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Supply Chain Management Practices and Performance:

How to Thrive and Not Just Survive in a Low-Margin Supply Chain

by

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Abstract

Supply Chain Management (SCM) has increasingly become the focus of many organisations in a vast array of industries. However, due to external environment pressures and the multitude of internal management options, firms experience difficulties in determining how to best manage a supply chain in order to create a competitive advantage and enable higher organisational performance. This thesis aims to provide an accurate representation of the relationship between specific SCM practices, competitive advantages, and organisational performance in a low-margin supply chain. Using a qualitative approach, a theoretical framework is selected through the literature review and the dairy industry in the UK is chosen to test it. Through the analysis, all of the framework's SCM practices are reaffirmed as relevant: strategic supplier partnerships, customer relationships, level of information sharing, quality of information sharing, and postponement. Moreover, empirical findings from both secondary data and primary data show that strategic supplier partnerships must precede the other practices in order to support higher performance and create a competitive advantage. It is lastly claimed that together with the existent practices, the lean capability and innovation should be added to the framework, as they, according to the current study, can increase organisational performance and support organisations in low-margin industries in the creation of competitive advantages.

Keywords: Supply Chain Management, Dairy, Retailers, Processors, Farmers, UK, SCM Practices, Competitive Advantage, Organisational Performance

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Table of Contents

1	Introduction	1
1.1	Managing Supply	1
1.2	Managing Supply in a Low-Margin Industry.....	2
1.3	Problematisation.....	4
1.4	Research Question.....	5
1.5	Research Aim and Objectives	5
1.6	Research Limitations.....	6
1.7	Thesis Outline	6
2	Literature Review.....	8
2.1	Introduction	8
2.1.1	Definition of SCM.....	8
2.1.2	Previous SCM Frameworks	11
2.1.3	RBV-Related Frameworks	13
2.1.4	Industrial Organisation View of Competitive Advantage.....	14
2.1.5	Generic Strategies and the Value Chain.....	15
2.2	Choice of Theoretical Framework.....	16
2.2.1	SCM Practices	19
2.2.1.1	Strategic Supplier Partnerships.....	19
2.2.1.2	Customer Relationships	20
2.2.1.3	Level of Information Sharing: Quantity and Quality	20
2.2.1.4	Postponement.....	21
2.2.1.5	Additional Practices.....	22
2.2.2	Competitive Advantage.....	23
2.2.3	Organisational Performance	24
2.3	Chapter Summary.....	26
3	Methodology	28
3.1	Introduction	28
3.2	Research Approach	28
3.3	Research Design.....	29
3.4	Choice of Supply Chain and Organisations	30

3.5	Data Collection Method	32
3.5.1	Interviews	33
3.5.2	Interview Preparations.....	34
3.5.3	Design of Interview Guide	34
3.5.4	Conducting the Interviews	35
3.5.5	Respondents	35
3.6	Data Analysis	37
3.7	Quality of Research.....	38
3.8	Chapter Summary.....	38
4	Empirical Findings.....	39
4.1	Introduction	39
4.2	From Cow to Consumer – An Overview	39
4.2.1	Farmers.....	41
4.2.2	Processors.....	42
4.2.3	Retailers.....	44
4.3	Primary Data Collection Presentation	46
4.3.1	Introduction	46
4.3.2	Undisputed Elements.....	47
4.3.2.1	Power Shift to Retailers	47
4.3.2.2	Growth of Discounter Retailers	48
4.3.2.3	The Lean Philosophy	49
4.3.2.4	Consolidation.....	50
4.3.2.5	Innovation	50
4.3.2.6	Control	51
4.3.3	Researchers.....	52
4.3.3.1	Centralisation.....	52
4.3.3.2	Collaboration and Partnership.....	52
4.3.3.3	Information Sharing	53
4.3.3.4	Time.....	54
4.3.4	Practitioners.....	54
4.3.4.1	Collaboration and Partnership.....	54

4.3.4.2 Information Sharing	55
4.3.5 Miscellaneous	56
5 Analysis	57
5.1 Introduction	57
5.2 SCM Practices	58
5.2.1 Customer Relationships.....	58
5.2.2 Level and Quality of Information Sharing	59
5.2.3 Postponement	60
5.2.4 Strategic Supplier Partnerships	61
5.3 Additional Findings.....	63
5.3.1 Lean (and Mean)	64
5.3.2 Innovation.....	65
5.4 Chapter Summary.....	66
6 Conclusion.....	68
6.1 Research and Objectives	68
6.2 Theoretical and Practical Implications	70
6.3 Limitations and Further Research	71
References	73
Appendix A	85
Appendix B.....	87
Appendix C	88

1 Introduction

1.1 Managing Supply

Keep your friends close, your enemies closer, and your suppliers closest.

- Unknown Author.

For the past few decades, the concept of supply chain management (henceforth SCM) has progressively received attention from both academia and practice, initially met with hesitation over its value (Bechtel & Jayaram, 1997), yet gradually found to be an “effective management tool for firms to maintain business stability, growth, and prosperity” (Ou et al., 2010, p. 527). Furthermore, as globalisation started to transform the competitive landscape, and the business environment has come to be increasingly interlinked, SCM became an important part of managerial decision-making (Tan, Lyman & Wisner, 2002). In an intertwined world, businesses began to compete as supply chains rather than autonomous entities, thus the actions and decisions of one link in the chain affected the others (Holmberg, 2000; Lambert & Cooper, 2000; Qrunfleh & Tarafdar, 2013). It has therefore become imperative to understand which SCM practices and activities lead to a better outcome, in order to ease managerial decision-making with regards to supply chain choices in the unsparing competitive environment, not only for the benefit of their firm, but for the survival and success of their upstream and downstream supply chain partners.

In the business world, a better outcome is primarily equated with performance, be it financial, operational, or customer-related (Ou et al., 2010). Additionally, as academia has repeatedly emphasised, a method of obtaining above-average performance is by developing a sustainable competitive advantage (Porter, 1980; Barney, 1991). Hence, it is suggested that the concepts of SCM and its practices, firm performance, and competitive advantage can be linked in a meaningful way to assist managerial decision-making. This can be of use for all firms that are operating within a supply chain, yet all the more so in competitive, low-margin industries, where intelligent SCM decisions are key to survival, as they enable the lowering of costs (Jacobsen et al., 2017) and lead to improving bargaining power against the other players in the supply chain (Maglaras, Bourlakis & Fotopoulos, 2012). Thus, academia must ensure that an understanding exists of how SCM actions can lead to success and must provide an explanatory

framework linking the concepts together, specifically in a low-margin setting. As will be demonstrated in the literature review, there have been several attempts of developing a framework that connects certain supply chain practices with increased performance and sources of competitive advantage (Lambert & Cooper, 2000; Li et al., 2006, Porter, 1985), yet there is limited empirical evidence that proves said connections (Li et al., 2006), particularly in a competitive, low-margin industry, which is hence the aim of this thesis.

1.2 Managing Supply in a Low-Margin Industry

There are many features that could indicate the competitiveness of an industry and supply chain. One of the most visible and easily measurable is the profit margin that each participant can obtain, with some industries enabling high margins, and some only allowing a few percent even to their highest performers. In the latter type, the competitiveness is fierce, as there is a very thin line between thriving, surviving, and going bankrupt. Traditionally, one such industry has been the one involving fresh food, as supply chain participants have historically and publicly struggled to overcome low-margin obstacles (Reagan, 2013). This has been a global issue that has not sidestepped the developed economies, low margins rather being an additional element adding to the competitiveness of the fresh food supply chain (Jacobsen et al., 2017).

Moreover, industry consolidation, changing consumer preferences, increasing legislative and political pressure have been observed and it has become apparent that the European food industry is undergoing structural changes affecting the nature of the supply chain (Kinsey & Senauer, 1996; Muller-Lankenau, Wehmeyer & Klein, 2005). That is particularly evident in the UK, chosen as a representative of a developed economy for the purposes of this study. There, the beginning of the 21st century has brought radical transferrals of power in favour of retailers (Beaton-Wells & Taylor, 2017; Smith, 2006). These retailers are considered likely to behave in an opportunistic way towards their upstream partners, since the latter are disadvantaged by the power asymmetry and are more willing to accept a weaker position, as long as their own profits are considered satisfactory (Maglaras, Bourlakis & Fotopoulos, 2013). Evidence indicates that UK retailers increase their own margins by exploiting their bargaining power and compelling their suppliers into nearly punitive contracts (Beaton-Wells & Taylor, 2017). Researchers have gone as far as calling UK retailers “channel captains”, as the actors that have the most influence, and the ones taking increasing control of the supply chain (Smith, 2006).

Additionally, and most visibly in the fresh food retail arena, it has been a small number of large retailers that have managed to continuously exercise the most authority over the rest of their supply chain (Smith, 2006). This trend of power concentration in the hands of a few major players has become visible all over Europe, turning into a major phenomenon in the UK, and increasingly allowing a few retailers to dictate supply chain dynamics and acquire a larger portion of value comparatively to the manufacturers (Fernie, Sparks & McKinnon, 2010). Since this trend is anticipated to continue (Hingley, Lindgreen & Casswell, 2006), the British food supply chain is expected to be heavily influenced by its retail participants and therefore pose various threats to its other players, with regards to control, profit margin, and even survival.

