the firm's degree of influence (low and high) within alternative modes of governance appears to be TCE's contribution to a sound governance decision.

Organizational buying behaviour

Organizational buying behaviour (OBB) has been proposed as a complementary theory to TCE (Foerstl et al., 2016). Both theories consider the transaction as the unit of analysis and incorporate human behaviour as an important variable. However, whereas TCE aims at understanding the relational aspect of the transaction between suppliers and buyers, OBB focuses on firm internal decision-making processes and has been developed to understand behaviour within the 'buying' alternatives of the governance decision.

It contributes to the current decision on the governance decision as it considers organizational buying to be a decision-making process, which is carried out by individuals, in interaction with other people, in the context of a formal organization (Webster & Wind, 1972), therefore providing insight into the processes underlying the transaction. Ultimately, these processes shape the operations of the firm. In that sense, the process of the initial offshoring decision that results in the inclusion of any form of outsourcing is subject to the characteristics of the OBB theory. Although, this could be the case for any alternative on the governance spectrum

(Table 1) as hierarchically governed offshored facilities might still outsource inputs from the market that are needed for its production activities.

The actors involved in these buying processes are identified as the 'buying center' (Foerstl et al., 2016). The theory distinguishes five actors within a buying center: the buyer, the decision maker, the user, the influencer and the gatekeeper (Bals et al., 2015). The buying center deals with the buying task, a process in which a range of alternative brands and suppliers are identified, evaluated and decided upon (Webster & Wind, 1972). On the one side, this process is considered to be one of rationality, embedded in economic factors. On the other side, behavioural factors such as emotion, personal goals and internal politics are involved in the buying decision process. The key distinction is that the behavioural factors are not related to the goals of the buying task, which are to "buy the right quality in the right quantity at the right price for delivery at the right time from the right source." However, the behavioural non-task related motives may often be more important (Webster & Wind, 1972).

The ultimate buying decision(s) will be influenced by individual, social, organizational and environmental factors. Within the buying center, we divide between five roles, that are: the buyer, the decision maker, the influencer, the user and the gatekeeper (Bals et al., 2015). Varying perceptions on the outcome of the buying task by different members of the buying center can lead to sub-optimal decisions. Insights into the organizational buying behaviour of the firm can provide valuable information, as it potentially could explain why some decisions have turned out to be dissatisfying.

Box 6. Contribution of the OBB to rightshoring.

The theory of OBB provides insight into the firm's buying practices. Completely rational behaviour within the buying center should lead to economically rewarding buying decisions. However, in practice, to some extent, actors within the buying center pursue personal goals that interfere with the buying task. For rightshoring, it is important to take notice of the connection between rationality and emotion. Not only when regarding buying behaviour, but also in extension to the entire governance decision. This connection is provided by OBB, but also by TCE.

2.3.1.6 Human behaviour

Modelling the initial offshoring decision-making process of the firm requires the integration of factors of human behaviour. Some of the most important behavioural factors, such as bounded rationality and opportunism have been addressed above. In addition, both need to be distinguished theoretically as the concept of bounded rationality provides a theoretical cause

for restricted rationality, whereas opportunism is the outcome of unjust self-interested behaviour. The existence of bounded rationality indicates that decision-makers are never fully rational, as it refers to the cognitive limitations of the individual. This notion might be an inconvenient one regarding the possibility to find the optimal manufacturing location. As such, the notion is that human behaviour influences the decision outcome unavoidably. By contrast, to a certain extent, the occurrence of other behavioural factors such as opportunism could be influenced by the individual itself. The positioning of behavioural factors (E), such as bounded rationality, opportunism, but also the bandwagon effect in its influence on decision-making (C and D) is illustrated in Figure 7.

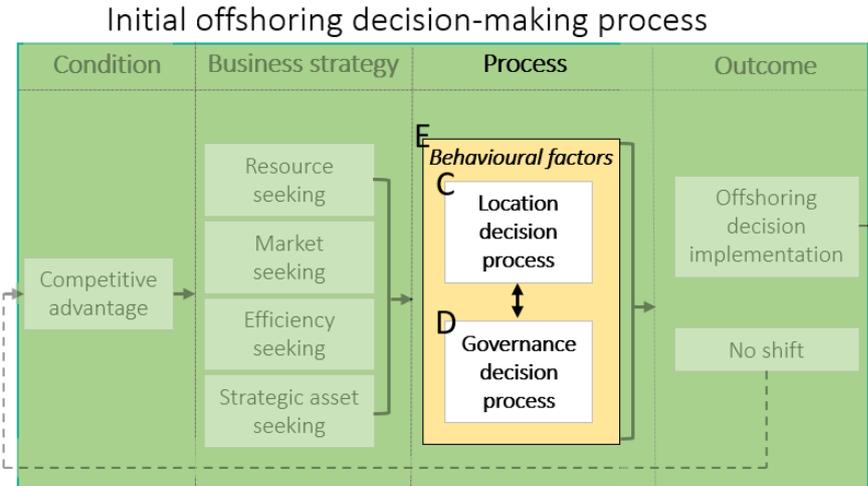


Figure 7. The influence of human behaviour in the model.

The bandwagon effect

A decision bias which has emerged out of the concept of bounded rationality is the bandwagon effect (Barthélemy, 2003). Benstead et al. (2017) argues that the bandwagon effect influenced offshoring decisions as firms that have no strong internal drive to offshore might be impacted by the actions of competing firms that have decided upon offshoring production. Offshoring decisions that are influenced by the bandwagon effect potentially lack solid strategic consideration (Fratocchi et al., 2016).

Box 7. Contribution of human behaviour to rightshoring.

Discussing the OLI-paradigm, section 2.3.1.1 argued that no offshoring decision is to be made when the needed competitive and location advantages are not present. In this situation, decision-makers acting fully rational will, therefore, not engage in any offshoring activity. However, as observed in this section on human behaviour, decision-makers will be constrained by factors limiting their rationality or by factors inducing irrational behaviour, ultimately influencing the outcome of the decision-making process. Therefore, not all firms implementing offshoring decisions exhibit all three advantages of international production. Evidently, when offshoring decisions are heavily based on behavioural factors such as the bandwagon effect, the possibility of misjudging the actual cost advantage of offshoring is increased (Bailey & De Propriis, 2014). Rightshoring needs to take into account such factors as some of them are hard to overcome. It is wishful thinking that rightshoring develops without the influence of emotional and personal factors. In that sense, it is better to acknowledge the existence of human behaviour in decision-making and try to reduce irrational behaviour where possible, instead of neglecting its impact.

2.3.1.7 The offshoring decision outcome

As shown in Figure 8, two possible general decision outcomes exist regarding the initial offshoring decision-making phase. On the one hand, after consideration, a firm can decide to keep its production in the home country. In that case, the decision-making possibly starts over again when certain factors change in favour of offshoring. On the other hand, a firm can decide to implement an offshoring strategy. The consideration of a business strategy, a location and a mode of governance, while fulfilling the condition of competitive advantage resulted in a decision that favoured offshoring as a right new business approach. Conceptually, the firm now shifts to the consecutive decision-making process.

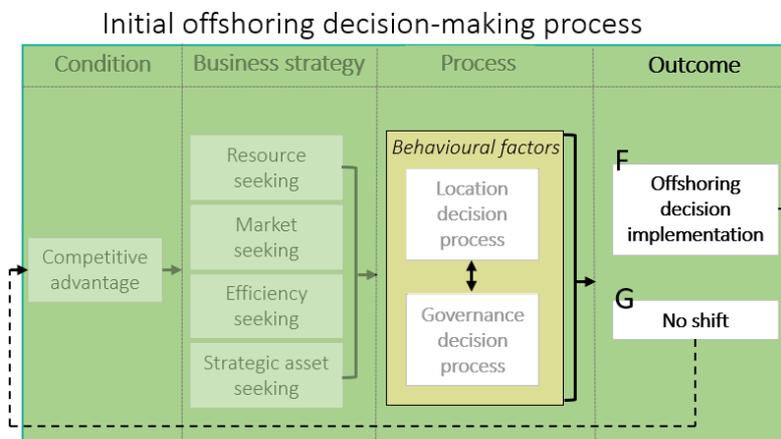


Figure 8. The outcome of the initial offshoring decision-making phase.

2.3.2 Consecutive decision-making process

In the current model, a firm that implemented an offshoring decision as the result of the initial decision-making process enters the consecutive decision-making process (see Figure 1). In this phase, the firm again goes through a process of consideration that results in either a decision to reshore to the home country or another country or that results in no shift at all. This section analyses this process. The theories and concepts discussed in section 2.3.1 retain their relevance and are extended in the following sections to include the dynamics that distinguish the initial decision-making process from the consecutive decision-making process.

It was argued in section 2.3.1.1 that both the location- and competitive advantage of international production need to be present in order to make the decision to offshore hierarchically governed production (Dunning, 1980).³ However, it has also been observed that behavioural factors might constrain rational decision-making, thereby influencing the decision outcome. Therefore, offshoring decisions might not be based on the presence of all three advantages of international production. In the consecutive process of decision making, the firm encounters the effects of such a decision that lacks one or more advantages. However, assuming that the location and governance advantages are present at the time of offshoring, changes within all three advantages might occur as time proceeds. These dynamics and how firms deal with them are central to this section on the consecutive decision-making process.

2.3.2.1 Competitive advantage

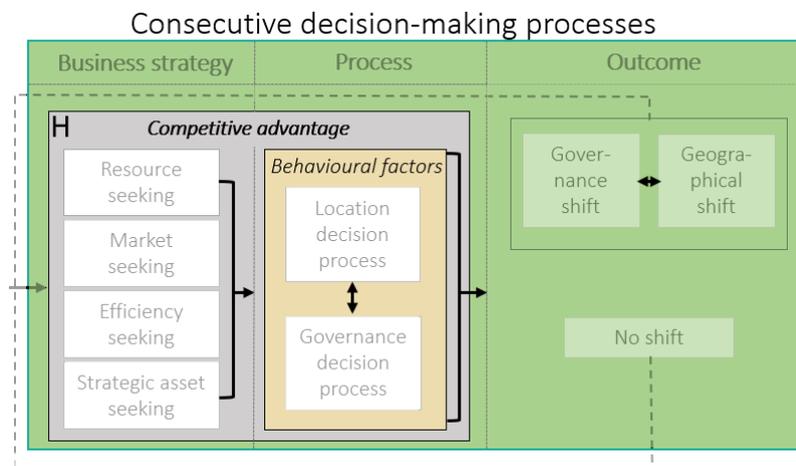


Figure 9. Competitive advantage in the consecutive decision-making phase.

In section 2.3.1.2, the possession of competitive advantages have been regarded as a necessary condition to start considering an offshoring activity. However, the possession of

³ Note that the absence of the internalisation advantage could still result in offshoring, albeit an outsourced one (see section 2.3.1.1).

competitive advantages at the initial offshoring decision is not a guarantee for a sustainable possession of such advantages abroad. This section contributes to the issue of competitive advantage in offshore locations, see Figure 9.

Resource-based view

The RBV (section 2.3.1.2.1) has been put forward to explain competitive differences between offshored firms. The ability or inability of individual firms to develop critical tangible and intangible assets abroad, to transfer them to the host country or to access and exploit the host country's resources determines whether or not a firm remains to be offshored or decides to backshore production (Canham & Hamilton, 2013). A firm that is not able to develop such resources and capabilities in a foreign context might relocate production back to their home country, which opens up new opportunities for the development of critical assets. For example, it could ensure a higher level of production quality, higher the level of flexibility and improve the relationship with distributors (Grappi et al., 2018).

However, the RBV provides no explanation for how firms maintain competitive advantage in unpredictable environments that are subject to change (Wiesmann et al., 2017). To fill this gap, the concept of dynamic capabilities is put forward to explain such differences.

Dynamic capabilities

The accumulation of valuable technological assets through a resource-based strategy is not enough to support a competitive advantage if a firm cannot utilize a sufficient level of dynamic capabilities in order to cope with changing environments (Teece & Pisano, 1994). Dynamic capabilities is mostly built on the work of Teece and co-authors (e.g. Teece et al., 1997; Teece & Pisano, 1994), and will be discussed accordingly.

In a rapidly changing environment, the key role of strategic management in adapting, integrating, and re-configuring internal and external organizational skills, resources, and functional competences needs to be emphasized. These firm capabilities are the organizational structures and the managerial processes which support productive activity. Therefore, capabilities enhancing competitive advantage are aimed at the internal activities of the firm *vis à vis* the organization of activities through markets. It is an essential characteristic as it takes into account cooperative activity and organizational learning, which cannot be replicated in a market. In other words, the focus on strategic capabilities is by definition not one for which a market exists, as strategic resources cannot be sold (Teece & Pisano, 1994).

