Taking Sustainability to the Operational Level: Purchasing within the MNC

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Abstract

Sustainability, including environmental, social, and economic aspects, has become increasingly important to multinational corporations (MNCs). Environmental and social sustainability are no longer mere voluntary initiatives, but are becoming essential to international operations. Despite its importance for the functioning of MNCs, only little attention has been paid to the facilitators of sustainability on an operational level. This thesis addresses this gap by focusing on the purchasing function and addressing the question: "What influences sustainability in the MNC purchasing function?". This question is further divided into four research questions, which are individually addressed in the essays.

The introductory part of this thesis builds a theoretical framework explaining sustainability in MNCs’ purchasing through various theoretical lenses. These are applied in the essays using quantitative (structural equation modeling on 305 companies) and qualitative (case study of two MNCs) methods. New insights have emerged through three critical aspects: the operational level examination, different theoretical lenses, and mixed methodology. First, Essay 1 reviews extant research on sustainability in MNCs’ purchasing and finds that studies draw upon a limited set of theories, where operational sustainability comprises of the sustainability focus, industry, and location. The following two essays build on this finding by applying two different theoretical lenses and viewing MNCs in comparison to other companies, non-MNCs. Second, in studying the relationship between institutional pressures and triple bottom line sustainability performance, Essay 2 finds that institutional pressures affect environmental and social sustainability, but not economic performance. Third, in examining the impact of absorptive capacities on environmental and social sustainability practices and economic performance, Essay 3 finds that only realized absorptive capacities affect social sustainability practices in MNCs. These essays find clear differences between external factors influencing sustainability (institutional pressures) and internal factors (absorptive capacities) in MNCs and non-MNCs. Finally, Essay 4 examines mechanisms of and reasons for the adoption of sustainability policies and practices by purchasing function actors. It finds the process to be headquarters driven; further, distance, in terms of geography and role, mainly influences differences in the sustainability policy and practice adoption.

This thesis contributes to international business research in several ways. It finds differences between sustainability on an operational level in MNCs, as opposed to other companies. Sustainability within MNCs is externally driven and its performance is impacted by institutional pressures. Absorptive capacities do not affect all aspects of MNCs’ operational sustainability, which is in contrast to the pivotal role of individual actors within MNCs’ purchasing.

Keywords sustainability, triple bottom line, multinational corporation, purchasing function, absorptive capacities, institutional theory
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This doctoral dissertation consists of a summary and of the following essays which are referred to in the text by their numerals.


Author’s Contribution

**Essay 1:** Understanding operational sustainability in multinational corporations: a conceptual review and an agenda for future research

Sole-authored essay.

**Essay 2:** Why become sustainable? Institutional pressures as drivers of sustainability performance in MNCs

Research idea; theoretical framework and literature review; research design; data collection (as part of team); analysis; discussion of results.

**Essay 3:** Learning Sustainability? Absorptive capacities as drivers of sustainability in MNCs’ purchasing

Research idea; theoretical framework and literature review; research design; data collection (as part of team); analysis; discussion of results.

**Essay 4:** Sustainability Policy and Practices on a Day-to-Day Basis: the Role of Purchasing in MNCs

Sole-authored essay.
1. Introduction

1.1 Background and Research Gap

"It does not suffice to do what the law says. We must be in the front line of these problems [of social responsibility]."

*Anders Dahlvig, CEO of IKEA, in Văduva et al. (2016)*

As Anders Dahlvig argues, sustainability – with its environmental, social, and economic aspects (Elkington, 1998) – is critical to organizations in the current business environment. In fact, it has become an increasingly important topic for firms in general, and for internationally operating multinational corporations (MNCs) in particular. Being at the center of the public eye in various markets, MNCs face varying and often conflicting pressures to consider sustainability as part of their day-to-day operations (Marano and Kostova, 2016). Environmental and social sustainability are no longer mere philanthropic or voluntary initiatives, but are rather becoming essential to international operations, given that the depletion of natural resources as well as both human and employee rights are seen as critical global issues for the future (United Nations, 2015).

Extant research has contributed with works on social, environmental, and ethical aspects (Kolk, 2016; Doh and Lucea, 2013; Holtbrügge and Dögl, 2012; Kolk and van Tulder, 2010; Egri & Ralston, 2008). Social sustainability concerns the advancement of social issues beyond compliance (Kolk, 2016), as well as socially supportive company management in pursuit of economic profitability (Carroll, 1999; Wehling, 2009). Discussions on environmental sustainability revolve around issues arising from climate change (e.g. Kolk and Levy, 2001) as well as attempts to reduce the environmental footprint of firms in their day-to-day actions (Andersson et al.,
Introduction

2005). Meanwhile, ethical issues are often addressed in connection with stake-
holder influences (e.g. Zhao and Park, 2014), such as interactions with non-govern-
ment organizations (Doh et al., 2010; Lambell et al., 2008). Many studies focus
on individual cases and provide snapshots of specific situations (e.g. Pinkse et al.,
2010; Pagell and Wu, 2009). Those concerning potential drivers of sustainability,
in turn, concentrate on a specific setting and component of triple-bottom-line sus-
tainability (i.e. environmental, social, or economic; Elkington, 1998), and remain
on a rather strategic level.

There is still a clear lack of knowledge about what influences firms to focus on
sustainability and its performance in their daily operations. Although strategic
planning is crucial, it is the day-to-day operations that make the difference. The
extant literature has thus successfully addressed the strategic-level implications of
sustainability in firms, but pays only scant attention to the functional level and the
subsequent operational effects. In an attempt to narrow the gap with regard to the
operational implications I will focus on one specific MNC function: purchasing.

The purchasing function offers an ideal empirical context because it acts as a node
that connects firms’ internal and external stakeholders (Ehrgott et al., 2011), inter-
acting with suppliers and therefore necessarily involved in cross-functional dia-
logue within the company. Furthermore, both environmental and human-rights is-
sues are highly relevant, and can make a big difference in purchasing practices
(Drumwright, 1994; Maignan et al. 2002). Purchasing has, the responsibility, for
instance, to ensure that subcontractors do not use child labor or hazardous materi-
als in the production of their goods and services, as either practice could have sig-
nificant legal consequences.

Sustainability is a particularly complex issue in MNCs. As inter-organizational
networks (Ghoshal and Bartlett, 1990), they and their purchasing functions are re-
quired to adapt their business practices to the different institutional environments
in the respective host countries (e.g. Tan and Wang, 2011). Prevailing discussions
on MNCs and their sustainability consider the organization in its entirety, however,
and tend to focus on the actions of either the headquarters or the subsidiaries (Cruz
and Pedrozo, 2009). This approach does not appear to fit the complex setting of the
MNC with its globally dispersed purchasing operations and varying institutional
environments. I therefore seek to advance existing research in international business and sustainability by establishing an understanding of aspects influencing sustainability in the MNC’s purchasing function including both the external and the internal drivers.

1.2 Research Questions

Against this background, I move from strategic-level discussion to the operational level and the purchasing function. Thus, I aim to find out:

What influences sustainability in the MNC purchasing function?

In seeking an answer to this main research question I investigate potential external and internal drivers through different theoretical lenses. As Cruz and Pedrozo (2009) suggest, the main factors affecting sustainability work include the governance structure, corporate ethics, and organizational learning. As far as the governance structure and corporate ethics are concerned, I refer to mimetic, coercive, and normative institutional pressures (DiMaggio and Powell, 1983) as potential external drivers. In addition, I consider the role of organizational learning from the perspective of absorptive capacities, including both potential and realized capacities (Cohen and Levinthal, 1990; Zahra and George, 2002), as potential internal drivers. This structure gave rise to the following four sub-questions that will help me to identify what sustainability means in the MNC’s purchasing function, and what drives its adoption and execution.

First, I set out to understand what sustainability is on an operational level, what theories have been utilized to shed light on it, and what main discussions are taking place in the fields of international business and sustainable purchasing and supply. I therefore address the following question.

1. What is known and not known about sustainability in MNC purchasing?

Building upon the theories and discussions identified in the first essay, I apply two theories as potential external and internal drivers. Institutional pressures give particularly valuable insights into the complex external influences affecting MNCs
Introduction and their sustainability practices and performance (Marano and Kostova, 2016). Meanwhile, absorptive capacities, as internal capabilities, enhance understanding of the underlying internal mechanisms potentially affecting MNC sustainability (Zahra and George, 2002). I therefore address the following two questions.

2. How do institutional pressures affect triple-bottom-line sustainability in the MNC purchasing function?

3. How do absorptive capacities affect triple-bottom-line sustainability in the MNC purchasing function?

Having identified the potential internal and external factors that affect the purchasing function I further seek to understand its role in the adoption and execution of sustainability in MNCs. To this end I address the following question:

4. How are corporate level sustainability policies and practices adopted by actors in the purchasing function and why?

Each of the four essays comprising Part II of this dissertation addresses one of the underlying research questions. Figure 1 illustrates the relationship between the four essays.

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**Figure 1.** The positioning of the four essays
1.3 Key Concepts

The context of this dissertation is the MNC and its purchasing function. Within this context I build on a variety of conceptual assumptions regarding MNCs and their environment in my investigation into the adoption and execution of sustainability in their purchasing.

The Multinational Corporation (MNC)

MNCs are conceptualized as organizational networks operating in several industries and locations with different organizational structures. Thus I am following Ghoshal and Bartlett (1990) in viewing the MNC as “embedded in an external network consisting of all other organizations such as customers, suppliers, regulators, and so on, with which the different units of the multinational must interact” (p. 603). By way of a further distinction from other companies, so-called non-MNCs, I identify MNCs as companies that control value-adding activities such as production, marketing, or research and development (in other words activities beyond mere sales) in more than one country (Dunning and Lundan, 2008).

Sustainability

I define sustainability as comprising the three aspects of Elkington’s (1998) triple bottom line, namely environmental, social, and economic sustainability, singly or in combination. This approach is in line with United Nations (2015) Sustainable Development Goals, a set of 17 major goals including good health and wellbeing, clean energy, and responsible consumption and production, for example. This introduces a new, concrete perspective on sustainable development, which is defined as ensuring “that it [the sustainable development] meets the needs of the present without compromising the ability of future generations to meet their own needs” (World Commission on Environment and Development, 1987, p. 5). I also include the term “corporate responsibility”, which is frequently used interchangeably with “sustainability”. 
Operational Sustainability

In line with the aforementioned triple bottom line (Elkington, 1998), I conceptualize operational sustainability as the practicing of environmental, social and economic sustainability within the MNC. These practices ultimately generate environmental, social, and economic performance within its business functions, including purchasing.

Organizational Purchasing

As an operational perspective from which to view sustainability where the day-to-day business is conducted I have chosen the purchasing function. In line with Ellram and Pearson (1993), I define this function as a unit that is engaged in specification development, make-or-buy analyses, price and term negotiations, supplier selection, market and pricing analyses, and materials-requirement reviews. Thus, I view purchasing as an activity executed by a specific unit within the MNC, which does not necessarily need to be given the formal title “purchasing function”.