Furthermore, the UK has also seen changes within the retail segment of the food supply chain, as discounter stores have increasingly grown in market share (Statista, 2018) and bargaining power, owing to consumer preference shifts towards low-cost retailers. These relatively emergent players are disrupting the established retailers through continual evolution and redefinition of their approach to business (Jacobsen et al., 2017). Their presence in the market and growing influence over the supply chain has already proven to dramatically alter the dynamics of the industry in Germany (Cleeren et al., 2010), and consequences for the UK food sector and supply chain cannot be underestimated, as for example the two discounters Lidl and Aldi have become the fastest growing supermarkets in the country (Statista, 2018). As they are attracting customers with low prices in an industry with “razor-thin margins”, these discounters are also lowering costs everywhere they see potential for it, including reduction of supply chain complexity and negotiation of pricing with suppliers (Jacobsen et al., 2017). This renegotiation can consequently impact the supermarkets’ upstream partners in an often-negative way, given the above-mentioned opportunistic behaviour that these powerful retailers are able to display.

It can therefore be seen that the food supply chain in the UK is a hectic one, with consolidation of power in the hands of a few large retailers, two of whom are offering lower prices than their competitors, reducing the margins of the upstream players in favour of the consumers. In these circumstances, it becomes vital that every participant in the supply chain understand their own sources of cost efficiency and profit enhancement in order to successfully compete and even survive in the unsparing industry. Hence, the British food industry supply chain can become a suitable empirical testing ground for an understanding of the SCM practices that lead to higher performance. Naturally, within the food industry there are many supply chains if one takes into account specific players and their contracted partners. The methodology will expand on the

choice of supply chain and the actors examined in the current thesis. Yet for the purpose of the introduction and the literature review, a supply chain is referred to as the general movement of food from the raw produce farmer to the end consumer through all the steps of the supply system of the industry. Consequently, an assessment of the actors within each step can illustrate both the SCM actions that retailers have been utilising in order to establish and maintain dominance, and the reactions of the other players to the limitation of their bargaining power.

Thus, a successful scrutiny into the SCM practices of the firms in the UK food industry could teach practitioners in competitive, low-margin industries both how to maintain a leadership position, and how to respond to the high power of another actor in the supply chain. Furthermore, it can be an addition to the research in the field of SCM, organisational performance, and competitive advantage, as it can provide an empirically proven understanding of how the concepts are linked and what SCM practices create value for a firm.

1.3 Problematisation

As was shown above, SCM has become an important factor for the survival of a firm, particularly since organisations are interlinked and dependent on each other's actions (Lambert & Cooper, 2000). The latter is strongly exemplified in the UK food industry, where consolidation of retail power, and the growth of discounter retailers has transformed the supply chain into a battlefield for cost efficiency and sources of margin conservation. These discounter supermarkets have shifted the dynamics of the industry and have forced the other players to rethink their SCM decisions.

Since SCM actions can be a source of success or failure for an organisation, it must be understood what practices lead to the avoidance of failure or to the coveted success, which is primarily illustrated through higher performance and the development and maintenance of a competitive advantage (Li et al., 2006). Although there are frameworks that claim to provide an explanation of what SCM practices and competitive advantages lead to above-average performance, there is a lack of empirical testing of the models, thus this thesis aims to gather SCM practices that are said to lead to above-average performance in a low-margin industry and test them, bringing empirical understanding to this field.

From the identified problem, a research question has been formulated:

1.4 Research Question

What SCM practices have become sources of competitive advantage and superior performance for firms in a low-margin UK supply chain?

1.5 Research Aim and Objectives

The primary aim of the thesis is to provide an accurate representation of the relationship between certain SCM practices, competitive advantage, and organisational performance in a low-margin UK supply chain. In order to achieve this aim, several other objectives must be fulfilled, namely:

- Define and assess the concepts of SCM and its practices, competitive advantage, and organisational performance;
- Find the SCM practices that have repeatedly been linked in literature with higher performance and the creation of a competitive advantage;
- Identify a theoretical framework that illustrates the link between certain practices and organisational performance and competitive advantage;
- Test the framework in a specific low-margin supply chain, in order to prove its relevance to practice;
- Provide a revised model in case any variances are detected during the empirical testing.

The fulfilment of the first three objectives can be found in the literature review, where a preliminary framework is selected for further testing and refinement. The gathering and presentation of the empirical data aids the completion of the fourth objective, after which the findings are compared with the theoretical model. If additional practices are uncovered, the model will be updated, therefore completing the fifth and final objective, and providing both academia and practice with a revised framework.

Since the thesis attempts to provide a comprehensive understanding of SCM practices that increase performance in different stages of the supply chain, it is worth analysing the SCM of every link in the chain in order to be able to provide a holistic view of the practices that bring performance at different supply chain segments. Thus, the unit of analysis of this thesis will be the firm. This will then additionally enable a deeper understanding of the relationships that the

organisations have in their networks, which will expectantly result with a rich understanding of both firm practices and strategic choices, and of the industry power relations.

1.6 Research Limitations

The limitations of this thesis are primarily related to its scope. Firstly, the choice of the UK as the focus limits the findings and their implementation to similar economies, therefore potentially only to Western developed states. Furthermore, the selection of a specific supply chain for the validation of the theoretical framework limits the conclusions that can be drawn from the empirical evidence to other supply chains of similar length and complexity. The low-margin industry chosen additionally narrows down the findings to other competitive, price pressured industries, potentially only ones handling fresh produce. Nevertheless, the thesis will provide a higher degree of abstraction in the analysis and conclusion in order to allow for more generalisable findings and aid more practitioners.

It must also be mentioned that although the concept is called SCM, there are few individual managers who indeed have control over an entire supply chain. Instead, their degree of control is limited to their respective organisations and at times an ability to influence partners. Therefore, when discussing the management of a supply chain with a practitioner, their observations are limited to their realm of influence and control. Hence several opinions have to be pieced together in the thesis in order to avoid a unilateral view of SCM.

1.7 Thesis Outline

The following chapters illustrate our progress in the attempt of answering the research question and fulfilling the research aims. In Chapter 2, the literature on SCM, organisational performance, and competitive advantage is assessed and a preliminary framework linking the concepts is presented, pending to be tested. Chapter 3 showcases the methodological approach to said testing, including an explanation of the research approach and design, as well as the choice of supply chain and data gathering method. The thesis then proceeds to the empirical findings, presented in Chapter 4 and including both primary and secondary data. This data is further analysed according to the patterns found in the empirics and compared to the preliminary framework in Chapter 5. The implications of the comparison and potential refinements are also discussed in that chapter. Lastly, the suggestions for further research and the implications for academia and practice are examined in Chapter 6, which is the conclusion of the thesis.

In order to guide the reader through the thesis progression, the figure below provides a visual representation of the separate parts of the research and the links between them.

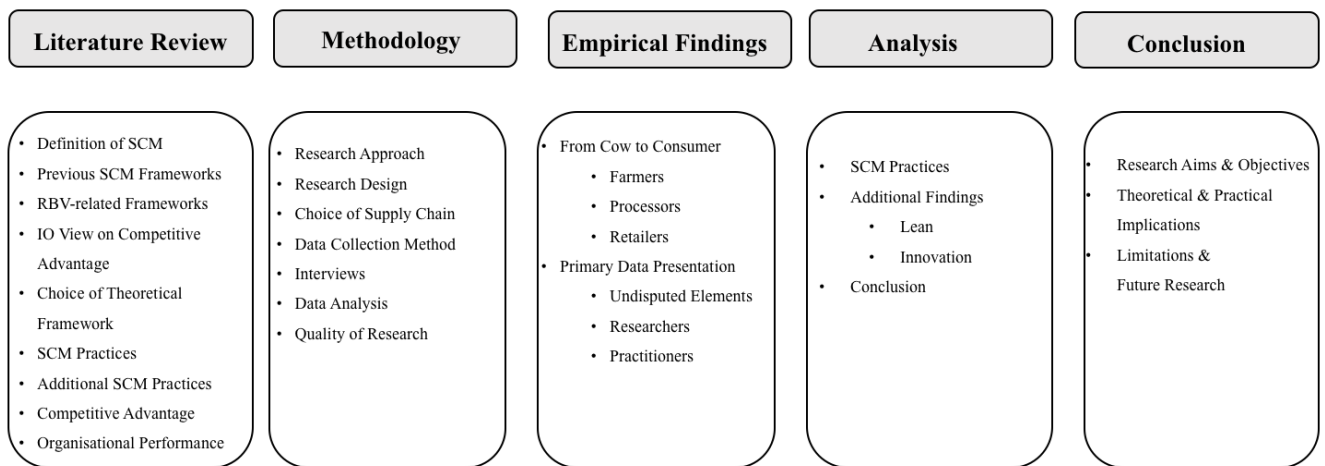


Figure 1. Thesis Outline.

2 Literature Review

2.1 Introduction

The following literature review aims to present the relevant concepts from the most abstract level to the specific elements that will be tested in the empirical chapter. Therefore, the review starts by illustrating the Supply Chain Management concept and its evolution throughout the years. It continues by showcasing frameworks that have linked SCM with other areas of business and strategy literature, in particular competitive advantage and organisational performance. This leads to an assessment of two of the chief schools of thought: Industrial Organisation and Resource Based View and their connection to SCM. After an explanation of the distinct views regarding the connection of SCM with competitive advantage and organisational performance, a preliminary framework that attempts to unite the concepts is selected and explained. The elements of the framework are assessed and the authors' operationalisation of SCM practices, performance and competitive advantage is presented. The literature review concludes with a summary of the explained concepts, as well as the presentation of a suggested refinement of the theoretical model. The suggestion may nevertheless be modified after the analysis of the empirical data.