Three dimensions of dynamic capabilities have been identified by Teece and Pisano (1994), namely: processes, positions and paths. The first is referred to as the managerial and organizational processes that shape how activities are practiced, like the organization's routines and its patterns of current practice and learning. The second, positions, is to be seen as the current assets of technology and intellectual property (IP), as well as its customer base and upstream relations with suppliers. Lastly, paths is referred to as the strategic alternatives available to the firm, and the attractiveness of the near-future opportunities.

Box 8. Contribution of dynamic capabilities to rightshoring.

Dynamic capabilities centres around the firm's internal processes, positions and paths that determines to which degree a firm is able to maintain its competitive advantage abroad. It could however also imply that a firm decides on backshoring, as the firm learned that its competitive advantage is better maintained in the home country. Dynamic capabilities provides a particular useful perspective on offshore business management. However, although dynamic capabilities points out which firm-internal dimensions need to be paid attention to when analysing a firm's decision-making process, it remains undefined how these dimensions need to be valued precisely.

Absorptive capacity

Experience and learning to expand a firm's absorptive capacity is key to achieve sustainable competitive advantage (Barney et al., 2001) and is to be seen as a specific dynamic capability (Zahra & George, 2002). The concept has been developed by Cohen & Levinthal (2000) and has been reconceptualized by Zahra & George, who define absorptive capacity as "a set of organizational routines and processes by which firms acquire, assimilate, transform and exploit knowledge to produce a dynamic organizational capability" (2002, p. 186).

As defined, absorptive capacity consists out of four complementary organizational capabilities. These four capabilities are further specified into two subsets, knowing 'potential absorptive capacity' and 'realized absorptive capacity'. The potential capacity consists of both the acquisition and the assimilation capability. *Acquisition* denotes the capability of the firm to identify and acquire externally generated knowledge that is critical to its operations (Zahra & George, 2002, p. 189). It contains three attributes that can influence the absorptive capacity of the firm: intensity, speed and direction. The intensity and speed with which the firm attempts to identify and gather knowledge determines the quality of knowledge accumulation. The direction influences the paths that the firm takes in its accumulation of knowledge. *Assimilation* is referred to as the firm's routines and processes that allow it to analyse, process, interpret

and understand the information obtained from external sources (Zahra & George, 2002, p. 189). The assimilation of knowledge is for example complicated by information that falls beyond the firm's search zone or by context specific knowledge that prevents outsiders from understanding and comprehending such knowledge.

The realized capacity consists of both transformation and exploitation. *Transformation* is defined as the firm's capability to develop and refine the routines that facilitate combining existing knowledge and the newly acquired and assimilated knowledge (Zahra & George, 2002, p. 190). The firm can accomplish knowledge transformation through adding or deleting knowledge or by interpreting existent knowledge in a different way than the firm used to do. This occurs through a process of bisociation: the existent frame of reference is combined with the assimilated frame of reference and both together form a new schema. This ability which represents the transformation capability provides new insights, facilitates the recognition of opportunities and changes the way the firm views itself and its competitors, ultimately creating new competences for the firm. The *exploitation* capability emphasizes the application of knowledge and is based on the routines that allow firms to refine, extend, and leverage existing competencies or to create new ones by incorporating acquired and transformed knowledge into its operations (Zahra & George, 2002, p. 190). The outcome of such routines create new goods, systems, processes, knowledge, or new organizational forms.

Only when utilized together, both subsets of potential absorptive capacity and realized absorptive capacity make a dynamic capability that fosters change and evolution. The firm that is able to acquire and assimilate knowledge, but is not capable to transform and exploit the newly absorbed knowledge will not improve its performance.

Box 9. Contribution of absorptive capacity to rightshoring.

Absorptive capacity is key to rightshoring as it explains why some firm fail because of changes in the external environment while others succeed under the same conditions (Zahra & George, 2002). These differences between firm performance contribute to a better understanding of offshoring and backshoring. Acquiring and assimilating new information and transforming and exploiting this information into the firms operations might implicate that the firm improves their competitive advantage abroad. It might also mean that the firm realizes that their current offshoring activities are no longer sustainable and profitable and hence decides to implement a reshoring strategy. Rightshoring should consider both alternatives to be potential appropriate consequences of newly constructed frames of reference. Whether or not these are the 'right' decisions depend on the firm's capacity to absorb new information.

2.3.1.2 Consecutive business strategy

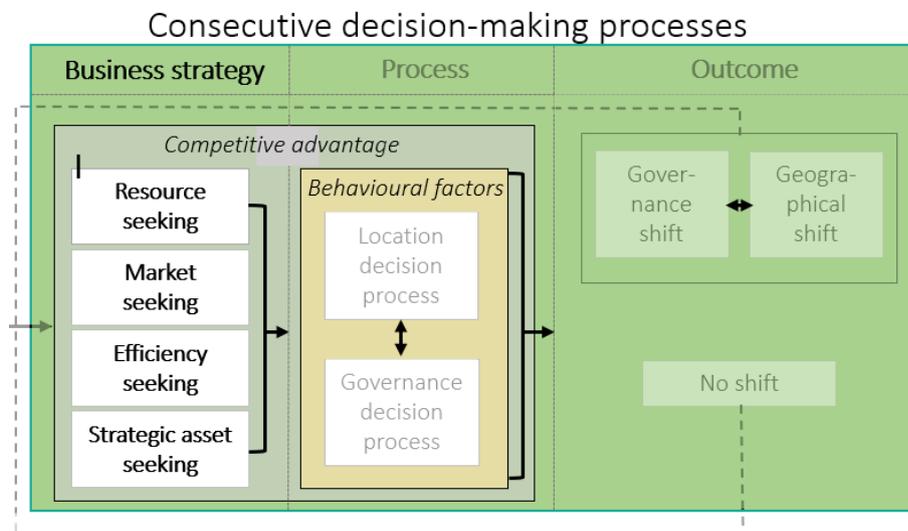


Figure 10. The position of the consecutive business strategy in the model.

There are two main components to the role of the business strategy in the consecutive decision-making process. First, regarding the offshoring location, a firm can reflect on its business strategy by altering or expanding the offshore business strategy. For example, a firm can consider to expand its business strategy to include another strategy, e.g. to also enter the foreign market instead of just focusing on low-cost production. Second, a firm that potentially seeks to reshore needs to consider which business strategy would fit a relocation. For example, backshoring might be more suitable for firms that focus on quality and innovation in their business strategy (Bals et al., 2015). Rethinking the business strategy can therefore have potentially far-reaching consequences for the firm. It might be a first step to backshoring, but it might also lead to a stronger local foothold in the foreign country. The position of the consecutive business strategy is shown in Figure 10, with the character I.

Box 10. Contribution of the consecutive business strategy to rightshoring.

For rightshoring, it is important to take into account that corporate business strategies can vary over time. The extent to which a business strategy will be adjusted has consequences for the firm's operations and can be dependent on both environmental changes (section 2.3.1.3) and internal changes, such as the turnover of management which leads to a shift of strategic priorities (Foerstl et al., 2016). Whether or not the initiation of a change in business strategy improves the firm's operations will be dependent on the consecutive location and governance decision, discussed hereafter.

2.3.1.3 Consecutive location decision

The consecutive location decision process is dependent on changes in the environment of the firm. The initial environmental factors that resulted in a location advantage for the firm may change, either positively or negatively, or may be valued differently by the firm during the decision process (Gray et al., 2013). It's influence on the model is illustrated with the character J in Figure 11.

A frequently mentioned economic development driving backshoring from China is the rapidly increasing wage rates in China (Ellram et al., 2013; Joubioux & Vanpoucke, 2016). This will influence firms differently based on their business strategy. For example, efficiency seeking firms could face an eroding cost advantage. However, it needs to be noted that the unit labour costs, which adjusts labour costs for productivity, increased less strongly (De Backer et al., 2016). Moreover, political-legal changes may also influence firms to backshore production. Since the U.S. presidential elections, president Trump's policies have been aimed at protecting and reinforcing internal production (Baroncelli et al., 2017), potentially limiting offshoring decisions and/or returning offshored production (Stępień & Młody, 2017). Furthermore, whereas diminishing transport costs have been enabling international production in the past, recent developments such as increases in oil prices have again increased transport costs (De Backer et al., 2016).⁴⁵

⁴ It is acknowledged that the discussed developments along the dimensions of environmental factors are by no means comprehensive. Many other environmental changes influence the firm's location decision process. However, it is unfeasible to list all possible factors. For a comprehensive exposition of all relevant (environmental) factors driving reshoring, see Fratocchi et al. (2016) and Barbieri et al. (2017).

⁵ It needs to be noted that these environmental changes are not solely affecting the consecutive decision-making process. It could very well be that these environmental changes are also influencing offshoring decisions. However, it has been decided to lay out these factors in this section as the discussed factors are often proposed as having an influence on the decision-making process of currently offshoring firms.

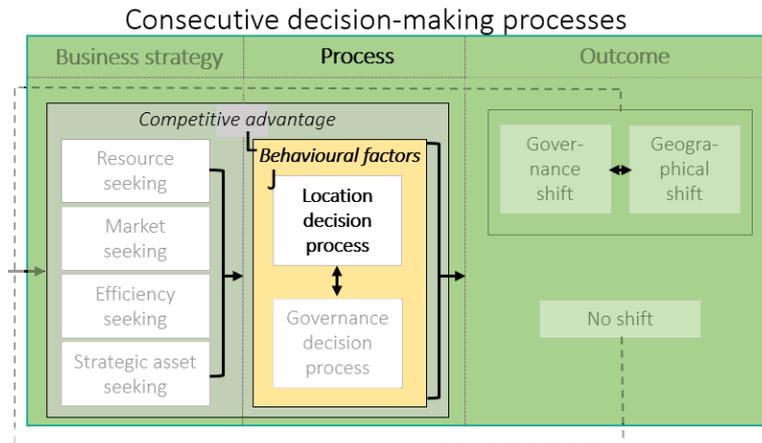


Figure 11. Location and behaviour in the consecutive decision-making model.

Environmental uncertainty

Environmental factors influence the firm's decision-making process even more when dealing with uncertainty. Environmental uncertainty is described as the perceived degree of volatility and unpredictability in the marketplace by decision makers (Milliken, 1987). In that sense, the prospect of changes in the business environment that may cause potential disturbances for the firm affects the firm's decision-making process. In fact, uncertainty combined with bounded rationality is considered a strong driver of backshoring decisions. Such unpredictability and volatility is manifested in many respects, for example in changing labour market regulations, exchange rate fluctuations, unforeseen cost increases, political stability and increased supply complexity (Foerstl et al., 2016).

OBB's contribution to the consecutive location decision

The initial offshoring phase addressed OBB in terms of the governance decision and human behaviour. Bals et al. (2015; 2016) expand OBB to contribute to the backshoring location decision (L and J in Figure 11). In particular, the functional team that makes up the buying center within the theory of OBB is put forward to analyse firm internal decision-making processes regarding the production location. In that sense, the functional roles within the buying center are lifted beyond the buying task and are now distinguished with regard to the manifold expertise that is required to qualify and implement critical decisions such as backshoring. It has been argued by Bals et al. (2016) that given these different functional backgrounds and expertise, the buying center's members are likely to perceive decision drivers differently, potentially leading to conflict and sub-optimal decision considering a consecutive location. In fact, Bals et al. (2015) observed that the final location decision of their cases was mainly based on a mixture of analyses and emotion.

The influential forces affecting the buying center's decision-making process (see section 2.3.1.5) are found to play a role in the location decision as well. For example, in the case of

Bals et al. (2015) not every member of the buying center got involved equally. The exclusion of some stakeholders might lead to dissatisfying outcomes as these stakeholders are often the ones that have to deal with a decision. In addition, individuals were also found to influence the decision, through their authority and expertise or by acting in self-interest to push the decision in the preferred direction.

Box 11. Contribution of the consecutive location decision to rightshoring.

Whereas firms that considered offshoring in the initial phase only could anticipate on the expected location advantages and risks through rigorous analysis, currently offshoring firms experience these factors first hand. It might be the case that expected advantages turn out more positively or negatively than expected, which could either be the consequence of an inadequate preparation or because of environmental changes that could not have been foreseen. Rightshoring should therefore take into account the influence of environmental changes when regarding the sustainability of a particular offshoring location, but should also acknowledge that many factors cannot be predicted. Working with systematic tools of analysis (discussed in section 2.3.1.4) provides insights into possible alternative futures of currently offshoring firms and the suitability of these futures to continue foreign production or to decide differently.