Institutional pressures

Institutional theory concerns organizations and their progress towards legitimacy, and thus implies the adaptation of institutionalized social and environmental norms that ultimately results in isomorphism (DiMaggio and Powell, 1983). Furthermore, stakeholder demands as identified by Benn et al. (2014) clearly exert pressures on companies and their purchasing function (Kauppi, 2013; Tate et al., 2010; Sarkis et al., 2011; Zhu and Sarkis, 2007). In this thesis, therefore, I consider the influence of the three types of institutional pressure: coercive, mimetic, and normative (DiMaggio and Powell, 1983). Coercive pressures, both formal and informal, are exerted on organizations by other organizations they depend on; mimetic pressures concern the imitation of best practices originating from uncertainty, and normative pressures refer to the professionalization of an organization.

Absorptive capacities

Absorptive capacities allow companies to identify and use external knowledge in their own operations (Cohen and Levinthal, 1990; Zahra and George, 2002). I investigate the two main dimensions, as defined by Zahra and George (2002) as well as Jansen et al. (2005): potential absorptive capacities comprising acquisition and assimilation capabilities, and realized absorptive capacities comprising transformation and exploitation capabilities.
1.4 Limitations

This dissertation has certain limitations connected to the assumptions discussed above. First, sustainability is an increasingly popular notion in the study of MNCs, and a variety of different conceptualizations have been put forward. While I acknowledge the various definitions including those rather referring to the social (e.g. Selsky and Parker, 2005), the environmental (e.g. Ritvala et al., 2014), or the economic component, I follow Elkington (1998) and the United Nations (2015) Sustainable Development Goals for a more holistic view on sustainability. I also include discussions on non-market strategies and particular sustainability aspects, but focus specifically on neither of them.

Second, while clearly drawing on existing literature and therefore extending prevailing views on sustainability in MNCs, this study is limited by the application of the two theories under consideration, absorptive capacities and institutional theory. Nevertheless, focusing on these two aspects gives valuable insights given the attention paid in earlier studies to other potential internal and external drivers, including stakeholder theory (e.g. Agle et al., 2008; Gupta, 2011; Spence, 2016) and the resource-based view (Gold et al., 2010; Sarkis et al., 2011).

Third, given the global applicability of organizational sustainability, I focus on MNCs. In functioning across national borders, these firms better facilitate the projection of a global view on sustainability issues than more locally operating companies. Moreover, as I am able to draw upon discussions in the realm of international business and management, as well as the literature on business ethics, I pay less attention to general discussions on sustainability.

1.5 Structure

Following this introductory chapter I review the existing literature in Chapter 2, and develop a theoretical framework for the study in Chapter 3. Chapter 4 focuses on the methodologies I have used. I give a brief summary of the four essays included in this dissertation in Chapter 5, and discuss the findings in Chapter 6. Concluding
Introduction

Part I in Chapter 7, I assess the contributions the study makes to the research on international business, and suggest directions for future research. Part II comprises the four Essays.

**Figure 2.** The structure of the study
2. Literature Review

The literature reviewed in this chapter covers the main streams on which the study is based. I introduce the MNC as a study setting in the first sub-chapter, and the purchasing context in the second. Sub-chapters 3 and 4 concern sustainability in MNCs and purchasing, respectively, and I conclude the chapter with some thoughts on sustainable purchasing in MNCs (see Figure 3).

2.1 The MNC as a Study Setting

The prominent role of the MNC has long been recognized. Perlmutter (1969), for example, discussed the complexity of MNCs in his seminal work, stressing the move towards geocentrism from ethnocentric and polycentric organizations and the varied approaches taken by MNCs in realizing multi-nationality (Perlmutter, 1969). This early conceptualization focused on two core aspects related to the MNC: the structures within it, and its interaction with the environment.
Literature Review

As a consequence of increased globalization, referring to the “integration of countries and people of the world” (Stiglitz, 2002, p. 9), MNCs are able to reap the benefits of ownership, location, and internalization (Dunning, 1979). The internal structures have long been a focus of interest, and particularly the relationships between headquarters and geographically dispersed subsidiaries (Vernon, 1966; Stopford and Wells, 1972). Ghoshal and Bartlett (1990), in turn, conceptualize the MNC as an inter-organizational network involving interaction between not only headquarters and subsidiaries and their respective functions, but also and critically between these units and their respective external stakeholders.

Within the MNC, the role of knowledge and capabilities has been extensively studied. Gupta and Govindarajan (2000) discuss the part subsidiaries play in acquiring and disseminating knowledge across the MNC, whereas Barney (1991) highlights the role of organizational capabilities. These aspects are reflected in the knowledge-based view of the firm (Kogut and Zander, 1992).

As the discussion about its structures indicates, the MNC is closely intertwined with its environment (Ghoshal and Bartlett, 1990; Casson, 1999). Forsgren (2013) identifies two influential theoretical perspectives on this aspect: contingency theory and network theory. Whereas the former refers to the continuous adjustment of the MNC to its environment, the latter concerns its specific relationships with its environment that soften the border between them. This latter conceptualization strongly builds upon Hedlund’s (1986) notion of heterarchy, according to which structural properties form the basis of the MNCs’ strategic decisions.

Given its critical role within the international business environment, the MNC has been the subject of a wealth of conceptual and empirical work (e.g. Björkman et al., 2004; Kolk, 2010; Marano and Kostova, 2016) in international business research. Roth and Kostova (2003) argue that the main research purpose now is to expand existing theories and to build new ones, as well as to study MNC-specific phenomena. Its distinct context in multiple and frequently conflicting environments make the MNC a setting that is unique to companies operating across borders (Tan and Wang, 2011).
MNCs are truly complex organizations. The networked structure (Ghoshal and Bartlett, 1990) that exposes them to a diverse set of internal and external stakeholder demands makes an intriguing study setting. Moreover, the different host-country environments impose varying regulatory and normative requirements on them (Tan and Wang, 2011; Marano and Kostova, 2016), and their employees are equally diverse. This is of particular relevance to the study of social, environmental, and economic sustainability.

Comparing MNCs to other firms, so-called non-MNCs, in an MNC-specific setting further facilitates identification of drivers that are specific to MNCs and not to firms in general. As noted in the introductory chapter, I follow Dunning and Lundan (2008) in viewing MNCs as companies that engage in value-adding activities outside of their home country. Whereas Crilly (2011) argues that the firm’s size and type should not generally affect how it behaves in the same local market, more recent findings show that the operational implementation of sustainability may be more challenging to MNCs than to other (smaller) companies (Baumann-Pauly et al., 2013). The authors attribute this to the MNC’s strength in communicating their sustainability initiatives but also to their size, which makes it more difficult for them consistently to incorporate such initiatives into their practices (Baumann-Pauly et al., 2013). This clearly calls for a more detailed investigation of MNC-specific settings.

There are various MNC functions that could be utilized as a study setting. Investigation of the drivers of triple-bottom-line sustainability requires the function to be in interaction with external and internal stakeholders, and potentially to allow environmental, social, and economic factors to play a role in its day-to-day operations. Table 1 compares the different functions in terms of these criteria, and highlights the suitability of purchasing as a context for analyzing sustainability in the light of existing studies.
| Table 1. The suitability of different functions to the study of operational sustainability in MNCs |
|-----------------------------------------------|-----------------------------------------------|
| | External Stakeholders | Internal Stakeholders | Environmental Sustainability | Social Sustainability | Economic Sustainability |
| | Marketing<sup>1)</sup> | x | x | x | x |
| | Sales<sup>2)</sup> | - | - | - | - |
| | Legal<sup>3)</sup> | - | - | - | - |
| | Research & Development<sup>4)</sup> | - | - | (x) | - |
| | Finance & Accounting<sup>5)</sup> | - | - | - | - |
| | Purchasing<sup>6)</sup> | - | - | - | - |
| | Communications<sup>7)</sup> | - | - | - | - |
| | Production<sup>8)</sup> | - | - | - | - |
| | Human Resources<sup>9)</sup> | - | - | - | - |
| | Information Technology<sup>10)</sup> | - | - | - | - |

(x): Stakeholders and/or sustainability aspects play a role
(x): Dependent on the industry
1) Mariadoss et al., 2011
2) Mariadoss et al., 2011
3) Mariadoss et al., 2011
4) Bonsaksens et al., 2004; Chakrabarty and Wang, 2012
5) Kolk, 2000; Asgary and Li, 2016; Luzzini et al., 2015
6) Asgary and Li, 2016; Waddock et al., 2002; Andersson et al., 2005
7) Mariadoss et al., 2011
8) Waddock et al., 2002; Andersson et al., 2005
9) Dao et al., 2011
10) Dao et al., 2011
As Table 1 indicates, the study of external or internal drivers, as well as a focus on environmental, social, or economic sustainability would have offered a variety of options among MNC functions. This study focuses on the purchasing function, with its apparently greater potential than other functions to give holistic insights into the drivers of sustainability work in MNCs.

The underlying mechanisms behind this interaction with internal and external stakeholders differ in the different functions, as does the applicability of the respective sustainability aspect. First, the R&D and finance functions interact less regularly with external stakeholders in their day-to-day tasks, and although they are equally receptive to external pressures, their external environment rather consists of a collaboration network involving research and development, production, and information technology (Blomqvist et al., 2004; Waddock et al., 2002; Andersson et al., 2005; Dao et al., 2011). In addition, the finance and accounting function interacts specifically with professional service firms for reporting purposes (Kolk, 2010).

Second, environmental sustainability, although important to the MNC in general (Kolk, 2005), does not play as active a role in some functions as it does in others. In the case of marketing, sales, and communications, for instance, it is rather a topic to be communicated to external stakeholders (Mariadoss et al., 2011), but does not affect their day-to-day tasks. With regard to human resources, environmental issues constitute the setting in which an MNC’s employees act, but do not directly affect the work within the function (Preuss et al., 2009), whereas they affect compliance issues in the legal and finance functions (Kolk, 2005; Kolk, 2010). In purchasing, in turn, there has to be an awareness of the environmental implications of purchased goods, and the research and development function may focus on environmental aspects at times, depending on the industry (Chakrabarty and Wang, 2012).

Finally, although social sustainability with its implications for wellbeing within the company as well as for fair labor conditions amongst suppliers is critical to the MNC in general, it seems less effective as a driver in two functions in particular: sales as well as finance and accounting, despite being functions that require personnel satisfaction, are not affected by or concerned with social-sustainability practices on a day-to-day basis (Lamberton, 2005; Kolk, 2010).
Literature Review

2.2 The Purchasing Context

Global sourcing and the research thereon have evolved from an internal developmental issue to a more externally focused project (Kotabe and Murray, 2004). Practices such as outsourcing have thus become increasingly relevant not only to purchasing and supply, but also to the research on international business (e.g. Mol et al., 2005; Brewer et al., 2013; Manning et al., 2015). Consequently, organizational purchasing (and supply) has advanced from being an administrative function in recent decades, and has assumed an increasingly strategic role (Gadde and Håkansson, 1994).

There have been changes in the role of purchasing in recent years, given its increased strategic responsibility. It has thus become more international in its operations (Quintens et al., 2006), and aspects such as cooperation with suppliers have become increasingly significant to the company as a whole (Gadde and Snehota, 2000). According to Ellram (1995), the purchasing function operates at three interfaces within the firm: internal analysis; supplier interaction and external data gathering; and planning and strategy. This makes it a particularly interesting setting in which to study both internal and external drivers of a strategically important issue such as sustainability.