2.1.1 Definition of SCM

Supply chains exist whether they are managed or not.

Mentzer et al. (2011, p. 4)

In 1997, Bechtel and Jayaram were questioning whether the concept of SCM was important for business, or “simply a fad destined to die with other short-lived buzzwords” (p. 15). They drew attention to business ecosystems, Keiretsu relationships, and business networks, the several other concepts used at the time to achieve above-average performance by linking firms together into interdependent relationships (Bechtel & Jayaram, 1997). They further questioned whether SCM was taking firms into a beneficial direction, since an emphasis on partnerships and alliances often meant ignoring what the authors called “underlying capabilities and competencies” (Bechtel & Jayaram, 1997, p. 16). Nevertheless, even then, more than 20 years

ago, the spotlight on SCM became obvious in both literature and practice. It started from debates over its definition (Mentzer et al., 2011), followed by the development of frameworks that explained the theoretical SCM notion and its links with other fields of business concepts (for example Bechtel & Jayaram, 1997; Mentzer et al., 2011), further to attempts of improving understanding of SCM and advising managers with best practice in terms of supply chain decision-making (Chen & Paulraj, 2004).

Even though there is extensive literature on the subject of SCM, there is still confusion about the actual meaning of SCM (Mentzer et al., 2011). What perhaps best illustrates the divergent views with regards to the definition of SCM is Bechtel and Jayaram’s (1997) attempts to gather definitions from several supply chain schools of thought, from academics who emphasised different processes and characteristics as being vital to the understanding of the supply chain concept, as seen in Table 1.

<i>Supply Chains Schools of Thought</i>	
<i>Author(s)</i>	<i>Definition</i>
	Chain Awareness School
Jones & Riley (1985)	“Supply chain management deal with the total flow of material from suppliers through end users.” (p. 19)
Houlihan (1988)	“Supply chain management covers the flow of goods from supplier through manufacturer and distributor to the end user.” (p. 14)
Langely & Holcomb (1991)	“Supply chain management focuses attention on the interactions of channel members to produce an end product/service that will provide best comparative value for the end user.” (p. 14)
Cavinato (1991)	“... the entire sourcing, value-added, and marketing activities of the overall link of firm up to final customers.” (p. 32)
Novack & Simco (1991)	“Supply chain management covers the flow of goods from the supplier through the manufacturer and distributor to the end user.” (p. 32)

Stevens (1990)	“Control the flow of material from suppliers, through the value adding (production) processes and distribution channels, to customers.”
Lee & Billington (1992)	“Networks of manufacturing and distribution sites that procure raw materials, transform them into intermediate and finished products, and distribute the finished products to customers.” (p. 65)
	Linkage/Logistics School
Scott & Westbrook (1992)	“... supply chain is used to refer to the chain linking each element of the production and supply process from raw material through to the end customer.” (p. 23)
Turner (1993)	“... technique that looks at all the links in the chain from raw materials suppliers through various levels of manufacturing to warehousing and distribution to the final customer.” (p. 52)
	Information School
Johansson (1994)	“SCM is really an operations approach to procurement. It requires all participants of the supply chain to be properly informed. With SCM, the linkage and information flow between various members of the supply chain are critical to overall performance.”
Towill, Naim & Wikner (1992)	“A supply chain is a system, the constituent parts of which include material suppliers, production facilities, distribution services, customers linked together via the feed forward of material and the feedback flow of information.” (p. 3)
Manrodt & Harrington (1995)	“Product and information flow encompassing all parties beginning with the supplier’s suppliers and ending with customers or consumers/ end users... flows are bidirectional.”
	Integration School
Cooper & Ellram (1990)	“An integrative philosophy to manage the total flow of a distribution channel from the supplier to the ultimate user.” (p. 1)

Ellram & Cooper (1993)	“Supply chain management is an approach whereby the entire network from which suppliers through the ultimate customer is analysed and managed in order to achieve the ‘best’ outcome for the whole system.” (p. 1)
Hewitt (1992)	“Supply chain integration is only a natural result of redesigned business processes not realignment of existing functional organisations.” (p. 340)
	Future
Cavinato (1992)	“The supply chain concept consists of actively managed channels of procurement and distribution. It is the group of firms that add value along product flow from original raw materials to final customer. It concentrates on relational factors rather than transactional ones.” (p. 285)
Farmer (1995)	“Instead of using the term supply chain management, we should use the idea of a seamless demand pipeline.”

Table 1. Definitions of SCM. (Bechtel and Jayaram, 1997).

Initially, SCM literature was heavily influenced by research in the area of logistics, as emphasis was put on coordinating and facilitating supplier and buyer relationships, and the enhancement of organisational performance through improved management of material movements (Bechtel & Jayaram, 1997). As research in the area progressed, academics began to include the end-customers in one way or another when defining SCM, subsequently leading to a retailer being able to be a part of both the upstream and the downstream supply chain (Mentzer et al., 2011). Thus, although the schools of thought diverge in several ways, there is agreement that a supply chain is a system of interlinked parties who deal with the flow of materials from raw resources to the end product in the hands of the consumers, which is how SCM will be considered in this thesis.

2.1.2 Previous SCM Frameworks

As the body of work surrounding SCM has continued to grow, its importance for the study and understanding of business has become evident, with academics exploring the implications of

supply chain decisions on organisational strategy and performance. Research has since dealt with numerous focus elements such as competitive advantages (Porter 1980, 1985; Barney, 1991) and agility (Christopher, 2000); with various investigation methods, such as case studies and surveys (Li et al., 2006); and with different relationship choices, such as integration and coordination (Lambert & Cooper, 2000) – all in an attempt to develop frameworks that best explain SCM and its connection to the rest of the business world, both the academic and practical sides.

As mentioned above, researchers have been divided for many years over the focal point of SCM. This has led to the creation of numerous frameworks claiming to elucidate the elements of good SCM and the actions to be undertaken to achieve higher performance. For example, Lambert and Cooper (2000) developed a conceptual SCM framework with three elements: “supply chain network structure, the supply chain business processes, and the supply chain management components” (p. 69). The authors claim these processes and components need to be considered in order to successfully design and manage a supply chain. Furthermore, they believe cross-functional integration to be paramount for an organisation’s success, due to the interrelatedness of existing in a supply chain (Lambert & Cooper, 2000). Gimenez and Ventura (2003) agree with the importance of integration, both internal and external, and additionally stress that SCM requires coordination and collaboration. Buvik and Gronhaug (2000) accentuate coordination as well, yet they place the emphasis on vertical coordination and inter-firm dependence as a determinant of success in a changing environment. Alternatively, Christopher (2000) claims that the philosophy of agility is key in uncertain markets, and that emphasis should rest on building a responsive supply chain.

The array of articles showcased above wishes to illustrate the variety of academic beliefs with regards to SCM that has appeared in a short time-span at the beginning of the 21st century. Although the solutions offered vary between researchers in more ways than the scope of this literature review can present, academia’s goal has largely involved linking SCM with the possession and maintenance of a competitive advantage. This can be understandable if considering that one of the general purposes of business academic studies is to aid managerial decision-making (Holmberg, 2000) and sources of competitive advantage have been a large discussion point for researchers and practitioners alike. For example, Fernie, Sparks and McKinnon (2010) claim that key theories in the area of SCM are the Resource Based View (RBV) linked most commonly with Barney (1991), and Porter’s (1985) Value Chain, which

assess and exemplify sources of achieving and maintaining a competitive advantage. It is argued that these theories can be used to illustrate an organisation's way of maintaining a competitive advantage through the efficient management of the supply chain (Fernie, Sparks & McKinnon, 2010).

Hence, it is valuable for the understanding of SCM practices to present the frameworks that connect supply chain activities with competitive advantage concepts. Given that the focus of this thesis is to empirically test which SCM practices have become sources of competitive advantage and superior organisational performance, it is of importance to reflect on the frameworks that have combined SCM with the most notable strategic concepts, in order to answer the research question. Thus, they will be expanded on below, namely through the assessment of frameworks that focus on the external environment and the ones that have combined SCM concepts with RBV, organisational performance and/or sustainable competitive advantage. Lastly, as this thesis focuses on a supply chain characterised by low-cost/discount retailers, Porter's (1980) generic strategies are also of interest and will be discussed, as they can provide a better understanding of the choices retailers make with regards to their strategy and how that can affect the supply chain.

2.1.3 RBV-Related Frameworks

One of the pivotal views on sources of competitive advantage in strategy literature has become the Resource Based View, most commonly known as a theory developed by Barney in 1991. However, many academics within the field of Strategic Management have contributed to the refinement and development of the theory. In 1959, Penrose was one of the first researchers claiming a firm should be seen as an administrative unit connecting resources to one another and that these resources could be heterogeneous. The firm then has the challenge of using this cluster of productive resources to enable growth of the firm (Penrose, 1959), thus resulting in a competitive advantage. Barney (1991, p. 102) defines a competitive advantage as when a firm "is implementing a value creating strategy not simultaneously being implemented by any current or potential competitors". A sustainable competitive advantage is then achieved if the organisational resources are valuable, rare, inimitable and non-substitutable (Barney, 1991). If the four criteria are not fulfilled, the firm can still achieve an advantage, yet it will not be sustainable, thus of competitive value only for a limited amount of time.