2.3.1.4 Consecutive governance decision

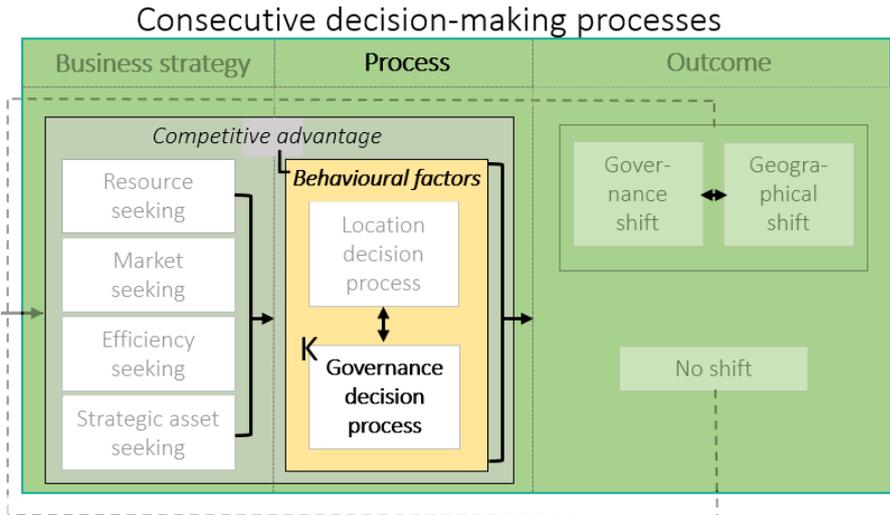


Figure 12. The positioning of the consecutive governance decision in the model.

The initial governance process results in a decision on a spectrum from outsourced to internally governed alternatives. In general, the discussion provided in section 2.3.1.4 on the initial

governance decision remains relevant for the consecutive processes. However, the chosen alternative has implications for the consecutive decision-making process. An initial decision outcome which resulted in offshored outsourced production activities features different governance characteristics than an offshore hierarchically governed production facility. The foreign owned production facility will acquire a whole new set of suppliers that distribute the needed resources to the production facility, whereas a pure outsourcing decision exhibits complexities of a lesser degree. Even so, a firm that is considering to reshore goes through a process in which it reconsiders its governance mode. A possible alternative is repatriating outsourced production and bringing it into the own firm within the home country.

This implies that the consecutive governance decision-making process consists of two main components: 1) governance decisions *within* the foreign production location, e.g. the search for and the interaction with suppliers, or deciding to internalise former outsourced production into the production site; and 2) governance decisions shifting *away* from the foreign production location, e.g. reshoring production and internalising production.⁶ These decisions are integrated in the model, see K in Figure 12. The in section 2.3.1.5 mentioned factors of human behaviour remain relevant, see L in the figure.

Box 12. Contribution of the consecutive governance decision to rightshoring.

Many of the relevant aspects of the governance decision for rightshoring have been discussed in section 2.3.1.5. Indeed, internalization advantages versus externalization advantages remain relevant for firms that are currently offshoring. Showing similarities with the location decision, firms will now experience actual transaction costs that are involved in buyer-supplier relationships. Depending on these costs and how firms deal with these costs (e.g. investing to build long-term relationships with suppliers to reduce transaction costs), the firm should consider whether or not its current operations are sustainable or if a shift is needed on the governance spectrum.

2.3.1.5 Consecutive decision outcome

Figure 13 specifies the possible decision outcomes. On the one hand, a firm can decide to not implement any shift (N in the figure), either geographically and in terms of governance. This does not mean that the firm will not take action. For example, through internal adaptations and innovations, the firm can try to enhance its foreign competitive advantage. On the other hand, if the offshore location appears to be unsustainable, a firm can decide on a shift (M in the

⁶ Showing similarities with the main components of the consecutive business strategy.

figure). This could either take the form of a geographical shift, a shift on the governance spectrum or both. This could imply any generic shift of location, including backshoring and further offshoring. In either case, no shift or shift, the firm will enter a new round of consecutive decision-making, as it is the offshoring experience that counts. This decision-making process is continuous of nature.

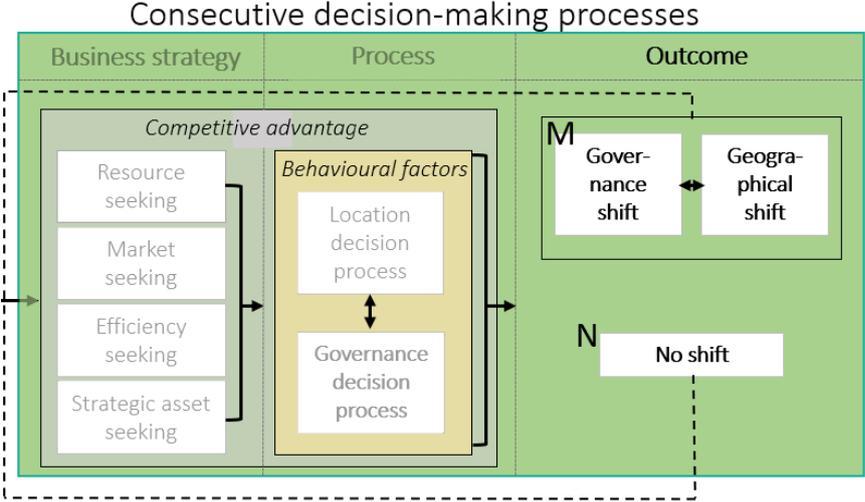


Figure 13. The possible outcomes of the consecutive decision-making model.

2.3.1.6 Theoretical conclusions

So far, five main components of rightshoring have been addressed by the theoretic framework. Firstly, we have discussed the role of competitive advantage. For the offshoring decision, the possession of sufficient levels of competitive advantage is seen to be essential. Without competitive advantage firms cannot be sustainable, neither in the home country nor in a foreign one. For rightshoring, the RBV helps to identify whether or not a resource or asset fulfils the criteria to potentially become a source of competitive advantage. Regarding the consecutive decision, deploying sufficient capabilities and capacities to either keep up a sustainable foreign production or anticipate timely on reshoring is of paramount importance regarding the role of competitive advantage for rightshoring.

Secondly, the literature showed that the determination of a foreign business strategy is the first decision that a firm encounters (e.g. Baroncelli et al., 2017; Dunning, 1988). As a wide variety of business strategies exist, it should be taken into account that the possible offshoring paths of firms differ distinctively, depending on the related needs of the firm and the desired benefits with respect to the offshoring location. A revision of the firm’s business strategy might be well possible in the consecutive decision-making phase. Pursuing additional strategies or rigorously changing the current business strategy might have a substantial impact on the firm’s operations. Reconsidering (and altering) the business strategy should be based on thorough

analysis, as in the case of the initial offshoring decision. Regarding both phases, the business strategy is strongly connected to the governance- and location decision.

Thirdly, with regard to the location decision, several categories of environmental factors that influence decision-making are identified. Of prime importance to rightshoring is that a firm needs to deploy different instruments of analysis, like scenario planning, to anticipate in the best way possible to changing environmental factors, considering the long-term suitability of a location. Indeed, in the best way possible, as environmental uncertainty will always play a role.

Fourthly, the governance decision is important to rightshoring as it lays out the most suitable mode of governance for a firm regarding a geographical location. Regarding TCE, it is especially crucial to balance the benefits of governance alternatives in terms of the accompanied transaction costs. Although outsourcing would be most likely in the case of low transaction costs, we have seen that even in situations of potential high transaction costs it can be profitable to outsource production if the firm is willing to invest in building strong long-term relationships with their suppliers.

Lastly, factors of human behaviour permeate the decision-making process. Indeed, even when it comes to rightshoring, or actually especially when it comes to rightshoring. Neglecting or ignoring the possibility of behavioural factors that interfere with rational goals results in lower quality decisions than when these factors are taken into account. Such factors appear both firm internal, as for example personal goals might get in the way of strategic goals, but also in relation to suppliers that may act in an opportunistic manner.

3. Methods

3.1 Research method

3.1.1 Qualitative research

The main research question to be answered in this study is “*In what way do the elements of the decision-making process of manufacturing firms contribute to rightshoring?*”. The issue at stake in this study called for a qualitative approach as it “*describes or reconstructs the complexity of situations*” (Flick, 2015, p. 11). Moreover, as it is the purpose to develop rightshoring by gaining insight into the decision-making processes of firms, the study needed to be designed as open as possible. This made possible to study a few cases extensively in their complexity, which benefited the purpose of this study as participants had more freedom to determine what was relevant for them and to present it in its context (Flick, 2015).

3.1.2 Multiple-case study

The main research question allows for a case study approach, as the study is centred around a ‘how’ question (Yin, 2003). Therefore, a multiple-case study is used, being both descriptive and comparative in nature. Descriptive studies allow to describe a phenomenon and the real-life context in which it occurred, whereas comparative (multiple-case) studies enables the researcher to explore differences within and between cases (Yin, 2003). Again, this relates to the aim of the study, which is to gain insight into the actual decision-making processes of firms (descriptive), ultimately contributing to the progression of the rightshoring concept (comparative).

3.2 Case selection

In order to be able to fully grasp the complexities and dynamics of the international manufacturing location decision, the main criterion for cases to be selected was that they are firms are either currently offshoring or that they had been offshoring in the past. Moreover, the cases needed to be manufacturing firms, as the stocks and flows of components and products provide more complexity than firms active in the service sector. Within the manufacturing sector, cases needed to be involved in discrete manufacturing production processes (*vis à vis* process manufacturing). With the risk of selecting relatively incomparable cases, no other inclusion criteria were determined. A deliberate choice, as it has been recognized by other authors that both offshoring and backshoring are a part of a corporate strategy which firms prefer not to disclose in great detail (De Backer et al., 2016), resulting in low expectations regarding willingness of firms to cooperate.

Potential cases were identified in various ways, e.g. via web search or through interviews with other cases. Subsequently, the identified potential cases were documented in a database.

Through this process, a total of eighteen out of twenty-two identified firms were considered to fulfil the criteria listed above. Fifteen out of eighteen firms were contacted, either directly or indirectly, which resulted in the cooperation of three firms.

3.3 Case description and interviewees

These three cases show similarities, as all three cases are: 1) active in the high-tech electrical industry, 2) owning a foreign factory, and 3) operating in China for at least ten years. According to Dachs & Zanker (2015), the high-tech industry shows a higher propensity to backshore. As all three of these cases are still offshoring, this provides valuable insights in how these high-tech firms handle their foreign operations.

Case A: X-ray material analysis. The firm possesses eight production sites all over the world, employing a total of 2000 people. The firm is a subsidiary of a parent firm that includes fourteen firms. The production sites in the UK and the Netherlands are the largest, employing 400 people each. Their products provide solutions for the chemical and structural analysis of materials. Within this case the main focus has been on the two production sites that are located in China. This firm is considered to be an extreme case within the international manufacturing decision making process, as their business activities involve little to no primary production. In other words, the firm's activities centre around the assembly of outsourced semi-finished products. Hence, the firm decision-making processes have a strong supplier-oriented focus, providing relevant insights into both the governance -and location decision-making process. The interviewee was the firm's director global procurement (DGP), managing a department of thirty people involved in and responsible for the global purchasing of all eight production sites.

Case B: Electrical engineering. The firm started its offshoring activity to China in 2005 and produces electrical motors which can be built into industrial systems. The firm is an extreme case within the manufacturing decision-making process as it produces every component inhouse and only purchases the needed natural resources (contrasting Case A). Two representatives of the firm were interviewed in the same session, one of them responsible for the Human Resource Management (HRM) in both the Netherlands and China and the other being the Central Financial Officer (CFO) of the firm.

Case C: Personal care products. The firm is a large multinational that started offshoring to China in the early 1990's. It produces premium brand products that people use for their everyday personal care. This firm is considered to be an extreme case within the offshoring manufacturing location decision as this case has over 25 years of offshoring experience, providing valuable insights on how to deal with a unfamiliar and changing environment. The interviewee was the firm's operation manager (OM), who already worked for the firm when the offshoring decision was implemented.

3.3.1 Suitability of the respondents

Colotla et al. (2003) already observed that decisions regarding both production site locations and governance decisions are usually made by the highest levels of management. By contrast, e.g. production managers were not included in such decisions as their decisions mainly centred around factory-level practices. However, both factory-level issues and production location decisions are heavily interdependent (Gylling et al., 2015). Moreover, following Bals et al. (2015), several stakeholders within the buying center that influence decision making were discussed earlier in section 2.3.1.5 and 2.3.1.3. Therefore, for this study the potential interviewees were considered to be suitable as a respondent if they operate in:

- 1) the highest levels of management of the firm, and/or;
- 2) the levels of management of the firm included in the firm's buying center.