2.3 Sustainability in MNCs

Issues related to organizational sustainability have become increasingly important. Varying in terms of conceptualization, they affect not only MNCs but also organizations in general. The notion can be traced back to the early 1970s. The Stockholm Conference of 1972 (Sullivan, 1972) achieved one of the most prominent advances towards recognizing environmental challenges at the time. Following on from this in 1983, the Brundtland Commission took the first step by including the social component in the concept of sustainable development (Mebratu, 1998).

Despite these early advances, sustainability and the terminology associated with it remain somewhat ambiguous (Aguinis and Glavas, 2012). In fact, sustainability is often used interchangeably with the term corporate (social) responsibility. It has
been suggested that corporate responsibility and a stakeholder focus allow companies to be sustainable (e.g. Kurucz et al., 2003). Given the implication that sustainability depends on corporate social responsibility, it is clear that the two concepts are interwoven.

Early advances in sustainability have been misjudged as representing a culture of extreme environmentalism and philanthropy (Lozano, 2010). It has also been argued that not only economic performance, but also social and environmental sustainability are critical to the success of organizations in general (Henriques and Richardson, 2004). This second school of thought developed over time and led to the incorporation of social, environmental, and economic aspects into corporate practices (e.g. Elkington, 1998).

In the context of international business, the concept of sustainability is often linked to potential performance improvements in MNCs (Porter and Kramer, 2006). Research on MNC sustainability has been approached from an institutional (Marano and Kostova, 2016) and an internal-capabilities (Chakrabarty and Wang, 2012) perspective. Given that the focus of this study is on the MNC, which is predominantly positioned in the field of international business, it is necessary to account for the different conceptual lenses through which organizational sustainability is viewed (Carroll, 1999; Garriga and Melé, 2004; Waddock et al., 2002). Six core areas and conceptualizations have emerged in recent years, which form the backdrop of contemporary discussions on sustainability.

First, triple-bottom-line sustainability refers to the social, environmental, and economic sustainability of the MNC (e.g. Elkington, 1998; Wehling et al., 2009). Although this conceptualization is well referenced, much of the research on international business and management adopts the perspective of just one of the three components. Second, social sustainability may refer both to internal issues such as employee wellbeing (Wehling, 2009), and to engagement in local communities. Third, environmental sustainability refers to the reduction of the environmental footprint of MNCs (Andersson et al., 2005). Fourth, although economic sustainability is often given as the underlying reason for an MNC’s existence, it equally motivates philanthropic engagement in economic development among emerging markets (Moser, 2001).
Fifth, stakeholder interaction, and particularly the pressure thereby exerted upon MNCs, have become highly significant, especially given their complex global environment (e.g. Zhao and Park, 2014). MNC interactions with non-governmental organizations have also become increasingly important (Doh et al., 2010; Lambell et al., 2008), and according to Aguinis and Glavas (2012), a variety of stakeholders, including customers and regulatory bodies, play a significant role. Finally, the environmental context, including the industry and country setting, affects MNC sustainability not only in terms of the respective component of the triple bottom line, but also in acting as a moderator of sustainability outcomes (Aguinis and Glavas, 2012).

The discussion on MNC sustainability follows the same lines as that related to general organizational sustainability, applied to a global operating context. In particular the challenges arising from balancing global requirements with adaptation to the local context apply to the issues raised in this section, and are even more prominent in the purchasing context. This is discussed in the following section.

### 2.4 Sustainability in Purchasing

International purchasing has changed significantly in recent decades. In a changed global business environment with its improved transportation means, lower international sourcing costs and lowered trade barriers, sustainability has become a crucial aspect of purchasing worldwide. The most critical factors include stakeholder pressure (Blowfield, 2005), as well as ethical initiatives and working conditions (e.g. van Tulder and Kolk, 2001, Kolk, 2005). In fact, the literature on sustainable purchasing dates back to the early 1990s (Wynstra, 2010). It has focused on a set of sustainability drivers related to three general issues: stakeholder pressure, (e.g. Zhao and Park, 2014), striving for increased competitiveness (Tate et al., 2013), and increased awareness of the environmental impact (e.g. Mollenkopf et al., 2010).

Sustainable purchasing is defined in manifold ways. The main focus in the prevailing literature is on the green/environmental aspects of purchasing decisions, and to some extent on the social component, but the triple bottom line (Elkington, 1998) does not feature strongly (Carter and Rogers, 2008, Foran et al., 2005). Nev-
Nevertheless, Carter and Rogers’ (2008) application of the concept positions sustainable supply chains at the very center of all economic, environmental, and social performance.

My approach reflects that of Pagell et al. (2010, p. 58), who define sustainable purchasing as “managing all aspects of the upstream component of the supply chain to maximize triple bottom line performance”. Environmental sustainability in purchasing specifically relates to the concept of “green supply”, referring to supply-management activities that aim at improving the environmental performance of purchased inputs and/or their suppliers (Bowen et al., 2001; 175). This typically includes environmental criteria used in supplier selection, consideration of purchased materials and product design, adhering to various environmental standards, and training (Lippmann, 1999; Hofer et al. 2012; Miemczyk et al. 2012). Socially responsible purchasing, on the other hand, means including in purchasing practices (Maignan et al. 2002) social issues such as supplier-assessment tools, codes of conduct, and certifications and audits related to ethical and social practices at supplier facilities (Gimenez and Tachizawa, 2012; Hofer et al. 2012).

Economic sustainability, the third element of the triple bottom line, has of course been extensively studied in the context of purchasing (economic) performance, although it is not prominently discussed in the literature on sustainability in itself. In the purchasing context it is considered essential for performance to be aligned with the company’s strategy (Krause et al. 2001; Gonzalez-Benito 2007b), and it thus tends to be expressed in relation to its key competitive priorities, i.e. cost, quality, and delivery and flexibility (Gonzalez-Benito 2007a and 2007b). I focus in this study specifically on economic performance in relation to quality, meaning the characteristics of the purchased products and services, and cost meaning the total cost of ownership including both process and price elements (Ellram, 1995).

2.5 Sustainable Purchasing in MNCs

Sustainability has become an increasingly popular topic in research on MNCs in recent years. Given their distinctive power, geographical scope, and impact on the planet, they have to comply with different requirements than other companies in terms of sustainability implementation, and even play a precursory role (Haugh
Literature Review

and Talwar, 2010; Pinkse et al., 2010; Andersson et al., 2005). Discussions on MNC sustainability thus touch on a multiplicity of issues.

First, it has been claimed on various occasions that sustainability in MNCs emanates from social or environmental crises. Their actions in emerging markets have attracted particularly strong criticism (Tan, 2009). Although Zhao and Park (2014) refer to institutional voids and sophistication as likely causes of MNCs’ sustainability crises in emerging markets, Hennchen (2014) suggests that such crises remain associated with the MNC and its practices far beyond the actual event.

Second, the emerging market as a context has been attributed to sustainable actions among MNCs. Although the bottom of the pyramid markets have great potential, they require completely new and balanced strategies involving non-traditional partnerships and co-inventing, as well as local capacity building (London and Hart, 2004; Zhao and Park, 2014), which in particular requires significant interaction with local stakeholders. Thus, embeddedness in the local environment (Beckman et al., 2009) is critical to the successful transition from an embryonic to a mature MNC in the local institutional environment (Chen et al., 2009). However, sustainability practices appear to become diluted in the transfer from headquarters to the local emerging-market environment (Jamali, 2010). More generally, according to Cruz and Pedrozo (2009), the governance structure, corporate ethics, and organizational learning challenge the transfer of sustainability practices from MNC headquarters to their subsidiaries. Many MNCs in emerging markets and other contexts engage in philanthropic actions, and collaborate with non-governmental institutions to counteract such challenges (e.g. Kolk and Lenfant, 2010).

Third, the challenges in emerging markets vary over time, and concern either the environmental and social consequences or the changing institutional environment. MNCs address each of the triple-bottom-line sustainability components differently. Social sustainability mainly concerns human rights and labor conditions, but sometimes extends to NGO collaboration in the respective emerging markets. Many studies on environmental sustainability focus on the impact of climate change on MNC actions, as well as the use of natural resources and the building of environmental strategies (Kolk and Pinkse, 2008; Pinkse et al., 2010). The economic component is typically considered in relation to the economic impact of sustainability initiatives. Asgary and Li (2016), for instance, found that negative consequences
resulting from unethical behavior could be avoided in particular through the incorporation of sustainability into supply-chain operations. Studies on social and environmental sustainability tend to focus on specific industries such as coffee production and retail (Kolk, 2005; Cruz and Boehe, 2010).

Fourth, a path many MNCs choose proactively to anticipate stakeholder demands is to closely monitor sustainability standards and commit to reporting on them. Kolk and Lenfant (2010) found that the reporting on sustainability practices was fairly generic and possibly differed among MNCs (Kolk, 2010). A more rigid framework within which to report and implement sustainability initiatives would entail adherence to standards such as ISO 26000, which have been found particularly suitable for MNCs beginning to incorporate sustainability, but not so much for those that are already on that path (Gold et al., 2013).

Finally, previous studies have identified a variety of actions that MNCs have taken to promote sustainability (Haugh and Talwar, 2010) in the purchasing context: ethical purchasing initiatives (Perez-Aleman and Sandilands, 2008); product and production-process design aimed at environmental-footprint reduction (Christmann, 2004); and collaboration in social, humanitarian (Selsky and Parker, 2005) and environmental (Ritvala et al., 2014) initiatives. Scholars in the field of international business have investigated global value chains and supply chains, the potential for process alignment through outsourcing or offshoring being of particular interest (Doh, 2005). The crucial role of sustainable supply chains in MNC success has also been recognized (e.g. Perez-Aleman and Sandilands, 2008).

In sum, whereas MNC sustainability in general typically concerns complex institutional environments, within the purchasing function it allows for tangible initiatives. Given the potential differences in such initiatives depending on the specific MNC offering, I will henceforth consider both products and services so as to project a holistic view of the drivers of operational sustainability in MNCs in general that is not biased toward a certain industry. A further advantage of using the MNC as a study setting is the inherent diversity of cultures, institutional environments, and organizational capabilities, all of which provide unique insights into MNC sustainability.
3. Theoretical Framework

3.1 Overview

As noted in the introductory chapter, the main research question addressed in this thesis is: “What influences sustainability in the MNC’s purchasing function?” In seeking an answer I have developed a theoretical framework based on the different perspectives and theoretical approaches I have followed (see Figure 4). In the following I discuss the individual components of this framework.

Figure 4. The theoretical framework of the study
Sustainability practices and performance do not occur in a vacuum. An MNC’s approach to sustainability is defined in terms of its execution in the various functions. Each function adopts specific practices that ultimately generate performance outcomes, but little is known about the factors that eventually affect which practices are adopted and their subsequent outcomes.