This theory has enabled researchers to suggest SCM as a source of competitive advantage from an RBV perspective. Rungtusanatham et al. (2003) developed a framework that predicts the advantages of having linkages within a supply chain for a firm's internal operations. The framework suggests that better SCM results in higher internal operational performance, and managers can use it to justify decisions both upstream and downstream in their supply chain (Rungtusanatham et al., 2003). This can lead to a better understanding of the supplier and customer practices that can become a competitive advantage, as the linkages with the two groups are seen as source of improvement for internal operations (Rungtusanatham et al., 2003).

However, although RBV is one of the most prominent avenues for understanding the creation and maintenance of a competitive advantage, it is of only partial use to the current research, as it primarily emphasises the importance of resources internal to the firm. The theory is limiting by disregarding how the external environment, including competitors, can affect the organisation (Oliver, 1997). Since the focus of this thesis is to provide an understanding of the SCM practices that bring success in a supply chain influenced by powerful retailers, a solely internal view of competitive advantage would not suffice, as it would not be able to detect practices that are chosen as a reaction to the firm's external environment. Thus, RBV will not be able to fully illustrate the SCM practices that are potential sources of competitive advantage and will be used as a component of the empirical testing in order to determine whether there are internal capabilities of a firm that can qualify as a performance improving SCM practice. To complement the potential internal factors that can become competitive advantages in a supply chain, the external environment must also be assessed, as seen below.

2.1.4 Industrial Organisation View of Competitive Advantage

As mentioned, it is of importance to the aim of this thesis to include the external perspective on competitive advantage. This perspective has focused on the question: "*How does the manner in which markets are organized affect the way in which firms behave and markets perform?*" (Church & Ware, 2000, p. 8). This question originated from the *Industrial Organisation* (IO) perspective, which initially centred on the positive or negative impact of the external environment in the path of obtaining a competitive advantage through the strategic choices of a firm (Porter, 1981). The concept of strategy is then claimed to stem from practitioners' need to organise their decisions in an organisation, given the chaos of daily events and environment impact on the firm's position (Porter, 1981).

Porter (1981) described how the IO perspective had impacted the view of competitive advantage in specific industries, given the Bain/Mason structure-conduct-performance paradigm, where the industry structure determined firm strategy (conduct), which in turn determined performance, both for individual organisations and as a collective group in the marketplace. However, Porter (1981) also observed that the too static structure-conduct-performance-paradigm was becoming more dynamic and moving towards a merge with corporate strategy views. Namely, IO evolved to also ask the question: “*How does the behavior of firms influence the structure or organization of markets and the performance of markets?*” (Church & Ware, 2000, p. 9). In an attempt to further the IO theory, Porter then introduced his own take on the sources and influences on competitive advantage, including the ones relevant to the scope of this thesis: The Generic Strategies and the Value Chain.

Since the focus of this thesis lies partly in the examination of low-cost retailers and their impact on the supply chain, the generic strategies will be expanded on below, as it is considered valuable to emphasise that in the Porterian view, the strategic choice of cost leadership can bring these retailers a competitive advantage against their competitors (Colla, 2003). It is then meaningful to understand the discounter retailers’ SCM practices that enable the maintenance of the competitive advantage, not only to allow the replication of their strategy in other areas of business, but also to facilitate the retaliation of actors that are harmed by the cost leadership strategy. The Value Chain concept is also assessed, as it is central to Porter’s illustration of how the different separate strategic activities in a firm can contribute to a superior cost position or differentiation, thus enabling a better understanding of potential sources of competitive advantage (Porter, 1985).

2.1.5 Generic Strategies and the Value Chain

Michael Porter is one of the most cited and recognised researchers in the field, and his (1980; 1985) Generic Strategies have become one of the most widely accepted classifications of organisational strategies (Akan et al., 2006). Porter started from the idea that a firm can possess two generic types of competitive advantages that can lead to above-average performance in relation to its rivals: low-cost or differentiation. The two advantages, combined with the scope of activities that are performed lead to three generic strategies for achieving long-term high performance: cost leadership, differentiation, and focus, the latter being further divided into cost focus and differentiation focus.

A firm can choose to have a broad scope and become the low-cost producer in its industry, thus enabling cost leadership advantages such as economies of scale; it can pursue uniqueness in dimensions that are valued by consumers and be rewarded for this differentiation with an ability to charge a price premium; it can focus on a narrow industry segment and tailor the firm services to suit the needs of exclusively said segment. Through this classification, Porter argues that a firm must make a strategic choice in order to achieve a competitive advantage, as “all things to all people is a recipe for strategic mediocrity and below-average performance” (Porter, 1985, p. 12). If a firm engages in more than one strategy it then faces the risk of becoming “stuck in the middle” (Porter, 1985, p. 16) and relinquishes its potential to achieve a competitive advantage, consequently being unable to perform as well as the cost leaders, differentiators, or focusers.

Furthermore, Porter (1985) also directly links competitive advantage with the supply chain concept in another framework: The Value Chain. The model explains the relationship between activities in the supply chain, such as procurement and distribution, and the creation of additional value for the organisation. Porter explains that the Value Chain is a tool for disaggregating the firm into its separate activities and examining each of them in order to understand how to perform “these strategically important activities more cheaply or better than [the firm’s] competitors” (1985, p. 34). It is an important model for the examination of the value-adding activities within a firm, as well as the firm’s position in the value system (Porter, 1985). However, in this framework, Porter (1985) does not take into account the customers to an organisation, which then becomes relatively impractical for the purpose of this thesis. The end-consumer plays a large role in creating a competitive advantage for actors in the food industry, as ultimately it is the consumer choice of retailer, brand, and product that enable above-average performance. Thus, Porter’s strategic concepts and the IO view can also only partially elucidate the research question.

2.2 Choice of Theoretical Framework

As could be seen from the examination of IO and RBV, the internal and external view on competitive advantage have both been used in attempts to link certain SCM practices to higher performance. However, the frameworks presented above have mostly disregarded either a wider representation of SCM practices, a balanced view of competitive advantage that acknowledges both internal capabilities and the external environment, or a clear definition of above-average

performance. Nevertheless, several researchers have attempted to create a framework that unites these three elements together. One such example is the article by Yamin, Gunasekaran and Mavondo (1999) that focused on establishing a relationship between generic strategies, competitive advantage and organisational performance, arguing that the decisions within Porter's Value Chain impact a firm's sources of competitive advantage and its choices of a generic strategy. Although this line of reasoning is undoubtedly valuable for other avenues of strategic management literature, it is of limited help with the problematisation of the current thesis, as the predefined outlook on competitive advantage equating to Value Chain choices narrows down the prospective findings to "Porterian" types of competitive advantage, and thus a potentially skewed view of the research question, performance, and SCM. Additionally, based on the industry and the supply chain that will be analysed in this study, a framework was needed that could provide further factors that can affect competitive advantage and organisational performance. Thus, a framework that went beyond the Porter (1980; 1985) definitions of competitive advantage was chosen, as it could also offer a wider array of SCM practices to be tested, as seen below.

The main framework that has been selected to represent the research question and its testing is the model created by Li et al. (2006) in their article "*The Impact of Supply Chain Management Practices on Competitive Advantage and Organizational Performance*". Li et al. (2006) focus on demonstrating that effective SCM can lead to securing a competitive advantage and to higher organisational performance. They do this through creating a framework that aims to illustrate what SCM practices can lead to different types of performance and entail competitive advantages, as seen in Figure 2.

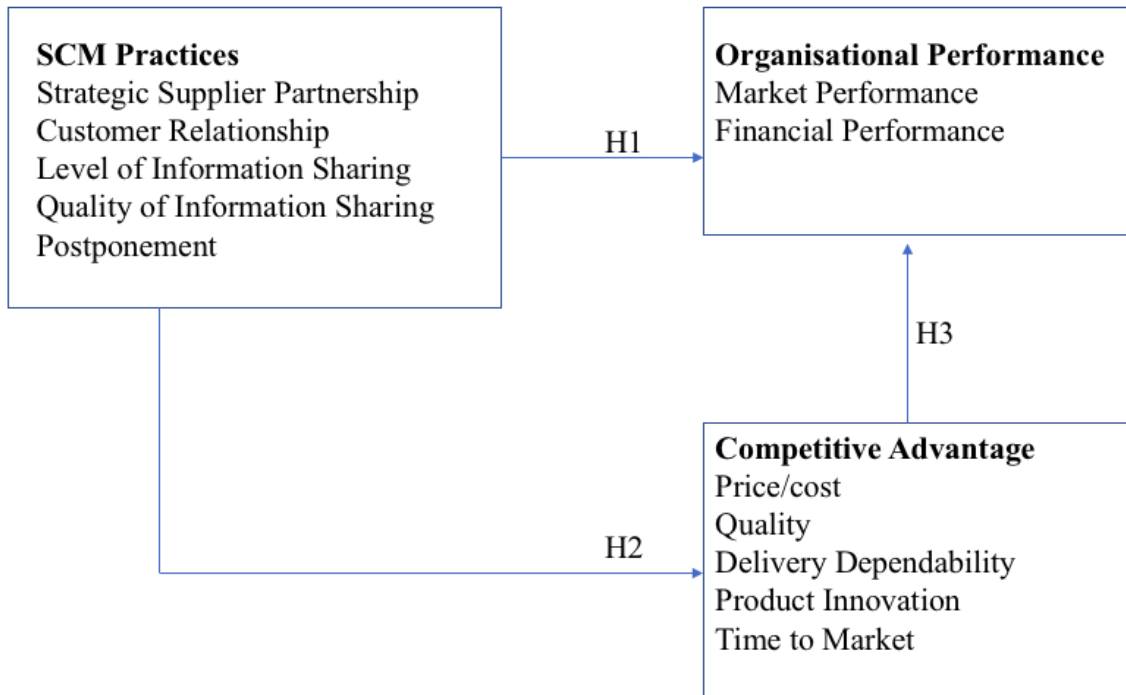


Figure 2. Theoretical Framework as proposed by Li et al. (2006).