Considering these criteria, on the individual level each of the interviewees is considered to be a suitable respondent regarding the issue at stake, although it is difficult to determine their exact position within the decision-making process. Firstly, the DGP of Case A is considered to be a decision-maker with respect to issues regarding governance and is considered to be the 'buyer' within the firm's buying center. Although being a director, the DGP is not positioned in the board of the firm. The board ultimately makes the final call on production site locations. In this sense, the DGP can also be considered to be a gatekeeper within the buying center, as he collects and distributes information to the board. Secondly, the CFO of Case B is definitely considered to be included in the highest management level of the firm, although the CFO argued that he and the CEO were overruled by the shareholders in a location decision of their machinery (see section 4.2.5). This exemplifies the relativity of a decision-maker's power, making it difficult to determine its exact position. Thirdly, the human resource manager of case B is considered to be positioned within the buying center of the firm within the role of initiator and influencer, as she is directly confronted by issues caused by the offshore location and pushes for solutions that transcend factory-level practices. Lastly, the OM of Case C is considered to fulfil a leading role within the development of both the Dutch and Chinese production site, which positions her in the highest levels of the firm's management. However, similar to Case A, it is recognized that production location decisions are made on the board level, which the OM is not a part of.

3.4 Data collection

This study made use of semi-structured interviews, as it enables the interviewees to answer the questions openly and extensively (Flick, 2015). The questions that were asked are pre-determined (see Appendix II), based on the research questions and literature. By making use of a semi-structured interview guide, there was room for further questions to lead the

discussion into greater depth. The interviews took between 35 and 65 minutes and happened face-to-face within the Dutch office of each firm. Though the firms possessed relatively comparable characteristics, the interview guide was adjusted slightly for every firm in order to capture the specific characteristics of each firm.

3.5 Data reduction and analysis

The interviews with the interviewees were recorded and transcribed. The transcripts were coded in Atlas.ti in a simple manner, i.e. the quotations of the interviewees were coded as a whole, linking several codes to that one answer. This was done in order to not lose track of any contextual meaning that might be important to the decision-making process of the firms. To keep focus on which part of the quotation is relevant for which code, each quotation was defined with comments relevant for that code. The codes that have been used are listed in Table 2.

Table 2. List of used codes.

Codebook

Offshoring business strategy	Consecutive business strategy
Offshoring competitive advantage	Consecutive competitive advantage
Offshoring location decision	Consecutive location decision
Offshoring governance decision	Consecutive governance decision
Offshoring human behaviour	Consecutive human behaviour

3.6 Additional empirical research

Additional sources of expertise were approached in order to 1) substantiate and validate the scarce current empirical knowledge on backshoring; and 2) as a way to get in contact with potential cases. These sources included the Dutch Chamber of Commerce, a German professor of Supply Chain & Operations Management, a Dutch platform for reshoring firms named ‘The Reshoring Connection’ and a professor from the University of Tilburg, who is one of the initiators of The Reshoring Connection. Although both professors did not reply, semi-structured interviews with representatives from both the Chamber of Commerce and The Reshoring Connection were carried out by phone.

The Chamber of Commerce is involved in the backshoring debate as it 1) developed the ‘reshoring potential scan’, a tool that provides an advise for offshoring firms to stay offshored

or backshore based on 34 questions; 2) incorporates reshoring in its program on smart industry; and 3) published an information guide on reshoring (Kamer van Koophandel, 2016). Unfortunately, due to privacy considerations, the Chamber of Commerce could not provide any contact details of potential cases. The representative of The Reshoring Connection made the effort to try to connect the involved firms to the author, which unfortunately did not result in any response from the firms that were reached out to. Nevertheless, both interviews helped both to structure the until then gathered knowledge and to prepare for the case interviews.

3.7 Ethical considerations

At the start of each interview each interviewee was asked whether or not it was allowed to record the session and whether or not the interviewee and the firm wished to remain anonymous. It was allowed to record the interview for each case and each case (both the firm and the interviewee) wished to remain anonymous.

4. Results

The results will be discussed according to the chronology of the decision-making model (Figure 1), which resembles the research questions of this study. The report will be both descriptive (within cases) and comparative (between cases) in nature.

4.1 The initial offshoring decision-making process

4.1.1 Offshoring business strategy

All three firms confirm that the business strategy is the first relevant factor when it comes to considering an offshoring activity. However, their initial business strategy varies, see Table 2. Firm B showed two main offshoring strategies, as 1) the necessary resources for their production are being mined in China and 2) the labour costs in China were more beneficial than in the Netherlands. The OM of Firm C emphasized that cost-efficiency has never been the primary reason to offshore production. They recognized that their Asian market had increased, resulting in the decision to produce closer to the market. In that sense, Firm C pursues a region-for-region strategy, which implies that if a regional market becomes large enough to offset the total costs of an additional production site *vis à vis* shipping the products from the domestic site to that region, the firm could decide on opening up a new production location in that region. The product range of firm C allows a region-for-region strategy as their products are in the high-volume category. By contrast, the systems of one Chinese factory of firm A do not allow for a region-for-region strategy, as they can be categorized within the high-mix low-volume business. Some of their systems manufactured in the Netherlands are only built by a hundred a year, which would make the capital investment and the component supply too expensive for producing these systems on two sites. That is why the systems produced and assembled in this factory in China are destined for the whole world, instead for the Asian market only. The other factory of Firm A is primarily producing for the Chinese market.

The case analysis showed that each of the three cases started their offshoring decision-making process by considering which offshoring business strategy would be the most appropriate for their business. The actual offshoring business strategies fit the theoretically proposed strategies of Dunning (1988; 2001). We also see that the four proposed business strategies are not entirely independent and isolated from each other, as firm B sought for a combination of two business strategies in their initial offshoring design. These findings are an important step to progress rightshoring, 1) as the cases confirm that the business strategy needs be determined first and foremost and 2) as each firm has very different needs that emerge out of the chosen business strategy. Although the three firms operate more or less in the same industry, the variety of business strategies show that these firms have set different goals that

motivated these firms to offshore. Such intra-industry differences need to be acknowledged within a rightshoring approach.

	<i>Firm A</i>	<i>Firm B</i>	<i>Firm C</i>
<i>Resource seeking</i>	-	Primary strategy	-
<i>Market seeking</i>	Primary strategy (Chinese site 1)	-	Primary strategy
<i>Efficiency seeking</i>	Primary strategy (Chinese site 2)	Primary strategy	-
<i>Strategic-asset seeking</i>	-	-	-

Table 3. Offshoring business strategy

4.1.2 Offshoring location decision

The initial location appears to receive less consideration as one might expect, in particular regarding micro level location decisions. Indeed, on a macro scale, the location factors have already been revealed through the determination of the business strategy (e.g. labour-costs, natural-resources and markets). The choice of location is bounded by several factors. For instance, although Firm A controls eight production sites, the majority of firms are incorporated through several acquisitions and a merger. As these firms were prior independent production locations, Firm A did not decide on the particular location of these firms. In the words of the firm’s DGP:

“The firms were already there. It has more to do with their historical growth than that we had a deliberate strategy of where we wanted to have production sites.”

However, as described in section 4.1.1, the Chinese production location was a deliberate one on a macro level. On a micro level, the choice is much more predetermined as there are only a few Special Economic Zones (SEZ) in China. This is exemplified by the OM of Firm C, who notes:

“In China there are Special Economic Zones where a western firm is allowed to settle. And that is why we are in Zhuhai.”

Mergers and acquisitions, as in the case of firm A, do not appear to be decided upon based on thorough analysis of location factors. Also, the choice of location for production sites in China is bounded by the economic policy of China’s national government, which means that

the relevant location factors for these offshoring firms can already be distinguished on the macro level, i.e. in the phase of business strategy determination. This is an important note regarding the importance of the location decision, however location decisions might be developed with more care in countries where firms are not bounded to SEZs. In any case, neither a rigid analysis of location factors, nor other analyses like scenario planning appear to have taken place. Within a rightshoring approach, more attention should be paid to the influence of these factors on the business performance.

4.1.3 Offshoring governance decision

For the initial offshoring decision, all three firms made the decision to set up centre in China on the base of hierarchical governance. As shown in section 2.3.1.3, this mode of governance is related to the arguments that are put forward for pursuing Foreign Direct Investment (FDI). None of the cases involved in this study opted for pure outsourced modes of governance, i.e. buying the product via third suppliers and shipping these back to the home country. However, the Chinese production sites of Firm A are pure assembly factories, meaning that these sites do receive their components from third suppliers. This will be discussed in more detail in section 4.2.4.

The offshoring governance decision-making process is for a large share determined by the business strategy of the firm. For example, the market seeking business strategy of firm C could not have been realized if it would have outsourced production. In that case, the firm would not have had a local foothold, impeding regional expansion of business opportunities in Asia. This notion is in line with the initial purpose of the developed business strategies of Dunning (1988; 2001) which is to explain internalized production. For rightshoring, it is necessary to take into account that particular offshoring business strategies such as market seeking are connected to governance alternatives that favour hierarchically governed production sites.

4.2 The consecutive offshoring decision-making process

4.2.1 Consecutive competitive advantage

Although each case belongs to the electrical engineering industry, all three firms display a unique set of firm-specific processes, positions and paths that more or less determines how the firms deal with doing business in an unfamiliar environment.

Local presence

For instance, we see that Firm A employs specific human resources to respond to the foreign market dynamics. As their business activity in China mostly consists of the assembly of supplied components, the firm deals with many third suppliers. A progressive relationship with these suppliers is desired in order to maintain product quality and reduce the risk for the firm.

Therefore, the firm employs two local buyers that support the whole organization concerning contacts with Chinese suppliers. As told by the DGP:

“The Chinese suppliers need a lot of attention. It is therefore beneficial to have a local presence of people who understand the business and who can act quickly when needed.”

Moreover, the parent firm of Firm A employs another eight people in China who are at the service of all subsidiaries as they can be utilized to visit suppliers and gather information through auditing, but also to assess the suppliers' capabilities and the quality of their products. Both the presence of local auditors and buyers demonstrate how Firm A adapts to changes and how the critical supplier base is being sustained through such productivity enhancing organizational resources.

With respect to rightshoring, we can consider that employing human resources of this kind fit within the perspective of dynamic capabilities and absorptive capacity, increasing the firm's competitive advantage through improved buyer-supplier relationships. In this sense, the connection can be made between enhancing competitive advantage and transaction costs. Indeed, the ability to utilize these buyers and auditors not only enhances long-term productivity, it also reduces risk within buyer-supplier relationships, leading to a reduction of transaction costs.

Knowledge-sensitive production

The internalised production activities of Firm B and Firm C in China are more complex compared to Firm A. Whereas Firm A has no primary production, limiting their business activities to the assembly of components into their systems, Firm B produces the whole product from start to finish. Firm C produces most, but not all, components internally. However, in this respect, a main distinction between Firm B and firm C needs to be addressed. Namely, to protect their IP, Firm C decided to produce their most specific and knowledge-sensitive components within their Dutch production site. These components are then shipped to China where they will be assembled into their products. This way, the firm deals with the risk of IP theft.

In contrast, as Firm B produces the whole product in China, it also produces highly knowledge-sensitive components, which are full of IP. The firm deals with major threats and actual thefts concerning their IP as a consequence. For example, the firm has been involved with a fraud case last year:

“Our own quality manager stole secret and confidential firm-specific information. Customer data, product data... virtually all confidential information. He started his own firm with it. (...) Our motors are simply being replicated.”

This fraud case involving the quality manager is mentioned by the HR manager as the second out of three copycats in recent years. Other former employees, such as an engineer and a financial manager left the firm to start working for a competitor. The HR manager mentions that the firm does work with a non-competition clause, however they acknowledge that such a clause is a sham. Following these events, the firm realizes that it at least needs to withdraw the knowledge-intensive processes from China. The HR manager stresses that the following years will be marked by decision-making regarding the kind of production processes that will remain in China. Although this realization appears to be a necessary one, it can be questioned why it has not yet resulted in a backshoring decision for these activities or why it has even been considered to start producing such risky components in China.

For instance, although firm A is not involved in primary production processes, the firm certainly considers its production location with respect to the complexity of their products. The DGP emphasizes that the firm would never consider to outsource their X-ray tube production to China:

“It [the X-ray tube] includes so much intellectual property, that it would be available to the whole world in no time. The Chinese are world-champion in that respect. We could buy electronics and cables locally, but the X-ray tubes, vacuum chambers, detectors and sensors include high levels of intellectual property.”

All three firms acknowledge that the risk of IP theft is a gigantic issue, however, Firm B is the only one taking the risk. This can be translated as a shortcoming with respect to its capability of adapting and re-configuring to a unfamiliar environment. In particular, regarding the criteria for a resource to potentially provide competitive advantage (section 2.3.1.2), it can be stated that the firm’s processes have become less rare and easier to replicate. Moreover, the firm is not organized sufficiently to exploit its assets. Although these criteria to create sustainable competitive advantage follow no strict demarcation in, for example, when an asset fails to meet the imitability criterion, it still becomes clear that both Firm A and Firm C have positioned their IP-sensitive production better than Firm B has. Firm B experiences negative effects as a consequence. Therefore, the four criteria for competitive advantage appear to be useful to analyse inter-firm differences and should be integrated in rightshoring approaches.