A variety of external and internal drivers may affect MNC sustainability on a day-to-day basis. Relevant theoretical approaches in this context include stakeholder theory (e.g. Agle et al., 2008; Gupta, 2011; and Spence, 2016), institutional theory (e.g. Cai et al., 2010; Escobar and Vredenburg, 2011), the resource-based view (Gold et al., 2010; Sarkis et al., 2011), complexity theory (Vachon and Klassen, 2006), resource dependence theory (e.g. Wolf, 2014), social-network theory (Sarkis et al., 2011; Tate et al., 2013), and transaction cost economics (Rosen et al., 2002; Sarkis et al., 2011).

Institutional theory offers particularly valid insights into external pressures in that it accounts for the complexity of the MNC environment, which has recently received special attention (e.g. Marano and Kostova, 2016). It thus encompasses stakeholder theory and complexity theory. In terms of internal drivers, however, prevailing theoretical approaches such as the resource-based view do not capture the dynamic capabilities required to adapt to the complex environment. More importantly, recent studies indicate that internal capabilities drive the change towards sustainability (Benn et al., 2014; Pinkse et al., 2010). Organizational learning, as a critical component contributing to the development of such capabilities, facilitates the adoption of sustainability (Smith and Sharicz, 2011; Schneider, 2015), and specific capabilities within the company can significantly affect its environmental, social, and economic performance (Paulraj, 2011). I thus consider organizational – or in this case functional – learning from the perspective of absorptive capacities (Cohen and Levinthal, 1990; Zahra and George, 2002). These influences are illustrated in Figure 4.

As Figure 4 shows, this study addresses the different layers involved in establishing operational sustainability in the purchasing function of MNCs. Essay 1 provides an overview of sustainability in MNC purchasing gleaned from the literature on international business, sustainability, and purchasing and supply chains. Essay 2 focuses on institutional pressures (DiMaggio and Powell, 1983) as external influences
Theoretical Framework

on triple-bottom-line sustainability in MNCs. Essay 3 investigates the impact of absorptive capacities (Cohen and Levinthal, 1990; Zahra and George, 2002) as potential internal factors. The concluding Essay 4 examines the mechanisms of and reasons for the adoption of corporate level sustainability policies and the practices adopted by actors in the purchasing function. I will now introduce the two theoretical lenses through which external and internal drivers are studied in this thesis.

3.2 The MNCs Institutional Environment

Institutions, both formal and informal, view regulatory, normative, cultural-cognitive pillars (Scott, 1995) as both “supraorganizational patterns of activity” (Friedland and Alford, 1991, p. 232) and “symbolic systems” (Friedland and Alford, 1991, p. 232) that govern organizational actions in their environment. Many firms are faced with competing institutional logics, particularly between the national and the transnational sphere, in which MNCs operate.

Institutional theory takes varying perspectives on organizational moves towards legitimacy, emanating from coercive, mimetic, and normative pressures (DiMaggio and Powell, 1983; Oliver, 1991). The institutional influence on organizations is frequently addressed from the perspective of neo-institutionalism, which is static in its approach to organizational forms and functions (Scott, 1995; Dacin et al., 2002; Hwang and Powell, 2005) and does not consider the dynamic transnational environment of MNCs. Hence, the discussions initiated by Greenwood and Hingings (1996), which recommend reconciliation between old and new institutionalism (DiMaggio and Powell, 1983; Oliver, 1991), shed light on how MNCs interact with their institutional environment.

Recent discussions aimed at developing a more suitable conceptualization of institutions particularly consider the role of firms, and especially globally operating MNCs, in shaping their institutional environment. Institutional pressures on MNCs may stem from the institutional context in which they are embedded in both the home and the host country. This dual embeddedness – or institutional duality (Kostova and Roth, 2002) – particularly affects the transfer of practices within MNCs, depending on the distance between the home and host countries’ institutional environments (Kostova, 1999).
In recent years there has been an emerging stream of research linking institutional theory to MNCs (Marano and Kostova, 2016; Saka-Helmhout, et al., 2016). Given that many MNCs face conflicting institutional demands (Oliver, 1991), a variety of response strategies have been identified to mediate the effects of institutional complexity and duality (DiMaggio and Powell, 1983; Oliver, 1991; Kostova and Roth, 2002; Pache and Santos, 2010). These approaches do not capture the requirements of MNC operational units such as the purchasing function, however. Given the need in MNCs for dynamic adaptation to varying institutional environments, utilizing “old” institutionalism (Hirsch and Lounsbury, 1997) appears most suitable in the case of sustainability.

Although sustainability initiatives may well represent their move towards legitimacy, MNCs react to the varying mimetic, coercive, and normative pressures of the respective environments (DiMaggio and Powell, 1983). Many studies focus on a specific setting and industry. Escobar and Vredenburg (2011), for instance, argue that neither normative nor coercive isomorphism arises globally in oil companies, whereas Kolk and Pinkse (2008) found that responses to institutional pressures varied according to the national situation with regard to climate change.

MNCs’ (un-)sustainable actions affect their role within the institutional environment. It is a balancing act to maintain or establish institutional embeddedness in the home and host countries, for instance, when counteracting climate change (Pinkse and Kolk, 2012). Furthermore, in their efforts to maintain this balance, MNCs need to critically consider informal aspects such as corruption so as to adequately account for their varying institutional environments (Luo, 2006; Keig et al., 2015).

The process of establishing sustainable practices within certain institutional constraints is dynamic (Child and Tsai, 2005). Nonetheless, it does not follow a clear path and requires consideration of the political components (Child and Tsai, 2005; Luo, 2006), as well as achieving a balance among different stakeholders and their demands. Thus, among the variety of pressures that may affect MNC sustainability, balancing stakeholders’ demands is of crucial importance (Chen et al., 2009). Other critical aspects include the differing legal systems, other non-market institutions, MNC governance, and sustainability approaches across countries (Windsor, 2009),
Theoretical Framework

and alliances that are critical to establish legitimacy in emerging markets (Shah, 2011).

3.3 Absorptive Capacities in the MNC

A concept that is commonly associated with the effectiveness of organizational learning and knowledge transfer is that of absorptive capacity. The literature on organizational learning dates back many decades, but has become established in business research relatively recently. Classical literature such as the works of Cyert and March (1963) and March and Simon (1958, 1993) describe the organizational-learning process as changing with experience. Organizations in the current fast-paced global business environment require a more rapid acquisition of knowledge, however, and thus focus on the capacities associated with learning.

Absorptive capacity originally came to light in connection with macroeconomics (Adler, 1965), referring to the ability of an economy to utilize and absorb external information and resources (Tu et al., 2006). Cohen and Levinthal (1990) adapted the notion to the corporate context, defining it as the ability to recognize the value of new external knowledge, assimilate it, and apply it for commercial ends.

Zahra and George (2002) distinguish between potential (acquisition and assimilation) and realized (transformation and exploitation) absorptive capacities. The former relates to attempts to identify, acquire and assimilate new external knowledge, and the latter to producing novel ideas by combining new and existing knowledge and transforming it into practices. Potential absorptive capacity is thus about exploring potentially relevant knowledge, whereas realized absorptive capacity is about exploiting such knowledge and gaining from it commercially (Zahra and George, 2002). It is suggested that both are needed simultaneously to achieve optimal outcomes (Flatten et al., 2015).

Within the four areas of absorptive capacity, acquisition concerns the ability to identify and to acquire knowledge from outside the company (Zahra and George, 2002; Jansen et al., 2005); assimilation is about understanding the company’s routines and processes and thereby being able to analyze and interpret the above-mentioned external knowledge (Zahra and George 2002); transformation refers to the
internalization and conversion of this knowledge, combining it with existing knowledge within the company (Zahra and George, 2002); and exploitation is about using and implementing this knowledge through the development of new products, processes and systems, for example (Zahra and George, 2002). This division between potential and realized capacities is relevant to my study given that demands for sustainability often originate from external stakeholders (Delmas et al. 2011; Kolk, 2010; Perez-Batres et al., 2012), whereas in-house issues influence their application (Paulraj, 2011).

The findings of Cohen and Levinthal (1990) imply that a company's absorptive capacity depends on the individuals who stand at the interface of the company and the external environment, or between subunits within the company, thereby making purchasing an excellent functional context in which to develop it (Kauppi et al., 2013). Few studies have examined absorptive capacity on the level of the purchasing function (Schiele, 2007; Kauppi et al. 2013), thus there are no clear definitions of the concept in this context. Kauppi et al. (2013), for instance, following the thinking of Tu et al. (2006), refer to the five components of absorptive capacity in purchasing: buyer competence, manager competence, the communication climate, the communication network, and knowledge scanning. Schiele (2007), in turn, links absorptive capacities to the maturity of the function.

My approach is in line with that of Zahra and George (2002), and I build particularly on the work of Jansen et al. (2005). Thus, I define the potential absorptive capacity of the purchasing function as the ability to acquire and assimilate knowledge through actions such as interaction with headquarters and information collection, but also the ability to understand and analyze the information. Most previous empirical studies on absorptive capacity focus on the company, the business-unit or the subsidiary level (Volberda et al., 2010), whereas I focus on the purchasing function.
4. Methodology

4.1 Overview

A variety of ontological and philosophical assumptions lie behind the decisions made in this mixed-methods thesis. The overall research question concerning what drives operational sustainability in MNCs clearly influenced my choice of a mixed quantitative and qualitative research approach. In answering this question I will first draw on existing theories and test them in a quantitative setup, and then further enhance understanding in a qualitative study.

The research question guided the methodological decision-making throughout the process. Quantitative research methods in general, including the two types of structural equation modeling used here, represent the deductive approach to theory testing (Byrne, 2012). The aim in the qualitative multiple-case study, on the other hand, was to develop testable hypotheses from a realist perspective (Eisenhardt, 1989; Yin, 2014). Furthermore, I aim to extend the holistic perspective on sustainability to the research methodology by moving from testing hypotheses to exploring the reality in MNCs.

The following section describes the two types of methodology used in some detail. I will start with the quantitative part of the study, which was conducted first, and will then proceed to the qualitative part. Essay 1 presents a structured review of the literature on international business, sustainability, and supply-chain management, Essays 2 and 3 report on the structural equation modeling of data from 123 MNCs and 182 Non-MNCs from four different European countries. Essay 4 is based on 46 interviews conducted in two Finnish MNCs. Information on the two datasets is given in Table 2.
Table 2. The two datasets

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Sample</th>
<th>Data-collection method</th>
<th>#</th>
<th>Time of data collection</th>
<th>Used in essays</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Purchasing departments of 305 companies in Finland, Germany, Ireland, and Italy</td>
<td>Email survey as agreed by telephone</td>
<td>305 companies: 123 MNCs and 182 non-MNCs</td>
<td>2014</td>
<td>Essays 2 and 3</td>
</tr>
<tr>
<td>2</td>
<td>Two Finnish MNCs</td>
<td>Semi-structured face-to-face interviews</td>
<td>46 interviews; Documentation on internal and external sustainability</td>
<td>2015-2016</td>
<td>Essay 4</td>
</tr>
</tbody>
</table>

The two datasets offer valuable insights into the main research question in that they allow for the testing of existing theories on the one hand, and for exploring the underlying processes on the other. The quantitative dataset facilitates the testing of existing theories and the determining of circumstances that are specific to MNCs, as opposed to other companies. The qualitative data gathered within the two Finnish MNCs allows for further exploratory examination of the underlying roles and processes.¹

4.2 The use of Multiple Research Methods

Guided by existing discussions in the field of MNC sustainability in an operational setting, I chose the methods I considered the most suitable for addressing the four sub-questions attached to the main research question of this study. Furthermore, I

¹ Further information on the methodologies is given in the methodology sections of the respective Essays in Part II of this dissertation.
Methodology

selected the research methods that would facilitate triangulation both between and within methods (Yin, 2014).