A specific list of components for each of the three analysed elements was chosen by Li et al. (2006) through a comprehensive literature review and on the basis of their appearance in other SCM literature, which is claimed to provide support for the framework. Each of the elements will be assessed in detail below, where their merits will be discussed, taking into account the focus of the thesis. Nevertheless, it must be highlighted that although the choice of components in SCM practices and competitive advantage has been motivated through tens of articles from a generally coherent area of research, it still results in the creation of a framework based on secondary data. Given that the elements for Li et al.'s (2006) framework were not chosen through empirical testing, there is room for error, as secondary data cannot fully illustrate everyday practice and its potential changes. Therefore, although the Li et al. (2006) model is considered to be the most appropriate for the examination of the research purpose, it is only a preliminary framework utilised for the empirical testing part of the thesis. This framework will then be refined if proven necessary by the findings in the British supply chain.

2.2.1 SCM Practices

There is an abundance of SCM practices definitions, yet the one used by Li et al. (2006) is “a set of activities undertaken in an organisation to promote effective management of its supply chain” (p. 109). The practices in their framework are strategic supplier partnership, customer relationship, level of information sharing, quality of information sharing and postponement. SCM practices can also be affected by factors external to the supply chain such as industry type, the positioning of the organisation in the supply chain and the type of supply chain (Li et al., 2006). However, these are not included in their choice of SCM practices, as the organisations themselves often cannot affect this. The practices included in the model will be assessed below.

2.2.1.1 Strategic Supplier Partnerships

Strategic supplier partnership is referred to as a durable relationship between an organisation and its suppliers. For it to be considered a strategic partnership, the partnership should be constructed so that organisations part of the supply chain can achieve long-term benefits from their “membership” (Li et al., 2006; Qrunfleh & Tarafdar, 2013). As long as a relationship brings value to both parties in a partnership, long-term benefits are said to exist (Monczka et al., 1998). Also, the partnerships should include mutual collaboration in the form of problem-solving, as supply chains are dependent on trust and collaboration for them to be as efficient as possible (Stuart, 1997). Organisations in a supply chain characterised by strategic partnerships are said to be more efficient than competitors and will develop resources and capabilities difficult to duplicate (Qrunfleh & Tarafdar, 2013).

A strategic partnership can lead to access to new markets, new products or technology, consequently enabling partaking organisations to benefit from each other and can become a make-or-break moment when it comes to the success of the supply chain (Li et al., 2006). Since partnerships are described as highly important and a source of competitive advantage, it is valuable to test their existence in the selected UK supply chain. As the tested supply chain is characterised by low-margins and powerful retailers who pressure the other parties into worse contracts, it will be of interest to examine the relationships and see whether there are partnerships based on trust and collaboration, or whether the actors are more isolated and rely on internal capabilities to gain an advantage.

2.2.1.2 Customer Relationships

Customer relationships, entailing all practices used in order to manage relationships with customers, can encompass activities for managing customer complaints or practices used to build a long-term relationship with customers (Li et al., 2006). Well-managed customer relationships have been claimed to be one of the most important sources of competitive advantage as competing firms often experience difficulties when trying to duplicate them (Day, 2000). Thus, it is sometimes claimed that well-managed customer relationships are almost entirely secured from competition (Day, 2000). Through the development of technology and the ways in which customers are increasingly using technology to become informed and to create personalised products, organisations are to a greater extent focusing on the importance of these relationships to keep customers (Hoyer et al., 2010).

Customer relationships in SCM can refer to both the end-customer (consumers), but also the customers within the supply chain (such as suppliers having retailers as their customers). However, in their framework, Li et al. (2006) are mainly referring to the customers at the end of the supply chain, even though both categories are of vital importance when implementing SCM practices in organisations. In this thesis, customers will be considered the clients that buy from each of the supply chain actors (for example, a retailer buying produce from a farmer), and the end-customer equates to the consumer. Creating and maintaining relationships with consumers are of greater importance to the organisation positioned closest to the end of the supply chain, e.g. a retailer, as this is the actor the consumer is usually interacting with (Li et al., 2006). However, with the increasing use of technology, the consumer can easily become informed about the full supply chain in ways that were not possible before (Hoyer et al., 2010), consequently leading to higher pressure on the supply chain as a whole.

2.2.1.3 Level of Information Sharing: Quantity and Quality

The two further SCM practices are level of information sharing and quality of information sharing (Li et al., 2006). Essentially, these concepts are concerned with the quantity and quality of the communication habits between the partners within a supply chain (Monczka et al., 1998). Quantity is referred to the level of information sharing, the focal point being the degree to which an organisation shares their proprietary information with their supply chain partners (Li et al., 2006). Proprietary information can include a vast array of factors from growth potential and financial information, to plans on expanding firm operations, and is thus not restricted to, for example, patent information or trade secrets (Monczka et al., 1998). This means that

information can be both of a strategic and tactical nature (Li et al., 2006). Partners able to exchange information on a regular basis will be able to function more as one single entity and such collaborative work will enable the partners to reap greater success for the supply chain as a whole, as well as for the individual organisations (Li et al., 2006).

Li et al. (2006) refers to quality of information sharing as factors including accuracy, timeliness and credibility of the shared information. Quality of information sharing is vital, as sharing information just for the sake of sharing will not benefit the supply chain. As follows, quality of information depends on the type of information shared, at what time in the process it is shared and in what way it is shared. Also, the information has to reach the correct individual in the other organisation for it to be useful and benefit the supply chain (Li et al., 2006). In order for a supply chain to be able to respond swiftly to customers and their demands, the quality of information shared must be high (Mason-Jones & Towill, 1997). The supply chain can be negatively affected if the process of sharing information is not well-functioning or if one actor is withholding information, as this can create information asymmetry between the partners (Li et al., 2006). Withholding information is often derived from the notion that information equals power (Mason-Jones & Towill, 1997) and that keeping information within the own organisation will increase power and profitability. Nevertheless, information can also be withheld inside an organisation due to fear of the information reaching competing organisations and thus the organisation's own performance can be accepted to be slightly lower as long as competitors cannot access the information (Li et al., 2006).

Both quantity and quality of information can be negatively affected by the length of the supply chain and the type of industry the supply chain is active in (Li et al., 2006). The longer information travels between organisations and different individuals, the higher the risk is that the information will arrive at the end-point distorted (Mason-Jones & Towill, 1997; Li et al., 2006). Thus, the length of a supply chain is meaningful when it comes to information sharing. It will then be of significant value to test the level of both the quality and quantity of information sharing in the UK food supply chain, as it will not only illustrate the practices that are vital to fast and safe fresh produce delivery, but also deepen the understanding of the relationships in a relatively long supply chain.

2.2.1.4 Postponement

The fifth and final SCM practice used by Li et al. (2006) is postponement, which has been defined as “the practice of moving forward one or more operations or activities to a much later

point in the supply chain” (p.110), referring to how an organisation determines how many and which steps it is able to postpone. As the focus of this thesis will be a fresh produce supply chain, this practice will not be highly applicable, as fresh produce cannot be postponed in a similar way to e.g. manufacturing goods.

2.2.1.5 Additional Practices

Although the simplicity and clarity of the model has resulted in its popularity, Li et al.’s (2006) article on SCM has also received some criticism from other academics. Van der Vaart and van Donk (2006, p. 42) question the “constructs, measurements and items used” when SCM is examined through survey-based research and they highlight some of their concerns with regards to this type of research. They claim that there has been a clear preference for measuring the performance of the focal firm only, and this through using subjective measures, with mostly low response rates, thus ignoring the performance of the full supply chain (van der Vaart & van Donk, 2006). Hence, it is important for the validity of this framework to test it on a specific supply chain and obtain primary data about its participants’ SCM practices and performance, which is the aim of this thesis.

Another area where Li et al. (2006) have received criticism is their selection of the components that have been chosen to represent the elements of the framework (van der Vaart & van Donk, 2006). The authors have not made an exhaustive list of neither SCM practices nor competitive advantage sources, as it was seen that several avenues of research provided additional explanations for performance, such as the lean and agile philosophies (Christopher, 2000), or outsourcing (Koh et al, 2007). Furthermore, Li et al. (2006) do not examine internal capabilities as sources of competitive advantage, as the practices that they have chosen are all focused on relationships and reactions that the firm has to the external environment, emphasising partnerships and information sharing. This has potentially skewed the framework towards an IO view of firms and performance. Hence, this thesis aims at balancing the model by additionally assessing the internal capabilities of actors in the UK supply chain and understanding whether competitive advantages and above-average performance can be explained by an RBV view of the firm.