Employee turnover

The shortcomings of Firm B are becoming even more apparent when considering the total annual employee turnover, which is not just limited to a few higher-educated employees leaving the firm. The firm’s annual employee outflow reaches a staggering 60 percent and is even expected to increase in the following years. The problem is mainly manifested in the production unit, as it is mentioned that these workers shift employers for the smallest increase

in salary. This catches the production unit by surprise, as from one day to the next these workers just do not show up anymore. The consequence of this turnover is that a huge share of resources needs to be invested in hiring *and* training new labourers, which is very time consuming. Trying to cope with these issues, the firm now engages employment agencies to reduce the time burden and associated search costs. However, this turned out to be dissatisfying as these workers are less committed and less loyal to the firm, even resulting in an increased outflow.

These illustrations exemplify the firm's undesirable position regarding their current assets and resources and the failure to turn things around. This is being reflected in the mood of the daily practice, as the HR manager indicates that they are currently in a mode of fear, considering they cannot predict where to expect the danger. Distrust and suspicion drive their current daily practice. Although these issues might not be easy to solve, not being able to predict where to expect the danger and living in a mode of fear reflects low levels of each of the four capabilities (knowledge acquisition, assimilation, transformation, exploitation) of absorptive capacity. This preeminent issue underlines the necessity to integrate absorptive capacity into understanding why firms fail under the same conditions where other firms thrive. Building and investing in such capabilities is key to rightshoring.

Towards a partnership

A different tone resounds from the way Firm C interacts with its Chinese counterpart. When the firm started to set up production in China 25 years ago, around 40 percent of the management team were Europeans. This was done in order to guide the initial process and to transfer the specific competences that are needed to maintain premium quality production. Although necessary, the firm realized that difficulties arose when trying to transfer and integrate European standards and processes in a significantly different work culture. Therefore, gradually, local management took over and the expats were send home. As the OM explained:

“In terms of management, the firm is totally independent. The local management is able to better understand and coordinate the processes.”

It displays a shift from top down control towards an interaction which is based on mutual learning and benchmarking. Such mutual learning is not completed by merely copying the other firm's successful processes. Rather, the firm assesses what would work for them, considering their own standards and work culture. In this sense, emphasis is being placed on the functional competences of both the domestic and foreign management and production team. It exemplifies sound structures and processes of learning and the adaptation to changing and unfamiliar circumstances. These developed capabilities serve to enhance productive activity. Whereas Firm B struggles with issues regarding its personnel, Firm C has been

successful. Again, the concept of absorptive capacity appears to explain why inter-firm performance differences exist, making it relevant for rightshoring.

4.2.2 Consecutive business strategy

It appears that once these firms had implemented their offshoring activity based on an initial strategy, the firms explored the opportunities to better utilize their foreign presence. Considering market seeking, both firm A and firm B are currently exploring how they can improve the distribution of their products to the Asian market. The reason for this is twofold. On the one side the firms aim to increase sales in the Asian market. On the other side, the firms want to prevent that their products are first shipped to the domestic site, from where they are sold and shipped back to the Asian market. These developments cannot be regarded as new primary business strategy; the DGP of Firm A calls it an “*additional advantage*” (see Table 3).

	<i>Firm A</i>	<i>Firm B</i>	<i>Firm C</i>
<i>Resource seeking</i>	-	Primary strategy	-
<i>Market seeking</i>	Primary strategy (Chinese site 1) Secondary strategy (Chinese site 2)	Secondary strategy	Primary strategy
<i>Efficiency seeking</i>	Primary strategy (Chinese site 2)	Primary strategy	-
<i>Strategic-asset seeking</i>	-	-	Primary strategy

Table 4. Expansion of business strategies

Regarding Firm C, the in section 4.2.1 discussed shift towards a more collaborative partnership can be considered as a transition towards more strategic asset seeking advantages. The firm aims to better understand the foreign market and seeks to improve its local presence by creating tangible and intangible synergies (Ellram et al., 2013). Next to their existing market seeking strategy, the firm interaction based on benchmarking is considered to be a primary strategic-asset seeking strategy.

The three firms do not show radical turnarounds considering their business strategies. The adoption of other business strategies appear to be relatively logical follow-ups of their business

practice. Although firms might initially not pursue market-seeking strategies, offshoring experience and having a local presence could lower the bar to expand the business strategy and start the distribution of products to regional markets. As suggested in the theoretic framework, rightshoring needs to recognize changes in the firm's business strategy. It might be a chance for firms to create a stronger foothold, but it also complicates and intensifies foreign operations.

4.2.3 Consecutive location decision

In Section 4.1.2 it was argued that the firm's initial offshoring location decision is mainly based on country-level advantages such as low labour costs. Those advantages were manifestations of the general business strategy that the firm desired to pursue. In the current decision-making phase we see that (changes in) the initial considered macro-scale level location advantages are impacting the particular location of the firms, both positively and negatively. Also, the firms encounter location factors that were not fully taken into account before, mainly due to unforeseen environmental circumstances.

Moving out of China?

Firm B's decision to offshore was mainly based on the low labour costs in China. The firm has reaped the fruits of this decision, in the words of the CFO:

"We would never have come so far if we had stayed in the Netherlands. Our products would have been too expensive. It brought us a lot."

However, they recognize that the wages in China are increasing rapidly. The average yearly increase of 10 percent is noticeable. Considering shifting to a new production location, the CFO speaks out that he really desires to leave China. He would opt to reshore to Vietnam or Indonesia, again to profit from the low wages. However, he admits that it would be an extreme challenge in terms of gathering natural resources and finding suitable workers. Also, they would need to go through a transition phase in which both the Chinese site and the new site need to be active, as it is not possible to transfer everything at once. Although the desire exists, both the HR manager and the CFO recognize that in the following five years the production location in China will continue, even though environmental changes such as the increasing labour costs are apparent.

This section touches upon two points. Firstly, eroding cost advantages as an effect of increasing wage rates does indeed appear to be an influential driver of reconsiderations regarding the manufacturing location. This might be felt the most by firms that are seeking for cost efficiencies, like Firm B. Secondly, and contrasting the traditional backshoring narratives, eroding cost advantages do not necessarily lead to backshoring-focused reconsiderations. This becomes apparent as Firm B holds on to their efficiency-seeking strategy, meaning that

reshoring to other low-cost countries would be favourable. However, as wage rates are not the only determining factor of cost-efficiency, it is important to take into account that such decisions are not taken easily as the costs of relocation and the need to keep the old location active until the new location is ready generates serious costs.

The backshoring narrative reconsidered

Firm C deals with increasing labour costs as well, however it is not a main concern. The difference in the impact of increasing labour costs between Firm B and Firm C can be traced back directly to their distinctive business strategies of efficiency seeking *vis à vis* market seeking. Changes in labour costs will therefore not impact Firm C's consecutive location decision severely, as it follows their primary strategy of market seeking.

The firm's region-for-region strategy is specified according to the number of sales for a particular product in a specific region. In other words, if the sales of a single product type reaches a certain critical mass for a region, it would open up the possibility to produce this product at both sites. This decision balances between the costs of shipping the products to another region and the costs related to provide the tooling that is needed to produce at the second location. Currently, 1 out of 5 products are produced within both production sites. In line, this decision is not only related to the sales, but to the production method as well. As is explained by the OM:

"Customized products would allow for numerous production sites. However, we are still in mass production. I do not want to have mass production in a hundred different locations. We need to be careful in considering our geographical market. "Where am I going to produce?" We will not relocate every year, so we need to approach it as a long-term strategy."

This example in which a product location is determined through defining a critical mass of sales is regarded as one of the firm's 'rules of allocation'. The allocation of certain products in certain numbers between both sites is however not only determined by its sales potential, but also by external changes that the firm adapts to.

This notion is key to put the backshoring discussion in the right perspective. To be specific, the firm occasionally shifts product lines between the Chinese and the Dutch site and vice versa. For instance, in considering the product supply to America, no huge differences exist in terms of transport costs when supplying from either China or the Netherlands. However, as a consequence of potentially increasing import duties from China to the U.S., the firm does shift its production for products that are specifically determined for the American market to their Dutch production site. Again, this fits their rules of allocation. In addition, in terms of the product life cycle, if a type of product is on its decline and its successor is not expected to reach the

critical mass to produce at two sites, the product will most likely be accommodated within the Dutch production site. Moreover, if the U.S. demand for a product manufactured in the Netherlands drops sharply, it could happen that the Dutch site receives some other product types from the Chinese site for a while. This is done in order to avoid problems in production with employees who possess permanent contracts. In China it is easier to send people home. In the wrong conception, these dynamics will be explained as backshoring decisions. In fact, the media highlighted this shift to be illustrative of backshoring. The OM looks at it differently:

“It might look as if we are moving production back to the Netherlands, but it just has to do with our rules of allocation that are determined in order to balance production at both sites. (...) It does happen the other way around as well: the Dutch production site once lacked capacity, so we moved some production lines to China.”

Clearly, an outsider could easily twist the story in favour of the outcome-oriented perspective that permeated the backshoring discussion. However, we see that the rationale for these geographical production dynamics are by no means an illustration of a failed offshoring decision. Neither can it be explained as a unidirectional strategic relocation, since the relocation happens both ways. Instead, the firm's decision is based on where to put which product lines at which moment in time. Shifting these product lines might not even have to do with either the Dutch or the Chinese location per se, as is shown with the example of plummeting U.S. demand.

This example makes a valuable connection between the influence of environmental factors, such as changing market demand and volatile import duties, and firm-specific adaptations to these factors, relating to the concepts of dynamic capabilities and absorptive capacity. Here we see the relation between competitive advantage (section 2.3.1.2) and the location decision, which has been argued to be an essential one to prosper in foreign locations.

Deliberate backshoring

Whereas the previous example illustrates how the operations of Firm C have been pulled out of its context, we do find backshoring movements within the case of Firm A. This does not include the backshoring of a whole production site (organizational level of the firm), but it contains the backshoring of a number of systems from China to the Netherlands (functional level of the firm). Previously, these heavy systems were shipped from China by boat, which took between six and twelve weeks before the systems arrived in the Netherlands. Because of technological developments in Europe that make possible to automate production, the DGP states that differences in purchasing costs between Chinese and European products have levelled:

“In terms of landed costs: import tariffs, transport costs, etc. it does not make a huge difference to procure either from China or the Netherlands. In that case, it rather have these systems located in the Netherlands, because it offers more flexibility. We can order smaller badges, decreasing our stocks. Moreover, we have a stronger grip on the quality of the product as we can visit the supplier quickly. A trip to China costs time and money. To the new supplier in the Netherlands I can travel by bus, and... I rest my case.”

This example shows how technological changes alter which region is most beneficial to purchase from. Procuring from a supplier that is located within the firm's region provides more stability for the firm. In this sense, the firm adapts its operations to improve its competitive advantage. This finding shows similarities with the previous example of Firm C that allocates production back and forth to ensure competitive advantage. This illustrates that firms are deliberately searching for the best possible location. In some cases such as the backshoring example of Firm A, we do see that production closer to home provides legitimate advantages that cannot be matched by a distant country like China. This calls for backshoring to be recognized as a performance-enhancing strategic movement, *in some cases*. In the case of firm A it has been a deliberate decision, based on integral purchasing costs calculations. It needs to be emphasized that firms should not think lightly of such relocations and that calculations need to be based on total cost approaches that give a realistic insight into the actual benefits and costs.

Identifying a correct location within a region

An important consideration was referred to by the OM of firm C. She raises questions of why one would choose to locate in The Netherlands, considering that the site needs to serve the European market:

“Europe differs as well. Why not Romania? Are you looking for low-labour costs or competences? Here in the Netherlands we have built our own ecosystem, with the needed competences included. And we already possess a factory with infrastructure. Why not Ukraine? How politically stable is the country? The social and geographic position is important as well. So, what would be the ideal location in the European region? (...) A central one. That would probably not include our production site in the Netherlands. What is important for the firm? A harbour, a stable environment or do I want to produce in the cheapest region? (...) You do not relocate overnight. It is always a continuous process to reflect whether or not the firm's strategy is still satisfactory. I think that is the most important thing.”

The quotation exemplifies how the firm relates its business strategy to relevant location factors. It shows that the firm's location decision is based on a continuous decision-making process that has anything to do with identifying the most suitable location. In this process, the fully

developed Dutch production site provides advantages over other regions that might in itself score better on the required location factors for the firm. An important notion for rightshoring, as the existing production site might be so deeply embedded in the region that other potentially better locations are not considered the *right* location. In this regard, the complex situation of Firm B's potential relocation to new low income countries discussed earlier this section, shows similarities with the example provides here. Regional embeddedness and the costs of relocation turn out to be important factors that influence which location is considered to be the right one.