As Hurmerinta-Peltomäki and Nummela (2006) recommend, I gave careful consideration to the order of the data collection, the role of each type of methodology, and the purpose of each method. As indicated at the outset of this chapter, the data collection was *sequential*, which reflected the development of the research questions. First I conducted the structured literature review reported in Essay 1 to identify the potential theories to be applied in the following studies (reported in Essays 2 and 3). Then, in 2014, I collected the survey data for the two studies. Using the findings as a basis, I developed the final research question to be addressed in Essay 4, which required the collection of qualitative data.

This research process similarly guided the roles and purposes (Hurmerinta-Peltomäki and Nummela, 2006) of these studies. The *quantitative approach dominates* this mixed-methods setting in that two of the four essays are based on different forms of structural equation modeling. Nonetheless, the qualitative data on which Essay 4 is based played an equally important role, and as mentioned was clearly driven by the research question at hand. The purpose of the quantitative studies was *knowledge-related*, in other words to test the hypotheses, whereas that of the qualitative study was *topic-related* given the aim to enhance understanding of the roles and processes involved in establishing operational sustainability in MNCs, an under-researched topic (Hurmerinta-Peltomäki and Nummela, 2006).

The use of two types of methodology to address the main research question suited the context. Given that research on sustainability in MNCs dates back to the early 1990s (see Essay 1), a deductive quantitative approach to studying existing and potential internal and external drivers seemed to be the most suitable. Although the prevailing literature describes these theories on an organizational level, I apply them on the operational level. On the other hand, qualitative case research seemed to be the best choice in terms of enhancing understanding of the role of MNC purchasing in establishing and maintaining sustainability practices.

Essay 1 is based on a structured literature review complemented with textual analysis. This approach facilitates analysis of the extant research on MNC sustainability on an operational purchasing level. Having established the prevailing theories in
the first essay, I thereafter set out to test them in Essays 2 and 3. To facilitate this I joined the International Purchasing Survey 2 research group, which collected a large set of survey data from Finland, Germany, Italy, and Ireland. I used this data to test hypothesized relationships in two structural equation models.

The slightly more exploratory nature of Essay 2 and its data structure, as well as the more confirmatory approach of Essay 3 were the drivers that led to my adoption of these two approaches. The multiple-case study reported in Essay 4 nevertheless draws not only upon the 46 case interviews, but also on secondary internal and external company information. My approach therefore was to start from a general understanding gleaned from the existing literature, then to narrow this down by testing two specific theories, institutional theory and absorptive capacities, and finally returning to a more general level through the case study (see Figure 5).

Figure 5. The positioning of the four essays
In order to study the internal and external drivers of sustainability in MNCs, I constructed a set of hypotheses to be tested in structural equation models. Although structural equation modeling was used as a quantitative research method in Essays 2 and 3, both draw upon approaches based on covariance and partial least squares to accommodate the differences in data structure, as discussed hereafter. First I describe the data and data-collection procedure, and then discuss the analyses.

4.3.1 Sample and Procedure

The quantitative part of this study consists of cross-sectional data of 305 companies, out of which 123 are MNCs and 182 non-MNCs in Finland, Germany, Ireland, and Italy. The data was collected during 2014 as part of the International Purchasing Survey 2 (IPS2), an international study of purchasing strategies. IPS2 is a research instrument focusing on several strategies, practices, and performance issues within the purchasing function. The constructs used in this study are selected items from this survey. All construct statistics as well as details regarding the sampling procedure are illustrated in Essays 2 and 3 at the end of this study.

The surveyed companies were randomly selected from the manufacturing and service sector, the aim being to avoid ambiguity in the use of industry-specific purchasing terms and language (see Flynn et al., 1990). After the survey instrument was piloted in each member country of the IPS2 group according to the so-called “concurrent think aloud” method (Davis and DeMaio, 1993), data collection started in each country independently using the same protocol and survey instrument either in English or the respective local language.

While I draw upon the entire dataset in my analysis, I was a member of the team that was responsible for collecting the Finnish survey data. This included firstly retrieving a random list of suitable companies from Fonecta (a Finnish company listings database). Secondly, finding a suitable respondent within each company. Suitable respondents were senior purchasing professionals (responsible for purchasing
in a plant/business unit, or in larger organizations for at least one purchasing category) as the examination of purchasing as a function may well be represented by one sufficiently senior individual (Bowman and Ambrosini, 1997).

After secondary search of the company websites and other available databases, I, as well as the other members of the Finnish IPS 2 research group, called the companies to verify or identify the most suitable respondent. We then contacted the suitable respondents via telephone to explain the purpose of this survey, gain their commitment to participate, and discuss any questions they might have. I thereafter sent out the survey link via email and followed up on both the calls and survey responses at least three times.

After data collection was completed in all four countries by December 2014, I pooled the data of all four countries into one database. After cleansing the data and excluding responses with missing data higher than 30%, the database retained the aforementioned 305 companies. To verify whether a company was an MNC or non-MNC, I asked one IPS 2 group member from each of the other three countries to draw upon secondary company information, such as the company websites. Thus, a total of 123 of the responding companies could be identified as MNCs by having value-adding activities, i.e. operations other than sales subsidiaries, outside of their home countries.

Nonparametric tests to test the differences in the four countries were furthermore conducted. The tests in each country confirmed (p<0.05) that there is no significant difference in the distribution of the number of employees in the companies for the two groups. In addition, tests indicated that the differences in distribution of company sectors in the two groups are also non-significant at p<0.05. Statistics on the respondents are depicted in Table 3. Further details about the respondents, additional tests, and how biases are accounted for can be found from Essays 2 and 3.
### Table 3. Respondent statistics$^2$

<table>
<thead>
<tr>
<th>Country</th>
<th>Manufacturing</th>
<th>Service</th>
<th>Company Type</th>
<th>Turnover by Type</th>
<th>Number of Employees by Type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abso-</td>
<td>%</td>
<td>Abso-</td>
<td>%</td>
<td>Abso-</td>
</tr>
<tr>
<td>Finland</td>
<td>63</td>
<td>75%</td>
<td>21</td>
<td>25%</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>54</td>
<td>77%</td>
<td>16</td>
<td>23%</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>22</td>
<td>42%</td>
<td>30</td>
<td>48%</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>94</td>
<td>95%</td>
<td>5</td>
<td>5%</td>
<td>35</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>233</td>
<td>76%</td>
<td>72</td>
<td>24%</td>
<td>123</td>
</tr>
</tbody>
</table>

$^2$ Table 3 is reprinted in Essays 2 and 3.
4.3.2 Analysis

I applied structural equation modeling (SEM) in Essays 2 and 3, which are based on the survey dataset. SEM is a multivariate statistical technique that combines (confirmatory) factor analysis and multiple-regression modeling for the purpose of analyzing hypothesized relationships among latent variables. The technique encompasses a variety of models, two of which I utilize in this thesis. Covariance-based SEM is a strict theory-testing approach that follows clear hypothesized relationships and applies them to a specific research setting (Byrne, 2012). Partial-least-squares SEM is a softer approach that is more exploratory in nature, and models potential paths between hypothesized relationships (Hair et al., 2014).

Structural equation modeling is particularly suitable in this study as its multivariate nature facilitates examination of the latent constructs in a multiple regression model (Byrne, 2012). Whereas Essay 3 builds on the more common covariance-based SEM using MPLUS (Byrne, 2012), given the reflective nature of the constructs, Essay 2 applies partial-least-squares SEM to accommodate the mix of formative and reflective measures (Chin and Newsted, 1999).

4.4 The Qualitative Approach

This study utilizes a multiple-case study to build theoretical constructs from case-based, empirical evidence (Eisenhardt, 1998). The case-study approach facilitates in-depth investigation of this contemporary phenomenon of MNC sustainability on an operational level (Yin, 2014). Given that only little is known about the role of various MNC functions in establishing sustainability, it is easier to retain the characteristics of real-life events through the application of case-study methodology (Yin, 2014).

The case study is popular as a qualitative research tool in the field of international business (Piekkari et al., 2009). Various perspectives are adopted, including inductive theory building, natural experimentation, interpretive sense-making, and contextualized explanation (Welch et al., 2011). In line with both Eisenhardt (1989) and Yin (2014), I adopt the two former approaches, namely in-
ductive theory building and natural experimentation. In the two following sections I describe the case-selection process and then discuss the data sources and analysis.

### 4.4.1 Case Selection

This case study was conducted in two Finnish MNCs operating in the fashion and the entertainment industries. MNC A, the Finnish fashion MNC, is stock-listed and renowned in its field, with annual sales of EUR 186 million. It has 450 employees in 40 countries across the world, most of them located at the headquarters in Helsinki, Finland. With its own manufacturing facilities and its strong focus on purchasing fabrics and other non-finished materials from subcontractors it represents a typical manufacturing company.

MNC B, the Finnish entertainment MNC, is particularly well known for its mobile games. Global sales resulting from the games, services, and the vast line of licensed consumer products amounted to EUR 145 million in 2015. The company’s 400 employees are located in 10 countries in Europe, North America, and Asia. Its main focus is on intangible products and services, making it a contemporary MNC in the service industry. It has no purchasing function per se, but a dedicated licensing team carries out similar tasks as the retail MNC’s purchasing function, such as specification development, price and terms negotiations, and supplier selection.

The case companies were theoretically sampled (Eisenhardt, 1989) to provide a rich and diverse setting representing both product and service organizations. Furthermore, both perishable as well as non-perishable products are included in the offerings. Given Eisenhardt’s (1989) recommendation that the research setting should be such that the phenomenon is easily observable, we included MNCs with purchasing activities in place. To control for the industry-specific settings we chose two very different MNCs. Whereas MNC A offers non-perishable products, MNC B offers non-perishable services in its main gaming and entertainment business, tangible products in the form of plush toys, for example, and perishable products through licensed branded foodstuff. This diverse setting (as illustrated in Figure 6) facilitates observation of the different perspectives on environmental, social, and economic sustainability, and thus provides a holistic view.
4.4.2 Data Sources and Analysis

The main sources of data comprise 46 in-depth research interviews (24 in MNC A, 22 in MNC B), which were conducted either face-to-face or via Skype, depending on the interviewee’s location. Secondary data included internal company documentation on sustainability procedures, practices, and guidelines, as well as the annual sustainability reports of the stock listed MNC collected for triangulation purposes. The interviewees included employees responsible for sustainability planning and execution, as well as those working in the companies’ core functions, namely the sustainability manager, representatives of the strategy and/or top management team, employees of the purchasing function (which is the focus of this study), as well as representatives of all company-specific core functions and those interacting with the purchasing function. These representatives were located at the Finnish headquarters of the MNCs, or in the different subsidiaries. Table 4 summarizes the data sources in both MNCs.
Table 4. Data sources for the case study

<table>
<thead>
<tr>
<th>Source</th>
<th>MNC A</th>
<th>MNC B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews</td>
<td>22</td>
<td>24</td>
</tr>
<tr>
<td>Internal Documentation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Sustainability documentation</td>
<td></td>
<td>• Sustainability guidelines</td>
</tr>
<tr>
<td>• Sustainability guidelines</td>
<td></td>
<td>• Risk-assessment frameworks</td>
</tr>
<tr>
<td>External Sustainability Material</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Annual reports</td>
<td></td>
<td>• Press releases</td>
</tr>
<tr>
<td>• Sustainability reports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Press releases</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The semi-structured interviews were conducted in three rounds. The first round included pilot interviews with sustainability managers at the companies. The second round involved the other sustainability personnel, as well as senior representatives of a variety of functions engaged in sustainability work in purchasing, legal, HR, communications and PR, sales, strategy/business development, marketing, and finance, as well as representatives of the core functions (design in the fashion MNC and game and entertainment development in the entertainment MNC). The aim in these interviews was to determine the key actors involved in establishing sustainability both in the purchasing function and in the company as a whole. The third round of interviews thus included the key actors identified in the second round.