As a result, the Li et al. (2006) model may be refined through the potential addition of other SCM practices that the empirical evidence proves to lead to a competitive advantage and/or it can be elaborated by the incorporation of RBV elements.

2.2.2 Competitive Advantage

In the Li et al. (2006) framework, competitive advantage is achieved through useful adoption of interrelated SCM practices, through which “a defensible position over its competitors” is created (p. 111). A competitive advantage can be achieved when an organisation inhabits certain competencies, namely price/cost, quality, delivery dependability, product innovation and short time-to-market (Li et al., 2006). Other authors emphasised cost, flexibility, quality and delivery (for example Hayes & Wheelwright, 1984; Berry et al., 1991), which are factors used specifically in the context of SCM.

Li et al.’s (2006) model hypothesizes that firms with high levels of SCM practices will have high levels of competitive advantage. An organisation inhabiting one or more of the above-mentioned competencies, whilst the competing firms do not, creates a competitive advantage, thus enabling it to perform above-average in comparison to the competition and achieving higher organisational performance. This shows that in Li et al.’s (2006) framework, the presence of the mentioned SCM practices (e.g. strategic supplier partnership and level of information sharing) lead to the presence of the competitive advantages (e.g. price/cost). It indicates that the authors believe the advantages to arise from those specific SCM practices, focused on relationships and reactions to the external environment, thus linked with an IO interpretation of competitive advantage and performance.

The positive effects of a competitive advantage range from customer satisfaction and loyalty to higher operational efficiency (Li et al., 2006). Firms with loyal customers will exhibit less customers switching to another brand (Yang & Peterson, 2004), which will increase sales and firm’s profitability. Nevertheless, as previously mentioned, this can differ between organisations adopting contrasting strategies, such as a cost-leader strategy or a differentiation strategy (Porter, 1985). For example, an organisation offering high quality products will be able to charge higher prices and increase the profit margin on sales and return on investment (Porter, 1985; Li et al., 2006). Furthermore, short time-to-market and speedy product innovation can give an organisation a first-mover advantage (Schilling, 2016), enabling higher market shares and larger sales volumes. Stemming from this argument, Li et al. (2006) claim there is a positive relationship between competitive advantage and organisational performance.

As emphasised above, Li et al.’s (2006) framework links the presence of IO related SCM practices with the existence of competitive advantage while disregarding the possibility of said

advantages stemming from a firm's internal capabilities. The model's advantages themselves could potentially originate from internal competencies, since the ability to innovate, provide higher quality and reduce cost could be created from the way a firm manages its internal operations. Therefore, for the purpose of this thesis, the list of competitive advantages in Li et al.'s (2006) framework is deemed to be in line with the research question, as the presence of these advantages can indicate above-average performance (exemplified by the low-cost retailers' success in the UK supply chain). However, in this list of SCM practices, there is no practice clearly linked with the internal capabilities of the firm, instead emphasising the importance of the organisation's relationships and reactions to the impact of the external environment. Thus, in order to understand whether it is a specific practice internal to the firm that enables the creation and maintenance of the competitive advantages listed, the current research will examine the UK supply chain actors from both an IO perspective (represented by the Li et al. (2006) framework) and from an RBV perspective (represented through additional questions about SCM practices linked with internal capabilities).

2.2.3 Organisational Performance

The next intuitive link that supply chain literature has made has been the impact of SCM on organisational performance. Justifiably, many articles focus on performance, as research has attempted to understand what it is about SCM that improves performance, and therefore also pinpoint what organisations have to do with their supply chain decision-making in order to maintain and improve performance. Gibson, Mentzer and Cook (2005) claim that research in SCM practices should continue and that refinements of SCM models can help further explain how firm performance is impacted by different ways of managing a supply chain. Chen and Paulraj (2004) argue that organisational performance through SCM is not connected to one single firm, but rather to all partners in the supply chain, with the authors examining both financial and non-financial performance indicators.

Tan, Kannan and Handfield (1998) refer to organisational performance as part quality performance and part financial performance, when examining performance in supply chains with emphasis on risk mitigation. What many researchers agree on is that organisational performance often is characterised, at least in part, by financial performance (Holmberg, 2000; Mentzer et al., 2011; Stock, Greis & Kasarda, 2000). This is since financial performance can be considered more tangible than other measurements, consequently easier to measure. Stock,

Greis and Kasarda (2000) refer to financial performance as a measurement highly responsive to the external environment of the firm, and not solely what is done internally, referring to “conventional” measurements like market share, which is measured in comparison to other firms. Additionally, they stress the importance of considering whether these measurements are affected by the relationships between supply chain structure and logistics (Stock, Greis & Kasarda, 2000). Also, researchers have recommended defining supply chain practices and evaluating suppliers in order to positively impact performance (Tan, Lyman & Wisner, 2002), as well as considering lean practices, outsourcing and multi-suppliers (Koh et al., 2007). Thus, it can be seen that there are various definitions and determinants of organisational performance, both from an economical and an organisational perspective (McGivern & Tvorik, 1997; Popova & Sharpanskukh, 2010).

According to Li et al. (2006), the short-term goals of SCM practices are predominantly to increase organisational performance through increasing productivity in the supply chain, thus reducing inventory and cycle time. The long-term goals are usually to increase market share and profits for all actors in the supply chain (Li et al., 2006). Previously, organisations have concentrated mainly on financial metrics when comparing organisations, evaluating their behaviour and assessing whether it brings value to the supply chain over a longer period of time. However, increasingly, this has been complemented with non-financial measures (Defee & Stank, 2005). When addressing organisational performance, any action carried out by an organisation should lead to higher performance than before (Li et al., 2006). Organisational performance is said to increase by efficient SCM practices such as partnerships and high levels of information sharing (Li et al., 2006; Cao & Zhang, 2010). Li et al. (2006) make the distinction between market-oriented goals and financial goals when addressing organisational performance and operationalise it through measurements such as return on investment, sales growth, market share and competitive position. The choice of firms to be analysed in the current thesis and the operationalisation of performance will be explained in the methodology.

As a final note, the views on competitive advantage and organisational performance differ across different schools of research. Li et al. (2006) make a clear distinction between the two concepts, saying that competitive advantage will affect the level of organisational performance, i.e. claiming that one is a result of the other, and that organisational performance is derived from competitive advantage. Their research show that SCM practices mainly influence organisational performance through competitive advantage and not directly from SCM

practices to organisational performance. This is in accordance to IO and the “classical” Porterian view, where Porter (1985) claims that efficient value chain practices will lead to a competitive advantage consequently increasing organisational performance. However, other researchers, such as Barney (1991) in the RBV, equate competitive advantage with organisational performance, making no distinction between the two. This thesis thus aims to offer a degree of balance between the views and incorporating the potential internal firm capabilities found empirically in an otherwise predominantly IO favouring model created by Li et al (2006).

2.3 Chapter Summary

It can be observed from the literature presented above that SCM is seen as an important influence on how well firms perform and how they obtain and maintain a competitive advantage. Most SCM frameworks have provided theoretical contributions either through the IO perspective or the RBV perspective, which meant a mostly unbalanced view on firms and their performance. Hence, testing Li et al.’s (2006) model can provide a valuable contribution to existing research in the field, as it can empirically show which SCM practices influence the firm’s position in the environment. However, it needs to be determined whether the Li et al. (2006) framework has examined all the possibilities of obtaining a competitive advantage and higher performance through SCM practices, or if their model can be updated. Since Li et al. (2006) exclude internal capabilities from their framework, this thesis will, as said, also aim to test if internal capabilities influence the success of a supply chain or not. If any additional practices are found, whether they are related to internal capabilities (such as a management philosophy like lean or agile), or are a strategic decision made by examining the firm position in the environment (such as outsourcing), they will be added to a revised framework, as seen in Figure 3. The figure below is a visualisation of any potential modifications.

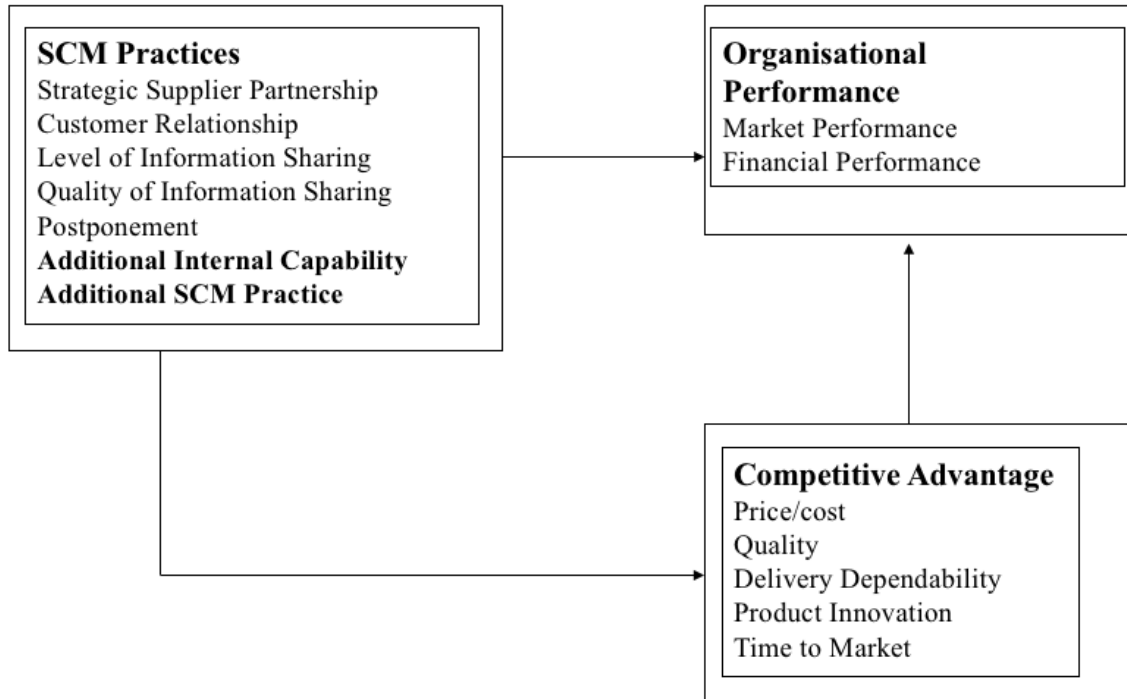


Figure 3. Our proposed framework built upon the framework from Li et al. (2006).