The viability of offshore locations are examined by the cases through multiple mechanisms such as total cost approaches. In line, the OM of Firm C states that such analysis is easier for firms the size of Firm C. The firm has a department that is entirely devoted to import tariffs. Moreover, the OM mentions that she can retrieve the forecast for China's wage developments for the next fifteen years with one call within the department. This might be a crucial distinction between smaller sized firms and large MNOs. In other words, smaller firms might not possess the capacity to accurately calculate the total costs of doing business. And if they do, the overhead costs might be relatively high in comparison to their sales, making it difficult to maintain these capacities. An interesting notion, as it again connects location decisions to a firm's absorptive capacity and its dynamic capabilities, which might be size-related.

Relating governance to location

As firm A's governance decision can be divided in 1) an almost exclusively outsourced production of semi-finished products and 2) the assembly of these products over eight production sites, their consecutive location decision is both focused on a combination of *where* to find third suppliers and *which* sites to develop. This will be illustrated by three examples.

Firstly, regarding the latter decision, the DGP explains that the firm is currently at a crossroads in the decision-making process. The discussion what to produce in which location is a lively one within the firm. One of the production sites in China is currently relatively small, but might be destined to grow in the near future. The firm is currently preparing a business case in which the cost of production for a particular system is benchmarked between the Canadian, the Chinese and the Dutch production site. These calculations include many factors, including labour costs and transport costs and will ultimately inform the board in order for them to make a considered decision. On a different strategic level, these decisions could have implications for the survival of certain production sites:

"It might happen that we close a production site if other sites grow. It needs to be considered which capacities remain in which sites. But, we also need to take into account the volumes we produce; where our clients are. That are factors that we need to consider."

Secondly, regarding the first decision, we see that these decision are made below the level of the board. The decision-making on the outsourced production develops according to a Total Cost of Ownership (TCO) approach. Following this approach, China appears to be an interesting location, mainly because the needed infrastructure is already present. And although they have witnessed labour costs increases, the DGP emphasized that still a large gap exists between the western production costs. The choice of suppliers centres mainly around costs, however, flexibility is considered to play an important role as well.

Lastly, regarding the combination of both decisions, we see that the governance decision plays a significant role in the suitability of a production site. As the firm launched a new product type, it determined that the location of production had to be China. However, it was known that they needed specific components that the firm could only buy from one supplier in Austria. The decision to produce the product in China became a costly one, as the Chinese import duties are extremely high. Therefore, the DGP argues that in terms of the development of new products, suppliers need to be involved in early stages.

These examples point out how differences in governance modes have different impact. In the last example, the limited amount of suppliers should have been leading in the process to determine the production location. As this firm depends on many specialist suppliers, it is most important for the firm to locate the assembly in particular sites that best fit the surrounding network of suppliers. The relation between governance and location is therefore undoubtedly different for firm A compared to either Firm B or Firm C (see also section 2.3.1.4 on the governance decision), providing support for viewing both decisions as combined strategies within rightshoring.

4.2.4 Consecutive governance decision

Selecting and maintaining suppliers

Within the outsourcing alternatives of the governance decision, the process of supplier selection is important. For Firm A - the firm that is most intensively involved in buyer-supplier relationships - we see that their first and most essential criteria for supplier selection is quality. Second, assuming that the quality criterium is fulfilled, the flexibility of the supplier and the involved costs are considered. Regarding costs, as a euphemism for ever trying to buy cheaper, the firm is concerned with optimising its cost pattern. This order of criteria in selecting suppliers is important as potential quality problems could easily exceed the apparently saved costs with selecting a supplier that was considered to be cheaper in advance. Indeed, as there are substantial differences between suppliers, the outcome of this selection process is essential to the firm. As the DGP explains:

“The dogmatic approach is that everything made in China is crap. That is just not the case anymore. Wherever you are in the world, there are bad and good suppliers. It is the art of selecting the right supplier.”

This process is accompanied by the in section 4.2.1 mentioned local buyers and auditors in China, who visit potential suppliers to assess their qualities and the financial health of the supplier. For other regions such as Eastern Europe, the firm sends engineers and buyers of their own. According to the DGP, these search costs need to be included into the consideration of switching suppliers. The firm needs additional capacity and resources to switch smoothly, making the switch itself potentially a costly one.

In line, another key complication with switching to a new supplier arises. The DGP recognizes that suppliers possess a lot of specific knowledge and experience, which will be lost when switching to another supplier. Such knowledge and experience needs to be built up again between the firm and the newly selected supplier. Therefore, building and maintaining a strong relationship with the supplier appears to be favoured over small cost differences. According to the firm, switching suppliers is possible if the audit has proven that the supplier is financially healthy, if obtained references from the market confirm the quality of their products and if the firm itself has an escape plan. In the words of the DGP:

“You must not act stupid. You will take a lot of risk when you quit a supplier and try to build up a relationship with a new one. It will leave a sort of gap. If you do not have a way back, you are not being smart. (...) But, sometimes it does not work out, sometimes it surprises you. Who says we know it all? We do not. But we need to learn from such mistakes.”

Interestingly, considering this buyer-supplier relationship, the same way of thinking applies for Firm C. As explained by the OM:

“We work on a sustainable partnership with suppliers. It is not that we would switch to another supplier every three months, just because that firm is one penny cheaper than the other. These are long-lasting relationships.”

The OM explains that such a partnership is manifested through both parties getting involved in how to achieve the best production process and how to develop it. Therefore, the firm would not leave a supplier that easily once it has found a solid partner.

However, as Firm C is in mass production, sometimes it does implement a duo-sourcing strategy. In that sense, if one supplier is not able to deliver the requested products, for whatsoever reasons, the firm can still depend on another supplier that delivers the same product.

We see that both Firm A and Firm C make substantial investments to build a solid relationship with their suppliers. These investments relate to the human asset specificity, as it concerns the specialized knowledge involved in the transaction. Indeed, the firms try to decrease the costs associated with the transaction and move towards a relationship which is based on a mutual interest of both parties in maintaining this relationship. However, contrasting the traditional view of asset specificity which focuses on high degrees of *customization* related to asset specific investments, Firm C shows that their mass production (low degree of customization) is still concerned with building and maintaining strong buyer-supplier relationships.

The findings also link the governance decision to competitive advantage. The processes and routines that both Firm A and Firm C deploy to enhance buyer-supplier relationships can be regarded as a necessary dynamic capability to ensure high-quality firm performance. As proposed, rightshoring embodies more than just adapting to firm-external influences. The example provided here shows that the correctness of a location is not only influenced by the presence of suppliers, but all the more by selecting the correct supplier and building and maintaining a solid relationship with these suppliers. Firm specific capabilities therefore determine whether or not a location and/or governance decision turns out to be the right one.

Opportunism

As an attribute of transaction cost economies, opportunism is considered to complicate the economic exchange. The DGP of Firm C illustrates how their firm gets involved in opportunistic behaviour of suppliers. For instance, it has happened that a supplier changed their strategy and moved to customers that are active in more high-volume segments. This does not mean that the supplier quits the relationship with Firm A, but it would increase its prices to encourage the Firm A to leave. However, if Firm A accepts the price increase, the supplier would earn a good living out of the deal. It shows opportunistic behaviour that will increase the transaction costs of Firm A. In this sense, we see that not only the buyers are selecting suppliers; suppliers go through a selection process for buyers themselves.

A similar example is provided in terms of opportunism related to changing economic conditions. During the crisis, the DGP argues, a deal was quickly made and suppliers were eager to give large discounts in order to cover its fixed costs. Currently, in better economic circumstances, the market is under pressure as suppliers are increasing their prices as the result of increasing labour costs, increasing resource costs and because their capacity is exhausted. As a consequence, suppliers start to cherry pick, choosing to deliver to a firm that provides the highest profit margins. In this sense, Firm A tries to offset cost increases with cost decreases, however the DGP acknowledges that this is difficult in the current economic circumstances, which leads to Firm A increasing the prices of their products as well.

An example of small numbers bargaining was provided by firm A, focusing on the only provider that could supply technical components from Austria to China (see Section 4.2.3). Once the supplier recognized that it was the only one that could potentially provide the demanded components, Firm A had nowhere to manoeuvre and price increases from that supplier were lurking. In this example, small numbers bargaining led to opportunistic behaviour which increased the transaction costs for Firm A.

These examples show that opportunistic behaviour is a real factor to take into account. In these cases opportunism is prevalent within buyer-supplier relationships. As we have seen earlier in this section, the firms invest to have sustainable relationships with their supplier. Nevertheless, the firms cannot cover for every occurrence of opportunistic behaviour as their degree of influence does not allow for total control. This leads us to consider opportunism to be of influence to any firm that deals with organizations that have their own interests. The governance decision contributes from TCE in this sense, as it takes into account these dynamics.

Intellectual property

In addition to section 4.2.1, in which the three firms affirmed that IP leakages were daily practice, an important note needs to be made regarding the governance mode. Theory on transaction costs states that in regions where the risk of IP leakages is pertinent, firms will rather produce the product inhouse than buy the product via third suppliers (Mártinez-mora & Merino, 2014). This would reduce the risk, as firms supervise their own processes instead of providing a supplier with detailed specifications on how the product is to be produced.

However, especially in the case of firm B, we see that although the firm produces nearly every component inhouse, this involves massive risks considering IP theft. Producing inhouse is not a guarantee for lower risks of IP leakages, as there have been many examples in which employees use their firm-specific knowledge as an asset to move to a competitor. This finding provides an addition to TCE, as inhouse production in countries for which limited IP protection exists is not a safe alternative to the risk accompanied with outsourcing. This means that an improved understanding of the business risks needs to be integrated within rightshoring, especially for countries like China.

4.2.5 Consecutive human behaviour

Each of the three firms confirm that emotional and psychological factors play a substantial role in the decision-making process. The difference for these cases is that Firm A and Firm C provide positive explanations for the interference of these factors, while Firm B provides a negative explanations of emotional interference.

Regarding the latter, the CFO of Firm B expresses his dissatisfaction regarding the decision of the firm to not ship a newly developed machine to China. This machine was developed to automate the process of wrapping coil, which is usually done manually. In terms of the most profitable location for this machine, the calculations of the CFO showed that China would have a cost advantage over the Netherlands. However, the shareholders have decided to leave the machine in the Netherlands, as the shareholders are afraid that the machine will be replicated by competitors. The CFO argues that the workers who manually wrap the coil are more of a risk as they can leave to a competitor and share their gained knowledge, whereas it is extremely difficult to copy a complex machine. The CFO:

“Emotion has prevailed. I mean, when I make the calculation, it is more profitable to produce in China. Well, the choice has been made. Now we will make some losses, while we could have had the profits in China. We see that there are more factors involved than just financial ones.”

In this case, we see that environmental uncertainty leaves a mark on the decision-making process. The possible risk of IP leakages dominates the decision-making. While the risk appears to be less pertinent for machinery, the shareholders are not able to fully rationalize the anticipation of such future events. In this sense, similarities are shown with the notion that environmental uncertainty in combination with bounded rationality drive backshoring (Foerstl et al., 2016).

Firm A and C explain emotional factors through the integration of these factors in business cases. The OM of firm C argues that emotion plays an important role for factors that cannot be fully rationalized in a business case. She provides the example of the ‘Made in Holland’ effect. An effect which is considered to be an important one when considering a production location. However, in a business case, it is not possible to express the influence of this effect in numbers. Therefore, it comes down to a more emotional sense of the decision-makers, considering the importance they attach to such effects. Gray areas such as the “Made in” effect is considered to provide opportunities, which would not have arose when everything could be calculated up front, according to the OM.

The DGP of firm A confirms that although many factors such as quotations, estimates, geographic calculations, import duties, export duties and so on can be substantiated quantitatively, there are some factors you cannot substantiate. However this is not seen as an impediment. The DGP:

“It’s a leap of faith. You need to dare. But, you also need to keep thinking. (...) You need to be considerate, but you also need to show some entrepreneurship. It’s never possible to accurately calculate every number.”

The DGP even acknowledges that one time when he worked for another firm, the business case for offshoring production activities resulted not to be conclusive, although competitors were already implementing offshoring activities by numbers. However, the firm did proceed to offshore the activity. It resulted in very positive results as the firm had made too strict assumptions on several cost factors that in the end turned out to be less of a factor than expected. In this case, the manifestation of the bandwagon effect turned out to be positive.