To mitigate potential bias, only the contact person within each case organization was aware of the topic of the interviews. All other interviews were conducted under the general heading “the relationship between operations and current strategic goals”, as agreed with the contact person in each organization. Examples of the interview questions include: *What are your most important strategic goals and how are they set? How do you interact with colleagues from other units? How do you interact with external stakeholders and who are they? How do your personal goals relate to the overall strategic goals?* At this point the topic of sustainability had often arisen in the discussion, but if that were not the case I would ask: *What is sustainability to you and does it play a role?* Each of these questions was followed up with questions going more deeply into the topic. The interviews lasted between 40 and 100 minutes.

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3 Appendix 1 of Essay 4 contains the detailed interview guide.
Following the recommendations of Eisenhardt (1989), Miles et al. (2014) and Yin (2014), I analyzed the data using replication logic. All the interviews were recorded and transcribed, after which a record was created for each case. I then content analyzed the case data using Kostova’s and Roth’s (2002) types of practices adoption. This included careful re-reading of the data and deep reflection to gain enough familiarity with it to then assign it to the predetermined aspects of Kostova’s and Roth’s (2002) model. I coded the data to identify underlying patterns, and compared the data from respondents involved in executing and/or designing sustainability within the MNCs to that from respondents who were not (consciously) involved in sustainability design or execution.

4.5 The Reliability and Validity of the Study

As mentioned at the outset of this chapter, I used a multiple-methods approach, reflecting the nature of the respective underlying research questions on the one hand, and to facilitate triangulation on the other. In this, therefore and in line with Brannen (1996), I established both within- and between-method triangulation. In other words, I focused on each method individually and thereafter drew them together to give a more holistic view.

Established tests are used to test the reliability and validity of structural equation models. Whereas validity reflects the extent to which an indicator measures what it is supposed to measure, reliability refers to measurement consistency (i.e. the extent to which an indicator is free of random error). When I was assessing the reliability and validity of the quantitative studies, therefore, I conducted established tests to ensure that the measures reflected what they were supposed to and were consistent. With regard to covariance I verified the validities and reliabilities of the individual measures in the confirmatory factor analysis, which showed a good model fit. In the case of the partial-least-squares-based model I conducted a confirmatory tetrad analysis to determine the formative or reflective nature of the respective constructs, and similarly assessed the reliability and validity of the constructs in question through a variety of statistical tests. I thus confirmed the validity and reliability of the quantitative studies in accordance with goodness-of-fit criteria, as discussed at length in Essays 2 and 3.
I followed Yin (2014) in assessing the reliability and validity of the qualitative case study. First, the reliability of case studies should be evaluated based on 1) a case-study protocol and 2) a case-study database: as described above, both of these criteria were met. Second, validity requires verification of the existence of construct, internal, and external validity. (Yin, 2014) Table 5 illustrates these four tests and their application to the study at hand.
<table>
<thead>
<tr>
<th>Test</th>
<th>Case Study Tactic</th>
<th>Phase of research in which the tactic was used</th>
<th>Application in this study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Construct validity</td>
<td>Use multiple sources</td>
<td>Data collection</td>
<td>Triangulation of different sources, such as primary interview data, and secondary internal and external company information.</td>
</tr>
<tr>
<td></td>
<td>Establish chain of evidence</td>
<td>Data collection</td>
<td>A chain of evidence is established so that external observers can follow the source of evidence from the initial research questions to the conclusions.</td>
</tr>
<tr>
<td></td>
<td>Have key informants review the draft case-study report</td>
<td>Composition</td>
<td>The interviewees were asked to verify their respective citations and to review the abstract and model draft.</td>
</tr>
<tr>
<td>Internal validity</td>
<td>Do pattern-matching</td>
<td>Data analysis</td>
<td>First, the literature is reviewed to identify frameworks, and then commonalities within the interviews are identified and analyzed.</td>
</tr>
<tr>
<td></td>
<td>Do explanation-building</td>
<td>Data analysis</td>
<td>The results are verified through the matching of the research results to previous literature.</td>
</tr>
<tr>
<td></td>
<td>Address rival explanations</td>
<td>Data analysis</td>
<td>This study addresses rival explanations of the observed roles and processes.</td>
</tr>
<tr>
<td></td>
<td>Use logic models</td>
<td>Data analysis</td>
<td>The application of Kostova’s and Roth’s (2002) types of practice adoption provide the logic model framing this study.</td>
</tr>
<tr>
<td>Methodology</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>External validity</strong></td>
<td>Use theory in single-case studies</td>
<td>Research design</td>
<td>This does not apply to this study.</td>
</tr>
<tr>
<td></td>
<td>Use replication logic in multiple case studies</td>
<td>Research design</td>
<td>External validity was confirmed in accordance with replication logic.</td>
</tr>
<tr>
<td><strong>Reliability</strong></td>
<td>Use case-study protocol</td>
<td>Data collection</td>
<td>Case-study protocol was used during the data collection.</td>
</tr>
<tr>
<td></td>
<td>Develop a case-study database</td>
<td>Data collection</td>
<td>A database was developed comprising the interview data, and internal and external company information.</td>
</tr>
</tbody>
</table>
The combination of qualitative and quantitative methodologies further facilitates the examination of operational sustainability in MNCs in both confirmatory as well as exploratory terms. Construct validity is ultimately about establishing that a construct measures what it is supposed to measure (Bryman and Bell, 2007; Yin, 2014), which has been done in the individual study set-ups. Triangulation between and within the methods (Brannen, 1996) therefore further establishes the validity and reliability of the research, while each of the studies has a clear role and purpose (Hurmerinta-Peltomäki and Nummela, 2006).
5. Summaries of the Essays

5.1 Overview

This thesis concerns the factors influencing operational sustainability in MNCs from the perspective of the purchasing function. It comprises this Introductory Part 1 and four essays that examine extant studies, investigate institutional pressures and absorptive capacities as potential external and internal drivers, and consider the role of MNC purchasing and its employees in adopting sustainability policies and maintaining sustainability practices. This chapter summarizes each of the four essays.
<table>
<thead>
<tr>
<th>Essay 1: Understanding operational sustainability in multinational corporations: a conceptual review and an agenda for future research</th>
<th>Research Question</th>
<th>Scope</th>
<th>Data</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do and don't we know about sustainability in MNC purchasing?</td>
<td>Review of 74 journal articles from the literature on MNC sustainability and sustainable purchasing to shed light on operational sustainability in MNCs</td>
<td>74 journal articles published in 1994-2015.</td>
<td>Systematic literature review to enhance understanding of current conceptualizations of operational sustainability in MNCs.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essay 2: Why become sustainable? Institutional pressures as drivers of sustainability performance in MNCs</th>
<th>Research Question</th>
<th>Scope</th>
<th>Data</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do institutional pressures impact triple-bottom-line sustainability in the purchasing function of MNCs?</td>
<td>Building on institutional theory, this essay concerns the impact of institutional pressures on triple-bottom-line sustainability.</td>
<td>Data from 305 companies in Finland, Germany, Ireland, and Italy, including 123 MNCs and 182 non-MNCs.</td>
<td>Partial least squares structural-equation modeling of cross-sectional survey data.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essay 3: Learning Sustainability? Absorptive capacities as drivers of sustainability in MNC purchasing</th>
<th>Research Question</th>
<th>Scope</th>
<th>Data</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>How do absorptive capacities affect triple-bottom-line sustainability in the purchasing function of MNCs?</td>
<td>This essay investigates the impact of absorptive capacities, as representative of organizational learning, on environmental and social-sustainability practices and economic performance.</td>
<td>Data from 305 companies in Finland, Germany, Ireland, and Italy, including 123 MNCs and 182 non-MNCs.</td>
<td>Covariance-based structural equation modeling of cross-sectional survey data.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Essay 4: Sustainability policy and practices on a day-to-day basis: the role of MNC purchasing</th>
<th>Research Question</th>
<th>Scope</th>
<th>Data</th>
<th>Methodology</th>
</tr>
</thead>
<tbody>
<tr>
<td>How are corporate level sustainability policies and practices adopted by actors in the purchasing function and why?</td>
<td>Building on types of practice adoption within MNCs, this essay aims at identifying the role of MNC purchasing and its employees in adopting sustainability policies and practices.</td>
<td>Interview data from 46 respondents in two Finnish MNCs.</td>
<td>Personal interviews analyzed as a qualitative case study of two Finnish MNCs.</td>
<td></td>
</tr>
</tbody>
</table>
5.2 Essay 1

Riikkinen, R.: UNDERSTANDING OPERATIONAL SUSTAINABILITY IN MULTINATIONAL CORPORATIONS: A CONCEPTUAL REVIEW AND AN AGENDA FOR FUTURE RESEARCH

My aim in Essay 1 is to shed light on current conceptualizations of operational sustainability in MNCs through a structured review of the literature on International Business and General Management in the context of purchasing and supply. More specifically, this essay addresses the question: “What do we and don’t we know about sustainability in MNC purchasing?”. The objective is to generate a more general understanding of the prevailing literature in the context of purchasing and supply, as illustrated in Figure 7. The essay therefore covers the potential theoretical perspectives as well as extant discussions on antecedents, moderators and mediators, the context, and the consequences.

![Diagram]

**Figure 7.** Part of the theoretical framework applicable to Essay 1
Having carried out a structured literature review (modeled on the work of Aguinis and Glavas, 2012) of 74 journal articles, I identify the antecedents, moderators and mediators, context, and consequences of operational sustainability. The findings indicate that the predominantly empirical studies draw upon a limited set of theories, including stakeholder theory, institutional theory, and the resource-based view, to offer potential explanations of operational sustainability in MNCs. The contribution of this research lies in the construction of a framework in which operational sustainability is depicted as a trichotomy comprising sustainability focus, industry and location. The framework captures approaches taken in existing works. The resulting static snapshots take a stance on each of the dimensions, highlight the limited ability to capture the complex institutional environment of MNCs, and thus provide clear avenues for future research.