3 Methodology

3.1 Introduction

In this chapter, the methodology underlying the research for this Master Thesis will be presented. The methodological choices regarding research approach and design will be illustrated, followed by data collection and analysis and finally, a reflection about the quality of the research.

3.2 Research Approach

This research aims to enhance the empirical understanding of the SCM practices of firms in a low-margin UK supply chain characterised by one actor in the supply chain being a low-cost retailer, through a qualitative study. More specifically, this research aims at increasing the understanding of which SCM practices lead to a competitive advantage and higher organisational performance of firms within the supply chain. According to Bryman and Bell (2015), qualitative studies are a way of researching where emphasis is placed on social constructs and the gathering and analysis of these, as opposed to numerical components. The advantage of a qualitative study is then that the researcher can achieve an in-depth understanding of the constructs of the social world and the processes within it (Easterby-Smith, Thorpe & Jackson, 2015; Polit & Beck, 2010), which is consistent with the objective of this study as we aim to enhance the empirical understanding through examining a theoretical framework.

However, attaining external validity can prove difficult as some criticism towards qualitative studies are that they are not as generalisable as quantitative studies. Consequently, higher reliability is easier to achieve in a quantitative study (Easterby-Smith, Thorpe & Jackson, 2015). Still, given the research objectives, a qualitative study enabling finding explanations of a broader context was deemed more appropriate as this would have been harder to attain in a quantitative study (Bryman & Bell, 2015). Choosing an approach for a qualitative study can present problems as neither an inductive or a deductive approach is considered a perfect fit. The deductive approach is heavily associated with quantitative studies as it has its standing point in formulating hypotheses which are then proved or disproved, whereas an inductive approach is aiming towards drawing conclusions based on empirical material where the starting point is not

necessarily a theoretical one (Bryman & Bell, 2015). Nevertheless, both the inductive and deductive approach have received some criticism as it is said that neither tries to understand veiled patterns in research (Alvesson & Sköldbberg, 2009). This is instead enabled through the abductive approach, which is a mix between the inductive and deductive approach. This approach was considered suitable for this thesis, as the purpose of this research is to study theoretical concepts and in combination with this to study empirical material. The abductive approach would then enable an iterative process between examining theory and empirical evidence.

3.3 Research Design

Given the research purpose, it was vital to examine what each actor in the supply chain emphasised as important SCM practices for the success of their organisation, and if these matched the SCM practices in the Li et al. (2006) framework. Furthermore, it would bring a greater empirical understanding in the field if we could crystallise whether all actors stressed the same practices or if they differed depending on their location in the supply chain. Thus, we tested whether the five SCM practices existed in the supply chain and if the respondents mentioned additional factors, unaided by us. These could be decisions taken as a reaction to the external environment or internal capabilities that the respondents believed were important. Hence, the aim was to test the part of the Li et al. (2006) framework that entails the SCM practices, and according to the amount of importance that the respondents gave to each practice, decide whether the practice was vital for competitive advantage and organisational performance. We kept the operationalisation of the SCM practices and organisational performance identical to the one illustrated by Li et al. (2006). Furthermore, as previously mentioned, we considered additional methods of obtaining a competitive advantage, as well as operationalised the competitiveness of the industry by specifying it was low-margin (Reagan, 2013).

Since the focus of the thesis is on several actors, a multiple case study was fitting as this would enable the examination of several links in the supply chain while “understanding the dynamics present within single settings” (Eisenhardt, 1989, p. 534). Case studies are often used to discern relationships and to understand the meaning of these (Riege, 2003) and can be used when testing theory (Eisenhardt, 1989). Both of these arguments are consistent with the aim of the thesis and enhanced our conviction that a multiple case study was fitting.

Case studies are characterised by looking “in depth at one, or a small number of, organisations, events or individuals, generally over time” (Easterby-Smith, Thorpe & Jackson, 2015, p. 89) and have advantages such as assisting the researcher in obtaining a deeper understanding of the organisations or events under research (Easterby-Smith, Thorpe & Jackson, 2015). The criticism directed against case studies about producing bulks of data during the research process (Yin, 2013a) was reflected upon especially since the timeframe for the study was quite limited. We tried to restrict the amount of collected data through defining the boundaries and the scope of the study, which is also said to facilitate analytic generalisation (Riege, 2003). Analytic generalisation is said to be more important than generalisation when it comes to qualitative studies (Yin, 2013a), as the result will be embedded in a certain context (Polit & Beck, 2010). Analytic generalisation can be used to generalise the findings specifically from a case study, which “should aim to apply to other concrete situations and not just contribute to abstract theory building” (Yin, 2013b, p. 325).

3.4 Choice of Supply Chain and Organisations

As part of our research design includes the examination of firms in a specific supply chain, here we want to elaborate on the supply chain that was selected in order to empirically test the theoretical framework and its potential adjustments. Li et al. (2006) suggest that future research should examine their theoretical framework through the example of a specific supply chain, thus we thought it was valuable to do so in order to determine the validity of the framework when tested empirically. Further to this academic aim, it was believed important to provide insights to the business world and aid practitioners in difficult SCM situations. Thus, we thought that the double academic and practical aim was best fulfilled by choosing a low-margin, changing industry and supply chain.

As mentioned in the introduction chapter, the British grocery retailing segment is undergoing structural changes and is characterised by its dynamism due to the presence of rapidly growing low-cost retailers. It is then of interest to see how these low-cost retailers affect their upstream supply chain in an already price-pressured industry and understand both if the success of these discounters stems from their SCM practices, as well as see what practices the other players in the supply chain are using in order to maintain profitability in the face of such pressure. It can then be observed if the Li et al. (2006) theoretical model provides useful SCM advice under such specific conditions, or if it needs complementary elements to be able to aid practitioners

in low-margin, competitive industries. A specific industry with such characteristics is the dairy industry in the UK, which has undergone changes in the last few years and is facing margin and profit vulnerability (e.g. Fearne, Zanutto-Filho & Pizzolato, 2008). It was thus seen as important to test the theoretical framework and empirically prove it or alter it, since it will provide valuable advice to practitioners facing the threat of low-cost retailers. It will also further the academic progress in the area of SCM, organisational performance, and competitive advantage.

The low-cost retailers chosen as focus were Aldi and Lidl, as they are the fastest growing supermarket chains in the UK, increasingly claiming customer loyalty and market share from the established UK grocery retailers (Statista, 2018). It was initially deliberated whether to test the existence of the practices on them and their upstream contracted partners. Yet, during the research process it was found that the supply chains, and the relationships within these, are mostly market based and cyclical, rather than being enduring over a longer period of time. Since the relationships are prone to change, it is not entirely significant to test the specific relationships that were active at the time of researching, as opposed to any other relationships, since the former could be a lot shorter and less significant than the latter. For example, during the time of writing, Lidl announced a three-year contract with Muller, a large dairy processor, which was described as a “long-term strategic partnership” by Muller’s managing director (Black, 2018). Yet, not only is the relationship too new to comprehend its benefits for the parties, it demonstrates that the dairy supply chain primarily functions according to the most beneficial deals that the players can get at a certain point in time (as will be illustrated in the empirical findings). Moreover, by examining Lidl and Aldi’s contracted partners, we risked losing the focus of the research question, which aims at understanding what SCM practices bring higher performance and a competitive advantage.

Therefore, in order to fulfil the aim of this thesis, we decided to examine actors who are currently in possession of a competitive advantage and/or show higher performance, as defined by Li et al. (2006), in order to examine if they are utilising the SCM practices mentioned as leading to a competitive advantage and higher organisational performance. In order to empirically prove which SCM practices are performed by the successful players in a supply chain, these successful players must be the ones investigated. For the purpose of this study, success is defined as having above-average performance and a competitive advantage, shown through growth and/or high market share. Thus, in the gathering of empirical data, a

methodological choice was taken to test the most successful players in each step of the supply system, rather than focus on organisations that are linked by contract in a specific supply chain. That is because it is deemed to be more informative for the research question to be able to understand what SCM practices the successful players are utilising. By doing so, the link between their practices and their performance/competitive advantage can be identified, giving practitioners the ability to replicate it, and academics further insight into the management decisions in low-margin supply chains.

Hence, the respondents that were contacted were from organisations with high organisational performance/competitive advantage. This was determined either through the highest market share or fastest growth in the industry, as it was deemed illustrative to understand and present the reader with the SCM practices that enable such growth and the maintenance of a high market share. The respondents that were interviewed are provided later in the methodology.