As shown, both Firm A and Firm C consider emotional aspects as relatively positive. This puts an interesting perspective on the rightshoring discussion. The rightshoring approach is involved with identifying the correct location for a firm, considering *all relevant factors* (Baroncelli et al., 2017, p. 40, italics added). However, these firms show 1) that being fully rational is not possible as not every factor can be quantified accurately and 2) that quantifications may actually display reality in a less optimistic way than necessary. This understanding has implications for rightshoring, as it seems impossible to consider all relevant factors accurately. Indeed, it might be naïve to consider rightshoring as an approach that will identify the correct location if all relevant factors are taken into account. Although, for example, Joubioux & Vanpoucke (2016) include risk assessment in their rightshoring model, rightshoring should be more aware of the uncertainty and unpredictability of the environment. It remains difficult if not impossible to take into account the interplay of factors into such an approach. Rightshoring implicitly suggests that one single location can be identified as the *correct* location, however such an undertaking seems to be overly ambitious, if not impossible.

5. Conclusion

The objective of this study is to progress the rightshoring concept by identifying and examining the elements from the manufacturing firm's decision-making process that contribute to rightshoring. This decision-making process has been divided into two phases: the initial offshoring decision and the consecutive decision-making process. Both phases have been integrated into a decision-making model (Figure 1) that served as the conceptual guideline for this study. Five general elements within these two phases have been identified throughout the process of this study, knowingly: 1) the business strategy, 2) competitive advantage, 3) the location decision, 4) the governance decision and 5) human behaviour. These elements were examined empirically through a qualitative analysis of decision-making processes of three currently offshoring firms within the manufacturing industry. The contributions of these findings to rightshoring will be discussed accordingly.

5.1 Business strategy

With regard to the position of the business strategy within the initial offshoring decision, the cases affirmed that the determination of the business strategy is the first factor to consider within the entire offshoring process. As a consequence, the firm's organizational and locational needs that are considered during the initial process are dependent on the chosen offshore business strategy. The offshoring strategies of the analysed cases fit within the categories proposed by Dunning (1988; 2001). In addition, it needs to be recognized that these categories are not exclusive in relation to each other as firms can opt for a combination of strategies. Regarding the consecutive decision-making process, it has been observed that the cases complement their initial offshoring strategy with other strategies. The offshoring experience revealed that these additional strategies could provide increased performance benefits for the firm.

5.2 Competitive advantage

As a part of competitive advantage, we examined the role of the RBV, dynamic capabilities and absorptive capacity within the consecutive decision-making process of manufacturing firms. It is observed that each case deploys various resources that are aimed towards the creation of capabilities and capacities that maintain and enhance competitive advantage in the distant environment in which the cases are operating. However, it has also been observed that the outcome of these resources differ for each case. On the one hand, we see that Case B struggles with acquiring and assimilating knowledge that is needed to confront the issues considering IP theft and personnel turnover that are pertinent in their offshore location. On the other hand, the resources that the firm deploys to combat these issues appear to be

inadequate and ineffective. Under relatively the same conditions, we note that the other cases implemented routines and processes that counter potential issues effectively.

Such differences illustrate the key role of competitive advantage within the concept of rightshoring. The concepts of dynamic capabilities and absorptive capacity indeed help explaining why some firms thrive under the same conditions where other firms struggle. Hence, the rightshoring concept benefits from such concepts as it provides handles that both identifies operational issues and offers the direction to performance-enhancing change.

5.3 The location decision

The offshoring location decision depends for a large share on the chosen business strategy. The findings of this study indicate that the business strategy narrows the location alternatives that are considered to be suitable for the offshoring firm. On a macro level this would provide sufficient guidance for a firm. However, it has been observed that the cases have not conducted systematic analysis with regard to the initial offshoring location within China. This needs to be improved within a rightshoring approach, however it needs to be noted that China's SEZs bound the location choice.

With regard to the consecutive location decision, we see that the cases do examine the suitability and viability of locations carefully, depending on changing environmental factors. Particularly Firm A and C make use of thorough methods of analysis that determine whether or not to relocate specific systems. In this sense, it needs to be recognized that relocations do not always need to involve the organizational level of the firm (the whole plant) and that functional relocations (systems) might even occur more frequently. Moreover, this location analysis is continuous as the cases have stated that they are always in search for the right production location.

5.4 The governance decision

The cases all opted for internal offshore production, although Firm A mainly buys semi-finished products to be assembled in their Chinese site. The relationship between the buyer and the supplier appears to be crucial in terms of the experienced transaction costs. Therefore, within rightshoring, attention should be paid to both the decision of internal versus outsourced production *and* the business management of either decision as the gains of either decision can only be experienced through competent management. Contrary to the notion by Martínez-mora & Merino (2014) we see that IP theft is present even within internal production alternatives. This has implications for our understanding of differences in transaction costs between internal and outsourced production alternatives.

5.5 Human behaviour

Factors of human behaviour encompass decision-making. It can be regarded as an odd man out within rightshoring, as rightshoring suggests that ideally the single-best location can be identified. The unavoidable interference of human behaviour, manifested through the presence of personal goals and emotional factors, result in sub-optimal decisions for the firm. Forms of opportunism exist within the own firm's decision-making, but also within buyer-supplier relationships, while the complexity and the uncertainty of the environment make it difficult, if not impossible to be fully rational. Not being able to be fully rational might impede sound decision-making, however the cases also showed that firms can miss out on new business possibilities by counting on calculations only.

5.6 A rightshoring decision-making model

This study developed a decision-making model in which the five aforementioned elements were identified to play a role within the process of 'rightshoring'. Using and interpreting the eclectic paradigm of international production (Dunning, 1980; 1988), three main elements were positioned into the model, being: competitive advantage, the location decision and the governance decision. The empirical findings showed that rightshoring needs to recognize these three pillars and, moreover, the *connection* between these pillars. Decisions for locations and governance practices are essential to ensure sustainable competitive advantage. Dealing with environmental uncertainty in distant environments requires that firms develop resources and capacities that the firm is able to deploy when gathering and transforming business specific knowledge. The outcome of these processes can include any alternative, including backshoring. Backshoring might well be the right outcome for firms that have been through the model.

In any case, it needs to be recognized that the concept of rightshoring is influenced by both firm-external factors (the environment), firm-internal factors (business operations and management) and relational factors (buyer-supplier relationships). The examination and analysis of which location and governance mode is most suited is a continuous process for the firm. The popular thoughts of the media and academics, focusing on unidirectional movements, appears to be oversimplified. The complexity of contemporary location and governance decisions should not be underestimated and, hence, the firms decision-making process should be superior to any outcome-driven focus. The development of the decision-making model is a contribution to the concept of rightshoring. From here, research should focus on digging deeper into the identified elements, both within the specific elements as with regard to the connection between the elements.

6. Discussion

Would it ever be possible to fully develop rightshoring? Do we need to? Contemporary global complexities make it almost impossible for firms to fully comprehend their position on the world map. Even more difficult it would be to develop an accurate forecast as the basis for long-term strategic plans. In academia, the complexity of the concept becomes even more apparent as it involves many areas of expertise, including business and operations management, economic geography, international business, supply chain management, etc. The more detailed rightshoring becomes, the more unfeasible it appears to be fully comprehensive. With regard to rightshoring, the various academic disciplines should proceed transdisciplinary to further identify what matters within the firm's decision-making process. Such research would learn the causes and effects of decisions between the relevant elements of rightshoring. However, it does not need to be the goal to aim for one true outcome. Many right outcomes exist for a firm. Such an outcome is not bounded by a specific location only. Firms need the knowledge and dexterity to adapt to changing circumstances. There are many factors that can be influenced by a firm and many that cannot. If the level of influence and its outcomes become so dissatisfying, offshoring firms would be better off by changing location. However, it needs to be emphasized that firms are able to improve their circumstances within a particular location. Such achievements can lead to a right location.

The degree of influence might depend on the size of the firm. This study found preliminary indications that larger firms possess more extensive capacities to anticipate and respond to changes in the business environment. Smaller firms might not be able to gather and transform the knowledge needed to thrive in distant environments. This possible relationship needs to be researched more extensively in order to differentiate between smaller and larger firms. In any case, it needs to be acknowledged that firms cannot sit back and relax the moment that it operates in the 'right' location. Rapidly changing environments call for continuous analysis regarding the performance of the firm.

More attention also needs to be paid to the various business strategies that are open to the firm. This study included a range of possibilities and these were indeed identified within the empirical analysis. However, additional strategies might be pursued by other firms. Additional research considering differences in outsourcing strategies and backshoring strategies needs to be conducted in the future. Relating the business strategy to the firms sequential decisions needs to be further investigated. Also, it is recommended for future research to interview several respondents with different roles in a firm, as their perspective might differ.

7. Reflection

A general review

Although the research process took longer than expected and turned out to be a complex one, I am satisfied with the knowledge I gained regarding the phenomena in question and with the contribution I hope to make within the debate. One of my strengths that helped me with this thesis is my skill in writing. Although sometimes it can be time consuming to endlessly think of a more appropriate word or a better sentence structure, it helped to convey my thoughts on paper. I do, however, recognize that I can improve my methodological knowledge and skill. Especially when it comes to bridging the gap between theory and empirics, progress can be made. Operationalising the discussed relevant concepts and theories remained difficult and could have been paid more attention to. And, although my writing skills are sufficient, I noticed within the complexity of this topic that I find it hard to write towards a specific goal. This could very well have to do with the scope and definition of the study, which I continue to proceed with now. Subsequently, I will reflect on the selection of the cases and the interviews that were conducted.

Scope and definition

The research process has been one of trial and error. On the one hand, this was expected as I had never conducted a research as big as a master thesis before and because I desired to dig into a theme that was not covered extensively within the other courses of the master's programme. I hoped to gain knowledge of a topic that was both new to me and new to the scientific discussion. In part, this made up for the 'known unknown' hurdles that I would encounter during the process. On the other hand, however, the confronted hurdles were not easy to overcome, occasionally leading to dissatisfaction. Partly, this can be attributed to the research scope and definition. In hindsight, the chosen study object might have been too broad for a master thesis. As I started with the research, this was not expected. It was not yet possible to paint the full picture. Gradually, when the blanks were filled in and all aspects of the decision-making process were identified, it became clear that the manufacturing location decision-making process encompasses many different academic areas. However, it was not felt that the focus should have been narrowed, because the phenomenon in question needed conceptual progression that demanded the construction of a decision-making model that takes into account all that is relevant. In the future, others may focus more on one or a few components of the model, as described in chapter 5. Additionally, defining the scope and definition was challenging as the phenomena in question lack a common understanding. This

resulted in re-constructing my frame of reference over and over again, sometimes leading to confusion.

The process made me realize that defining a manageable scope is essential for a focused research, however, it also made me realize that such a scope is hard to define initially, when the possessed knowledge is not extensive. It helped me that I worked in a structured way during the research, meaning that I documented and processed new papers with care and with the help of research managing software.

Case selection

Initially, the aim was to include several cases that could be positioned in different stages of the decision-making process. This would have included backshored firms, currently offshored firms and even firms that have not been active in international production (yet). This would lead to comparisons between different stages of the decision-making process and between cases within one decision-making stage. However, it became clear that the process of identifying and involving these cases would not be easy. Firstly, it was hoped that institutions like the Chamber of Commerce could help to get in touch with potential cases. However, unfortunately, the institute is not allowed to distribute contact information. Secondly, because of this, the search possibility got limited to firms that deliberately appeared in the media or that were connected to organisations such as The Reshoring Connection. Although it was expected that a fair share of these firms wanted to share their story, this turned out to be dissatisfying. It made me realize how hard it can be to get firms to cooperate with your study, especially when the subject concerns their confidential strategic choices. In the end, three firms were found to cooperate. These firms fulfilled the inclusion criteria and showed quite some similarities, resulting in renewed confidence that a sound empirical analysis would be possible.

The interviews

It was felt that the conducted interviews were pretty fruitful. The interests of the interviewees and their business processes aligned with the frame of reference I had developed from the literature, i.e. the developed components within the theoretic decision-making model were recognized by the interviewees to play a role in their decision-making process. The interpretation of these components were mostly very firm specific, resulting in interesting insights. Nevertheless, if the research definition would have been more focused, the interviews would be more focused as well. In the current setting, a wide variety of aspects needed to be dealt with within the interview. The given answers were very useful to gain insights into decision-making and into rightshoring, however comparison between cases was not possible for every aspect. A deeper focus on one or two of these aspects would have provided a better setting to make comparisons between the practices of these cases.

Although I deliberately paid attention to not steering the conversation into a particular direction, a thin line exists between asking follow-up questions and being suggestive. In both cases it becomes clear which part of their answer caught my attention. I judged the questions to be legitimate as the interviewees never showed signs of being constrained to answer freely and because the interviews were held as open as possible, which emphasized that the interviewees were able to talk about what was important to *them* within the scope of the subject.