5.3 Essay 2

Riikkinen, R.; Salmi, A.: WHY BECOME SUSTAINABLE? INSTITUTIONAL PRESSURES AS DRIVERS OF SUSTAINABILITY PERFORMANCE IN MNCS

Essay 2 builds upon the findings of Essay 1 in shedding further light on the impact of institutional pressures on operational sustainability in MNCs. It focuses particularly on the second research sub-question: “How do institutional pressures impact triple-bottom-line sustainability in the MNC purchasing function?” With the purchasing function as an empirical setting, this study investigated the impact of mimetic, normative, and coercive pressures (DiMaggio and Powell, 1983) on achieved environmental, social, and economic sustainability. In focusing on the external pressures affecting triple-bottom-line sustainability in the purchasing performance of MNCs, the study concerns the following part of the theoretical framework introduced in Chapter 3.
This essay thus develops a model of hypothesized relationships linking institutional pressures (DiMaggio and Powell, 1983) to sustainability performance. Based on a partial least squares structural equation model (Chin and Newsted, 1999) to accommodate its exploratory nature, the study compares MNCs and non-MNCs, in other words smaller or more locally operating companies, in a setting that is specific to MNCs. The model draws on data from 305 companies operating in Finland, Germany, Ireland, and Italy.

According to the findings, institutional pressures affect the performance of MNCs in the areas of operational environmental and social sustainability, but not their economic performance. A further finding was that uncertainty avoidance through the imitation of best practices (Cantwell et al., 2010) appears not to apply to MNCs as such imitation would not apply to their intricate, individual institutional settings and would therefore rather have an adverse effect. Finally, the results reported in Essay 2 indicate that normative pressures affect sustainability performance in both MNCs and non-MNCs, whereas coercive pressures have no impact on triple-bottom-line sustainability in this operational setting. Regulatory pressures to change practices may, in fact, significantly affect firms in terms of their social and environmental performance.
5.4 Essay 3

Riikkinen, R.; Kauppi, K.; Salmi, A.: LEARNING SUSTAINABILITY? ABSORPTIVE CAPACITIES AS DRIVERS OF SUSTAINABILITY IN MNCS’ PURCHASING

The focus in Essay 3 is on absorptive capacities as internal drivers of operational sustainability in MNCs. It thus addresses the third research sub-question: “How do absorptive capacities affect triple-bottom-line sustainability in the MNC purchasing function?” As in the other essays, the context is that of purchasing and supply, this time drawing on both potential and realized absorptive capacities (Cohen and Levinthal, 1990; Zahra and George, 2002) as potential drivers of environmental and social sustainability practices and their ultimate impact on the function’s economic performance. More specifically, the study addressed the following questions: 1) Do organizational learning and capabilities (absorptive capacities in this study) have an impact on sustainability (in other words adopted environmental and social practices, and economic performance) in the purchasing function? 2) Are there differences in impact between the purchasing functions in MNCs and non-MNCs? It therefore concerns the following part of the theoretical framework illustrated in Figure 9.

![Figure 9. Part of the theoretical framework applicable to Essay 3](image-url)
This essay thus draws on a model of hypothesized relationships linking absorptive capacities as proxies of organizational learning with sustainability practices and performance. Two groups, MNCs and non-MNCs, i.e. smaller or more locally operating companies, are analyzed by means of structural equation modeling in a setting that is specific to MNCs. As in Essay 2, the model is based on data on 305 companies operating in Finland, Germany, Ireland, and Italy.

The findings indicate that only realized absorptive capacities affect sustainability practices and performance. Whereas the impact on MNCs is limited to social-sustainability practices, absorptive capacities in non-MNCs appear ultimately to affect economic performance mediated by the above-mentioned social-sustainability practices.

These results contribute to the literature on sustainability in international business in three ways. First, the analysis of the role of absorptive capacities as drivers of sustainable purchasing practice and performance facilitates analysis of sustainability-related learning in companies. At the same time, the mixed empirical findings indicate a need for managers and scholars alike to conduct further investigations into the impact of learning on sustainability practices and performance. Finally, the comparison of MNCs and non-MNCs allows the clear distinction of MNC-specific sustainability dynamics.

5.5 Essay 4

Riikkinen, R.: SUSTAINABILITY POLICY AND PRACTICES ON A DAY-TO-DAY BASIS: THE ROLE OF MNC PURCHASING

Essay 4 investigates the mechanisms of and reasons for the adoption of corporate level sustainability policies and the practices adopted by actors in MNCs’ purchasing function. It therefore responds to the question: “How are corporate level sustainability policies and practices adopted by actors in the purchasing function and why?”. Although representing the purchasing context, as in the previous essays, it adopts neither an internal nor an external perspective on the drivers of sustainability. It rather explores the role that purchasing, as a function or activity, and its members play in establishing sustainability policy and executing sustainability practices in MNCs. It thus examines the dynamics between the MNC level of sustainability policy and the purchasing-function level
of sustainability practices presented in Figure 10, which is part of the theoretical framework depicted in Chapter 3.

![Figure 10. Part of the theoretical framework applicable to Essay 4](image_url)

This essay draws from the literature on policy translation and practice transfer (Kostova and Roth, 2002), focusing on the operational-level dynamics in MNCs to develop a framework outlining the role of an MNC’s operational unit and its members in adopting sustainability policies and practices.

Reporting on a multiple-case study of two Finland-based MNCs, Essay 4 confirms the importance of regulatory, cognitive, and normative factors in the implementation of sustainability practices, thereby emphasizing the critical role of the social and relational context (Kostova, 1999). The focus is on the process of developing a sustainability policy and the role of purchasing in transferring practices. According to the findings, the individual within the MNC plays a particularly critical role. Moreover, the role of the function is clearly determined by the product and/or service offering. The purchasing function, for example, is much more critical in an MNC with its own manufacturing, meaning that the offering relies on a physical product, than in one that relies mainly on its service
offering. In fact, in the former case the function is more influential in determining sustainability strategies as well as executing them, whereas in the latter case its members are recipients of guidelines determined by the top management in collaboration with a dedicated sustainability manager and/or team. This essay finds that thus finds the process to be headquarter driven. Further, distance, in terms of both geography and role, is the main factor influencing differences in the adoption of sustainability policies and practices in the purchasing function.

This essay contributes to the dissertation in three ways. First, in combining the internal and external perspectives taken in the other three essays it shows that external drivers such as risk avoidance, regulatory compliance, and customer demands appear to be common to MNCs in general. Second, reporting on an in-depth investigation into both manufacturing and service MNCs it identifies significant differences in the role of an operational unit, in this case purchasing, in driving and maintaining sustainability. Finally, in focusing on both the headquarters as well as the subsidiary level, Essay 4 acknowledges the importance of Kostova’s (1999) notion of relational context, with its clear implementation challenges given the lack of a common understanding of sustainability as a concept.
6. Discussion

The theoretical framework introduced in Chapter 3 breaks down the main research question “What influences sustainability in the MNC purchasing function?” into two parts. The first part examines the potential external and internal drivers as represented by institutional pressures (Essay 2) and absorptive capacities (Essay 3), respectively, whereas the second part focuses on the relationship between different organizational levels: the corporate MNC level, the purchasing function and the functions with which it interacts, and the individual as an actor in the function and the MNC (Essays 1 and 4).

The purpose of this chapter is to bring together the different parts of this thesis. In pursuance of this aim, sub-chapter 6.1 addresses the role of the triple bottom line and its components in MNC operational sustainability; sub-chapter 6.2 discusses the external and internal factors affecting operational sustainability; and sub-chapter 6.3 synthesizes the findings of the preceding two sub-sections and develops a framework summarizing the aspects influencing sustainability in the day-to-day operations of MNCs.

6.1 The Role of the Triple Bottom Line in Operational Sustainability

In the following I discuss what operational sustainability means in the context of MNC purchasing, thereby moving beyond the initial main and underlying research questions investigating the various potential drivers. One of the major findings of this thesis concerns the significance of some sustainability components over others in an operational setting. Therefore, I will first consider each of the triple-bottom-line sustainability components, namely economic, social, and environmental, separately, and thereafter discuss the common implications.
Existing studies adopt various conceptualizations of sustainability reflecting Elkington’s (1998) triple bottom line, or a focus on social, environmental, or economic sustainability. I believe, however, that the operational conceptualization of sustainability is different. There is a clear distinction between sustainability within the company and sustainability as interaction with external stakeholders (as studied here in terms of absorptive capacities and institutional pressures). This extends the current understanding of sustainability in international business. Moreover, previous studies predominantly focus on environmental and social sustainability in the actions of MNCs (e.g. Pinkse et al., 2010; Kolk, 2016), whereas according to these findings, there are clear distinctions between sustainability initiatives within the MNC and its functions, and those aimed at the business environment. Table 7 summarizes these distinctions.

Table 7. Triple Bottom Line Sustainability: the internal and the external environment

<table>
<thead>
<tr>
<th>Economic Sustainability</th>
<th>Social Sustainability</th>
<th>Environmental Sustainability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Internal</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Prerequisite for MNC existence and initiatives targeted at environmental and social sustainability</td>
<td>• Employee wellbeing programs</td>
<td>• Green initiatives: waste minimization, electricity savings</td>
</tr>
<tr>
<td></td>
<td>• In the manufacturing environment: work safety</td>
<td>• In the manufacturing environment: use of chemicals and other raw materials</td>
</tr>
<tr>
<td><strong>External</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• If the MNC is “financially stable”, philanthropic initiatives towards the stakeholders may be undertaken</td>
<td>• In the manufacturing environment: working conditions at the supplier’s sites</td>
<td>• In the manufacturing environment: the use of raw materials at the supplier’s site</td>
</tr>
<tr>
<td></td>
<td>• Linked to financial loss or risk mitigation</td>
<td></td>
</tr>
</tbody>
</table>

The origins of international business in economics create a clear link to the role of economic sustainability in this field. Thus and in particular, the finding reported in Essay 4 indicating that economic sustainability is the underlying
condition for MNC existence and survival highlights the perceived disconnection of this component from the overall understanding of sustainability. It remains unaffected by institutional pressures and absorptive capacities, as discussed in the preceding section, and is also considered a facilitator of sustainability initiatives. Moreover, given that adhering to standards of social and environmental sustainability tends to be perceived as an element of risk management, engaging in such initiatives could be considered an investment made to avoid potential “sustainability crises”.

Social sustainability is the most commonly applied element of operational sustainability in MNCs. It is affected by (realized) absorptive capacities as well as (mimetic and normative) institutional pressures, and as such appears to act as a gatekeeper of internal and external sustainability. As further pointed out in Essay 4, employee well-being initiatives within the MNC, and the working conditions at its subcontractors’ sites are significant areas of interest among individuals engaged in sustainability work.

Environmental sustainability, including aspects such as waste minimization, energy savings, and the use of chemicals and other raw materials, plays an ambivalent role. Although it does not appear primarily to be affected by the MNC’s internal capabilities (absorptive capacities), particular rules and regulations (normative pressures) guide its attitude towards its environmental strategy. Whereas Essay 2 also highlights the impact of both mimetic and normative pressures, Essay 4 pinpoints the importance of coercive pressures. It rather appears as if the imitation of best practices and the social pressures may be linked to adherence to the same set of rules and regulations in a similar institutional setting.

As the findings on environmental sustainability in the light of the prevailing literature (e.g. Chen et al., 2009; London and Hart, 2004; Kolk, 2005) imply, industry and location play a significant role in MNC operational sustainability. It is shown in Essay 1 how the existing literature focuses on both aspects, and this is clearly confirmed in Essay 4. Thus, the composition of operational sustainability is a function of factors close to the core business. In a product-focused manufacturing environment such as the one faced by MNC B, in which raw materials and their processing play a significant role, sustainability is clearly linked to environmental aspects such as adherence to certain chemical guidelines and the use of higher-quality cotton in the production of garments.
Social sustainability, in turn, plays a more significant role in service settings such as that in which MNC A operates, where working conditions at the subcontractors’ sites and internal well-being programs foster product development, which is at the core of this business.

Hence, the triple bottom line of sustainability as such does not play a universally applicable role in MNC sustainability, but each of the factors carries its own weight in the purchasing function, depending on the location and the industry. This finding, reported in Essays 2 and 3, follows the lines of the discussion in Essay 1 implying that the focus in the literature on international business with regard to the MNC as a whole is on social sustainability, whereas in the literature concerning purchasing and supply chains, and specifically the purchasing function, it is on environmental sustainability. The first three essays call for more nuanced studies of MNC sustainability, not only on the operational, but also on the individual level.

6.2 Drivers influencing MNCs operational sustainability

This thesis is about the drivers of operational sustainability in MNCs, investigated with reference to the purchasing function and through the examination of external (institutional) and internal (absorptive capacities) drivers at different organizational levels.

It could be concluded from the results that the main drivers behind the adoption of sustainability are external. As reported in Essay 2, mimetic and normative pressures affect both environmental and social sustainability. Essay 4 confirms and extends this finding to include the impact of coercive pressures: not only do rules and regulations play an essential role in mitigating risks, customer demands also constitute a clear external force driving operational sustainability in the purchasing function of MNCs.

Essay 3 reveals that the ability to exploit knowledge affects social sustainability in MNCs, but the function itself and the inherent capabilities have no further impact in terms of establishing operational sustainability. This finding is taken further in Essay 4, according to which the individuals within the function and the organization as a whole have an even more significant role as drivers of op-
erational sustainability. This contradicts prevailing studies on MNC sustainability that predominantly consider it on the organizational level (e.g. Kolk, 2010).

A critical consequence of the involvement of individuals, however, is the potential confusion about what sustainability means to the organization in question. Although there seems to be a shared understanding between the sustainability management team and its collaboration partners located in the respective functions, such as purchasing, it is shown in Essay 4 that the message gets distorted across national borders. Thus, even if headquarters have carefully designed sustainability policies in place, the subsidiaries may not be aware of them and thus not engage in sustainability practices.

The different environments of headquarters and the respective global subsidiaries also influence the way sustainability strategies are designed and initiatives are planned. MNCs appear to follow a clear risk-management approach in considering all regulatory environments and designing sustainability guidelines that follow the strictest local requirements of the markets in which they operate. Consequently, it is the external regulatory framework and potential customer demands that drive sustainability practices and guidelines, which are designed by a dedicated sustainability-management team, approved of by management boards, and ultimately executed by the individuals in the functions. The closer a subsidiary is to its parent, both relationally and socially, the higher is the likelihood of successfully implementing sustainability practices within the organization (Kostova, 1999).

In sum, the rules and regulations of the operating environment are external drivers of operational sustainability in MNCs, serving a risk-management purpose, as are the changing demands of customers who expect more than mere compliance, and increasingly pay attention to initiatives beyond the necessary (Chen et al., 2009). Internally, however, functional capabilities are less influential as driving forces, and the emphasis is rather on individual perceptions of what sustainability is and how it should be executed beyond the following of organizational guidelines.

Operational sustainability is consequently not static (Chakrabarty and Wang, 2012), but rather requires dynamic adaptation to changing demands. In other
words, sustainability is driven by constant changes in the institutional environment and in employees’ perceptions. Consequently, regulatory compliance for risk mitigation, competitive practices, and the satisfaction of customer demands are key elements of operational sustainability. Whereas top management decides on the general viability of sustainability practices within MNCs, a dedicated sustainability-management team designs and re-evaluates, strategies and initiatives in line with prevailing employee capabilities. Practices of economic sustainability are the only ones that are strongly influenced by the functional employees: other practices are the responsibility of functional agents and corporate managers.

In terms of execution, headquarters establish global guidelines, which may at times be adjusted locally. However, sustainability-specific requirements covering practices are more prominent in a manufacturing setting. Figure 11 summarizes the drivers of operational sustainability in MNCs.
As Figure 11 shows, the drivers of operational sustainability are many and various. Externally, governing rules and regulations, competitive practices, and customers' demands drive the development of sustainability policies at MNC headquarters. Internally, the realization of these policies as sustainability practices depends on the capability to transform and implement knowledge as well as on the resulting perceptions of their impact.
Contributions and Implications of the Study

7. Contributions and Implications of the Study

7.1 Theoretical Contributions

This thesis takes a novel perspective on MNC sustainability in moving the level of analysis from the overall corporation to the purchasing function. Thus, it makes a variety of contributions. First and foremost, it reveals the importance of the individual in establishing sustainability. Whereas prevailing discussions on sustainability in MNCs predominantly take place on the corporate level, this operational-level investigation highlights the critical role of the individual in driving sustainability. The current system involving the use of agents within the functions to develop the sustainability policy does not facilitate the buy-in of all individuals involved in its execution. Given the apparent lack of a common understanding of what sustainability is, this buy-in may be the key success factor driving operational sustainability.

The second contribution is linked to the first in that it also relates to the common understanding of what sustainability is in an MNC. Although such an understanding may be established at the MNC’s headquarters, the successful transfer of sustainability-related practices requires the relational and social contexts (Kostova, 1999) to be clearly accounted for. This may well be easier in certain industry settings such as manufacturing. Thus, this study clearly highlights differences in sustainability adoption based on the industrial setting. Even more importantly, it highlights that distance both in terms of geography and role impacts employees’ decision making and subsequent buy-in through their bounded rationality (Simon, 1991).

The third contribution, which follows from the first two, lies in the finding that functional capabilities such as absorptive capacities (Cohen and Levinthal,
1990) play a minor role in driving sustainability in MNCs, whereas external institutional pressures (DiMaggio and Powell, 1983) are still a major driving force. In fact, capabilities are more important on the individual level in terms of enhancing the opportunity to arrive at a common understanding of sustainability and facilitate adaptation to changing institutional environments, whereas their role on the functional level is less prominent.

The final contribution relates to the theoretical and methodological triangulation of operational sustainability in MNCs, which is a topic that has not yet been thoroughly explored. In an attempt to create a broad theoretical base, this study therefore connects the literature on international business and general management, the literature on sustainability and business ethics, purchasing and supply-chain management, and the literature on learning, and sociological pressures and practices. On the methodological level it embraces both quantitative and qualitative research. This is a combination that facilitates a more rigorous understanding of the phenomenon in question (Birkinshaw, 2004) in first drawing upon existing theories to potentially explain operational sustainability in MNCs and thereafter exploring the setting in the two case companies.

7.2 Managerial Implications

The managerial implications of this study extend to two levels: the MNC as a whole and the individuals within it.

The MNC as a whole could benefit from fully implementing sustainability practices and thus potentially going beyond mere communication in policy development to avoid risks and thus to comply with rules and regulations, as well as to gain a competitive edge and fulfill customer demands. Although these benefits are critical to MNCs, they require a dynamic setup to create new practices. In fact, continuous monitoring of the changing institutional environment with regard to sustainability requirements should take place on all levels of the MNC and not be limited to sustainability management.

The individual in the MNC should play a more prominent role in establishing and driving sustainability to foster a shared understanding of the day-to-day practices. Although the value of sustainability initiatives and practices may be clear to the “sustainability agents” within each function, and to management in
general, other employees, who comprise most of the organization executing such practices, may be unaware of it. Thus, particular attention should be paid to capability development in the individual so as to foster a common understanding of sustainability.

7.3 Limitations and Avenues for Future Research

I conclude Part I of this thesis with some recommendations for research in areas not addressed in this study. In responding to the main research question: “What influences sustainability in the MNC purchasing function?” I developed the model of sustainability drivers described in Chapter 6. The findings also point to other interesting areas of research that are beyond the scope of this thesis.

I have defined a clear model for the case of MNC purchasing, but turning the focus to other functional settings could offer interesting additional insights. An operations and production perspective, for instance, could facilitate investigation into a system in which interactions predominantly take place between organizational stakeholders. The lack of direct interaction with the external institutional environment could turn the focus toward the internal drivers of sustainability and the particular capabilities required.

I chose in this thesis to draw upon two theoretical streams, institutional pressures and absorptive capacities, to give both an external and an internal perspective on sustainability drivers. Given the dynamic nature of MNC sustainability, the application of theories such as complexity theory (Vachon and Klassen, 2006), or social-network theory that has already been applied to purchasing-related sustainability in general (Sarkis et al., 2011; Tate et al., 2013), could offer additional insights given that my findings clearly indicate that external outweigh internal drivers.

The insights gained from this study provide a European perspective on operational sustainability in MNCs. Both the quantitative as well as the qualitative datasets concern with MNCs in Northern and Western Europe. Given that the companies under consideration operate globally, it can be presumed that the findings are applicable beyond the European context. Nonetheless could future research take a comparative perspective to account for the potential bias arising from this focus on the European context.
Findings of this study indicate that individuals’ bounded rationality plays a critical role in the adoption of sustainability practices and policies and their ultimate performance. It may be valuable to understand whether continuous monitoring of changing institutional environments would result in dynamic compliance. Further, the current study builds on a framework, which addresses operational sustainability to complement prevailing discussions on the strategic level. While the essays of this study assume this premise, they may display repetition in this regard as they ultimately are individual research papers.

On a more general level and given the imbalance between the three components of sustainability identified in this study, there is a need for more research taking a holistic, triple-bottom-line perspective that would not limit the sustainability focus. Although economic sustainability appears to be a precursor to the consideration of both social and environmental sustainability, future studies should investigate the two latter components in combination to enhance understanding not only of their joint impact, but also of their impact on each other.

Finally, future research should move beyond the snapshot stage in which specific settings are addressed. Sustainability considerations have clear implications for foreign-direct-investment decisions, for instance, which could be captured in further longitudinal studies. Only when the complexity of MNC sustainability and its dynamic nature are understood will research efforts in the field of international business move towards theory building in specific areas such as headquarters-subsidiary relationships.
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Sustainability, including environmental, social, and economic aspects, have become increasingly important to globally operating multinational corporations (MNCs). Environmental and social sustainability are no longer mere philanthropic or voluntary initiatives, but are instead becoming essential to international operations, given that the depletion of natural resources along with both human and employee rights are seen as critical global issues for the future. However, despite its importance for the functioning of MNCs, only little attention has been paid to the facilitators of sustainability on an operational level. This essay-based thesis addresses this gap by focusing on the purchasing function. The purpose of this study is to examine the factors influencing sustainability in MNCs purchasing function and it addresses the specific research question: "What influences sustainability in the MNC purchasing function?"