With regard to Firm A and Firm C, I consider the interviews to be conducted quite smoothly. The interview with the representatives of Firm B had some complications, unfortunately. For instance, the CFO was late and he arrived 15 minutes into the interview. This did not benefit the flow of the interview. Moreover, from the beginning I felt the pressure of time as the HR manager indicated she had only 35 minutes before she had to leave for another appointment. As the first interview with Firm A took around 50 minutes interviewing only one person, I knew time could very well become a constraining factor, especially when interviewing two people. As a consequence, I felt slightly rushed during the interview, possibly not catching every detail that was discussed. Also, the HR manager started explaining their foreign business practice before I could ask a targeted question, directly touching upon almost every aspect of the interview very briefly. Although she acknowledged that her story was ahead of the questions to be asked, it was hard to regain structure in the interview. A last factor that complicated the interview was that, once arrived, the CFO did not show much interest in being present in the conversation. He did not say much at all and when he did, it stagnated the conversation. This even led the HR manager to ask conversation-related questions to him to get him more involved. These complicating factors resulted in a feeling that the data could have been improved if the setting was different, although the retrieved data was still highly useful.

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Appendix I. Terminology

Many authors have acknowledged that the used conceptual terminology regarding the subject of offshoring and reshoring is ambiguous (e.g. Wiesmann et al., 2017). However, it is equally these authors that contribute to the vagueness of the concepts. This appendix provides a description of and a discussion on the existing terms and their multiple understandings within the context of the manufacturing location decision. The aim of this section is to reduce the conceptual confusion and progress to a more common understanding of what the terms include and exclude.

Offshoring

Although the concept of offshoring and its manifestations have existed for quite some decades, no consensus towards a congruent definition has been reached within the academics. Most fundamental to offshoring is the location decision, which is by definition a foreign one (De Backer et al., 2016). The decision is of paramount strategic importance, due to its long-term influence on the competitiveness and operational processes of the firm (Kinkel & Maloca, 2009). However, some authors have integrated the location decision with one of the possible alternatives of the make-or-buy decision. For example, Arlbjørn & Mikkelsen (2014) and Stentoft et al. (2016) have argued that offshoring implies the maintenance of governance over the offshored activities (inhouse), whereas opposing views have been discussed by Gray et al. (2013) and Jahns et al. (2006), who have noted that offshoring and offshored outsourcing are often used interchangeably.

To provide clearance: by definition, offshoring occurs irrespective of the governance mode, as offshoring describes a shift across geographical boundaries. This shift is possibly, but by no means necessarily, accompanied by a shift along the organizational boundaries, the governance decision. Therefore, offshoring includes all possibilities of the governance decision (De Backer et al., 2016; Bals et al., 2015), defining the concept as: “the relocation of (parts of) production abroad: to own locations, to foreign suppliers or to any hybrid alternative in between”. As mentioned in section 2.1, this definition shows similarities with the offshoring definition of Kinkel & Maloca (2009), however the current definition adds hybrid alternatives as these modes of organization need to be acknowledged as an important class on the governance spectrum (Foerstl et al., 2016; Riordan & Williamson, 1985).

Reshoring

Considering the reshoring concept, first it needs to be noted that an actual offshoring decision needs to precede a reshoring decision (Gray et al., 2013). Although this sounds evident, the Dutch chamber of commerce defines reshoring in a different way. Their understanding of

reshoring is based on a broad definition, arguing that reshoring includes both the repatriation of foreign activities *and* the conscious retention of production activities in the Netherlands (Kamer van Koophandel, 2016). The adoption of a broad definition of reshoring is, although intelligible from the institute's viewpoint and mission, highly impractical and conceptually unfeasible. This does not imply that the decision-making process of firms that consciously maintain production in their home country is not of value to the current debate, on the contrary. In fact, maintaining domestic production is an outcome of a decision-making process, which can provide essential insights for the current debate.

Second, disagreement exists to whether or not reshoring always includes the relocation of (parts of) production back to the *home* country. Authors like Bailey & De Propis (2014) and Ellram (2013) have used the term to refer to home country relocations, whereas others have referred to a generic change in location with respect to the previous offshore location (Fratocchi et al., 2014). The latter definition is being preferred and adopted, interpreting reshoring as the overarching term referring to any geographical relocation from an offshore location. The adoption of this definition distinguishes reshoring conceptually from backshoring. A necessary distinction, as reshoring and backshoring are often regarded as similar, which they are not.

Third, regarding the make-or-buy decision, the same discussion as for offshoring applies. Consequently, reshoring is fundamentally concerned with a geographical shift. However, the governance mode should not be disregarded, see section 2.1 (Foerstl et al., 2016).

Finally, reshoring can refer to all or only parts of previously offshored activities (Foerstl et al., 2016), implying that not all offshored activities need to be closed (De Backer et al., 2016). Therefore, the level of analysis is on the functional level of the firm and not on the institutional level of the firm (Fratocchi et al., 2013).

Backshoring and nearshoring

The concept of backshoring and nearshoring can both be seen as a further differentiation of the reshoring concept (Foerstl et al., 2016). Whereas the reshoring definition contains no explicit geographical location, backshoring is geographically bounded and can be defined as the "re-concentration of parts of production from own foreign locations as well as from foreign suppliers to the *domestic* production site of the firm" (Kinkel & Maloca, 2009, italics added). This indicates that backshoring, and not reshoring, as claimed by Foerstl et al. (2016), is the reverse decision with respect to a previous offshoring process (Fratocchi et al., 2014).

Like backshoring, the nearshoring concept is also geographically limited, although not all boundaries are clearly defined. The concept consists of two geographical dimensions, which

are to locate the production activities 1) outside of the home country's boundaries, and 2) within the region of the home country (Ellram et al., 2013).

The former dimension being self-evident, the latter dimension not entirely. The latter dimension adds complexity and ambiguity to the concept. In the first place, it is rather vague where exactly the surrounding region of a country begins and ends. It depends entirely on the variables that are taken into account. Moreover, most relevant indicators (e.g. language and culture) are not well-suited to be measured objectively. To illustrate the nearshoring concept, Fratocchi et al. (2014) use the example of a French firm locating its production in Romania. Whether or not Romania fits within the region of France is, at least, arbitrary. Second, even if the boundaries are to be determined objectively, the boundaries are country specific. Consequently, as every country has its own region, determining each country's region seems highly impractical. Nearshoring can occur both as an offshoring decision and as a reshoring decision.

Onshoring

Two main interpretations exist regarding the term onshoring. On the one hand, according to De Backer et al. (2016) it relates to the decision to locate production activities close to market demand, meaning that onshoring can both be fit into the offshoring and reshoring terminology. On the other hand, most authors use the term to refer to the domestic production of goods (Benstead et al., 2017; Tate & Bals, 2017). In that sense, backshoring refers to the decision to return production domestically (i.e. firm A decided to backshore its production), while onshore could refer to the domestic existence of production (i.e. firm B produces onshore).

Governance decision

As discussed in section 2.1, offshoring and reshoring are essentially location decisions. In terms of framing the definitions, the distinction between governance and location is considered important. However, crucial to understanding the manufacturing location decision is that governance decisions and location decisions are not mutually exclusive. As a matter of fact, the two are often combined strategies (Foerstl et al., 2016), as they are embedded in the same context (Tate & Bals, 2017).

Confusingly, many different terms exist to describe the same governance mode. Table 1 clarifies what is meant by which term in the governance spectrum. If a governance decision outcome implies a change in the governance mode, the processes of 'insourcing' and 'outsourcing' are distinguished. Whereas insourcing can be defined as "the decision to reincorporate an outsourced activity within a firm that had formerly been transferred to an external supplier" (Cabral et al., 2013), outsourcing can be defined as "the movement of internal activities outside of the firm (Ellram et al., 2008). More recently, hybrid forms such as

joint ventures, strategic partnerships and long-term contracts have been introduced in the discussion (Foerstl et al., 2016).

As both the location decision and the governance decision are combined strategies, the location decision has implications for the governance decision and *vice versa*. For example, as has been suggested by Wiesmann et al. (2017), the motivation for the reshored location decision may be affected by the governance mode in the former host country, as outsourced manufacturing and greenfield inhouse manufacturing are two distinctively different governance modes.

Rightshoring

Recently, authors (e.g. Bals et al. (2015) and Baroncelli et al. (2017)) have proposed a new concept within the reshoring discussion, namely the one of *rightshoring*. Rightshoring can be defined as “the process that leads to identify the correct location for a specific firm, taking into account all the relevant factors” (Baroncelli et al., 2017). Rightshoring is inclusive of the governance decision, as governance is regarded to play a pivotal role in identifying the right location for a firm (Tate & Bals, 2017). This contrasts the reshoring concept, which does acknowledge the existence of various governance modes, but which does not integrate governance into its operations. It should be noted that the unit of analysis is on the component level of the firm and not on the organizational level (Gray et al., 2013), as firms might be involved in multiple location and governance decisions simultaneously (Foerstl et al., 2016).

In contrast to backshoring and nearshoring, the concept of rightshoring should not be regarded as an extension of the reshoring concept. Instead, it should be regarded as a concept on its own, which is not defined by the *outcome* of the firm’s decision, but by the *process* leading up to a particular outcome. In other words, whereas the concepts of reshoring, backshoring and so forth focus on the geographical outcome, the decision-making process is central to rightshoring (Joubioux & Vanpoucke, 2016). Implicit, but essential to its understanding is the notion that a rightshoring decision does not necessarily include a geographical shift (Tate & Bals, 2017). For example, in the search for the right location of its production, a firm has considered painstakingly both the governance mode as well as its geographical location, but decided either to 1) remain unchanged regarding both decisions, or 2) change the governance mode. Both options do not include any form of reshoring, but are essential outcomes based on a decision making process, which exists whether or not the outcome results in a change.

Appendix II. Interview guide

General questions for each case

5. Kunt u kort iets vertellen over uw bedrijf?

6. Kunt u voor mijn beeldvorming vertellen over de organisatiestructuur van het bedrijf?

7. Welke productieactiviteiten worden op deze site uitgevoerd?

- a. Waarom worden juist deze activiteiten hier uitgevoerd?
- b. Welke bedrijfsstrategie ligt hier aan ten grondslag?

8. Heeft uw bedrijf op dit moment (delen van) de productie gevestigd in het buitenland?

- c. Welke bedrijfsstrategie lag hieraan ten grondslag?
- d. In welk beheer is deze productie gebracht?
- e. Wat gaat er goed?
- f. Welke problemen komen jullie tegen?

9. Hoe is de productielocatie van de producten in eigen beheer bepaald?

- g. Welke stappen en/of analyses zijn doorlopen om tot een bepaalde afweging te komen m.b.t. de productielocatie?
- h. In hoeverre is dit een rationeel proces?
- i. In hoeverre is dit een continu proces?
- j. Wie wordt er betrokken bij zo'n besluit?
- k. Hoe verloopt dit proces voor andere productielocaties?

10. Hoe wordt de keuze voor een toeleverancier bepaald?

- l. Welke productieactiviteiten worden niet in eigen beheer uitgevoerd?
Waarom niet?
- m. Welke stappen en/of analyses zijn doorlopen om tot een bepaalde afweging te komen m.b.t. de toeleverancier?
- n. In hoeverre is dit een rationeel proces?
- o. In hoeverre is dit een doorlopend proces?
- p. Wie wordt er betrokken bij zo'n besluit?
- q. Hoe verloopt dit voor andere toeleveranciers?

11. Welke rol spelen de karaktereigenschappen van het product in het besluitvormingsproces van de productielocatie?

- r. Eigen beheer
- s. Toeleveranciers

12. Welke (andere) factoren zijn voor dit bedrijf van belang bij de bepaling van de productielocatie?

- t. Bedrijfsspecifieke factoren
- u. Bedrijfsexterne factoren
- v. Contextafhankelijke factoren

13. Onder welke omstandigheden of condities zou het aantrekkelijk zijn om (onderdelen van) producten in het buitenland te laten produceren?

14. Onder welke omstandigheden of condities zou het aantrekkelijk zijn om (onderdelen van) producten weer terug te halen naar Nederland?

15. Onder welke omstandigheden of condities zou het aantrekkelijk zijn om (onderdelen van) producten niet in eigen beheer te laten produceren?

16. Is er nog iets niet aan bod gekomen waar u wel graag over wilt uitweiden?

Specific questions Case C

Casus C heeft ook productieactiviteiten teruggehaald naar Nederland.

1. Welke productieactiviteiten zijn teruggehaald?

2. Hoe is dit besluit tot stand gekomen?

- a. Welke strategie lag hieraan ten grondslag?
- b. Hoe is de productielocatie bepaald?
 - i. Alternatieve productielocaties dan de huidige in Nederland?
 - ii. Welke factoren waren van belang in de overweging?
- c. Is er een afweging gemaakt tussen in-house productie versus toeleveranciers? Hoe?
- d. Wie zijn betrokken bij dit besluit?
- e. In hoeverre is dit een rationeel proces?

3. Wat is er veranderd in het productieproces?