3.5 Data Collection Method

The collection of qualitative data is often more extensive than the gathering of quantitative data. The chosen data type of this thesis was both primary and secondary data. As this thesis is a multiple case study, multiple data methods were used, which is said to enhance data credibility (Yin, 2003). Multiple data methods can consist of for example archival data and interviews (Eisenhardt, 1989).

The data collection started with gathering secondary data based on the research question, where we began to search for the most prevalent SCM practices in peer-reviewed journal articles. Peer-reviewed articles are often deemed to be the most important source of information (Easterby-Smith, Thorpe & Jackson, 2015), hence, the choice of this type of information. Additional to examining the journal articles by content, the amount of citations of every article was considered, as this can give an indication about the reliability of the source (Easterby-Smith, Thorpe & Jackson, 2015). Reliability of literature can be challenging when it comes to so-called grey literature (Easterby-Smith, Thorpe & Jackson, 2015), which is why the amount of grey literature was limited to sources from established newspapers that were considered trustworthy. As previously noted, grey literature was excluded from the literature review in order to increase the reliability of that section. Based on these criteria for reliability, our preliminary theoretical framework was chosen through the literature review and thus, part of the research question was also answered.

Secondary data was useful to some extent when testing the framework empirically, however, to go beyond this information, collection of primary data in the form of interviews with the actors in the supply chain was necessary. Interviews are said to help the “in-depth exploration of a particular topic or experience” (Easterby-Smith, Thorpe & Jackson, 2015, p. 134), provide elucidation of personal experiences and can help the researcher discover things that otherwise can be problematic to detect (Easterby-Smith, Thorpe & Jackson, 2015). Hence, interviews were valuable as they provided additional understanding about the framework and its limitations, since secondary data, though useful, would not enable us to fully answer our research question.

The primary empirical material that was collected will be presented according to themes that the respondents emphasised as important, and further divided into data from practitioners and data from researchers. This will be done as we found it important to illustrate the patterns that emerged from the respondents, as well as showcase the divergent views of the practitioners’ and researchers’ groups. Therefore, the primary data will present the concepts that were mentioned most often and given a higher degree of importance by the interviewees, regardless of whether the element figures or not in Li et al.’s (2006) framework. This allows us to provide the reader with an understanding of the opinions and observations of individuals involved in SCM practices, without them being bound to a predetermined theoretical model. The analysis will then be presented according to the theoretical framework, in an attempt to match the findings from the empirical data gathering with the Li et al. (2006) model.

3.5.1 Interviews

Qualitative interviews “offer ways by which rich and detailed information can be gathered from respondents to reveal aspects of their lives, understandings or experience” (Easterby-Smith, Thorpe & Jackson, 2015, p. 878). Amongst the different types of interviews, semi-structured interviews were deemed most fruitful for our way forward. Semi-structured interviews give the researcher structure but also freedom to go outside the structure (Bryman & Bell, 2015), can be used to stimulate conversation, and are directed towards knowing the respondent’s point of view (Easterby-Smith, Thorpe & Jackson, 2015). This can be beneficial given the research purpose, as we as researchers had some previous knowledge, but not enough to restrict the interviews to structured ones. Structured interviews are beneficial in the way of providing answers to clear questions and staying on topic. However, given our limited knowledge,

structured interviews were only used when the respondent was unable to have a telephone interview and only could reply via email. Unstructured interviews were avoided, as we aimed to test a theoretical framework and needed some boundaries in order to do so.

3.5.2 Interview Preparations

Prior to contacting actors from the supply chain, a few criteria were set up for the respondents. Any respondent had to (1) work within an organisation within the dairy supply chain in the UK and (2) be knowledgeable enough to answer our questions, i.e. have insights in the dairy supply chain and SCM practices. To come in contact with respondents in the UK market, we used phone, email and LinkedIn. Snowball sampling was then used to enable further access to actors in the supply chain, thus when we managed to access an actor in the supply chain, we asked this person to refer us to other actors that fulfilled our predetermined criteria (Easterby-Smith, Thorpe & Jackson, 2015). The practitioners we spoke to were all connected to an organisation active in the dairy supply chain, therefore providing first-hand insight into the industry. However, their accounts of the events can also be distorted by their connection to a specific organisation and its interests. Furthermore, we did not manage to get in touch with retailers and farmers. This led to us contacting and interviewing researchers that were non-affiliated, and hence able to give an impartial and holistic view of the dairy supply chain. The researchers were asked about their observations based on their multiple articles and years of research, which is why we categorise this information as being fact-based rather than opinion-based and should complement the storyline described by the practitioners.

3.5.3 Design of Interview Guide

Before conducting any interviews, an interview guide based on our theoretical framework was created. There was also room left to see if any additional elements like internal capabilities would surface during an interview. As advised by Easterby-Smith, Thorpe and Jackson (2015), the questions were formulated in an easy and clear way and leading questions were avoided, so as to abstain from interviewer bias. “Test interviews” were performed with individuals other than our respondents in order to ensure that the questions were understandable, clear and left some room for flexibility (Easterby-Smith, Thorpe & Jackson, 2015). Depending on the respondent’s profession, i.e. either as a practitioner or a researcher, we slightly adjusted the

questions in order to suit the respondent's level of knowledge about theoretical concepts. We also did not ask the respondents about their firms' organisational performance, as we chose to assess the highest performing firms through impartial measures such as market share and growth, as well as objective secondary sources. The interview guides can be found in Appendices A, B and C.

3.5.4 Conducting the Interviews

The interviewing process was done through what Easterby-Smith, Thorpe and Jackson (2015) refer to as remote interviewing, i.e. through telephone, Skype and email. Even though face-to-face interviews are thought to be better since they can provide the researcher with non-verbal signs and a larger context, remote interviewing can give both the interviewer and the respondents greater flexibility, a sense of relaxation and can facilitate the bookings of interviews as the respondent tends to feel less bound (Easterby-Smith, Thorpe & Jackson, 2015).

Before an interview started the respondent was asked about consent to record the interviews, so that we were able to re-listen and transcribe them afterwards. Recording is said to be one of the general concerns about interviews (Easterby-Smith, Thorpe and Jackson, 2015) as respondents might feel inhibited by knowing their answers are recorded. However, we felt that recording the interviews was necessary as this is said to increase reliability of the study.

3.5.5 Respondents

In Table 1 and 2, the respondents are presented in anonymous form. In the empirical findings, the respondents will be referenced by their respondent number, e.g. "Respondent 1", which enables the tracing of statements to either a practitioner or researcher.

<i>Semi-Structured Interviews</i>			
Respondent	Supply Chain Link	Time, minutes	Via
Respondent 1	Supplier of Processing Solutions	40	Telephone
Respondent 2	Supplier of Processing Solutions	30	Telephone
Respondent 3	Supplier of Processing Solutions	35	Skype Audio
Respondent 4	Processor Union Representative	40	Telephone
Respondent 5	Researcher in Marketing, Retailing and SCM, predominantly UK market	55	Skype Video
Respondent 6	Researcher in Retailing and Marketing, predominantly UK market	40	Skype Video
Respondent 7	Researcher in Retail Management and Retail Logistics, predominantly UK market	60	FaceTime Video
<i>Total Time, minutes</i>		<i>300 (5 hours)</i>	

Table 1. Semi-Structured Interviews.

<i>Structured Interviews</i>		
Respondent	Supply Chain Link	Via
Respondent 8	Researcher in Retailing and in UK Dairy Industry	Email
Respondent 9	Researcher in Logistics and SCM, predominantly UK market	Email
Respondent 10	Researcher in Marketing, Logistics and SCM, predominantly UK market	Email

Table 2. Structured Interviews.

3.6 Data Analysis

The analysis of the data was an iterative process, as the interviews were spread out during a few weeks. This gave us the chance to go back and forth between theory and empirics and facilitate revision of any questions that were unclear to the respondents. As such, the abductive approach that was chosen proved fruitful. Seven interviews were conducted, and three email responses collected with secondary data used to supplement the interviews. Complementing the primary data with secondary data was thought to be appropriate as it enabled us to get several other points of view in the empirics. The point of view of practitioners can be subject to bias as they answered the questions based on the interest of their organisations, which is another reason as to why we saw it necessary to complement this with researcher data.

For the majority of the interviews, both of us were present; one conducting the interview and one taking notes. To not distort the meaning of what the respondents said, all interviews were transcribed and then categorised according to the theoretical concepts. According to Bryman and Bell (2015), this type of categorisation can create awareness and display things that were missed when conducting the interview. Also, transcribing can help to get a more holistic picture of the interview and the context, and is said to increase validity (Riege, 2003). The few instances where there were disagreements with regards to the objective of the speaker, the interview was listened to again.

3.7 Quality of Research

Within the area of qualitative studies, there is some concern regarding how to assure and demonstrate quality (Bryman & Bell, 2015). In order to ensure a reliable study, respondents were selected based on their profession and knowledge in dairy SCM. Furthermore, the researchers included in the study have all dedicated most of their professional lives in these areas, thus making them reliable sources of information for this research. To increase construct validity, several data sources were used when collecting data, as suggested by Riege (2003).

External validity is defined as how “far the conclusion can be generalized across other types of person, settings and times” (Easterby-Smith, Thorpe & Jackson, 2015, p. 868). To increase the external validity, the questions used for the interviews were predetermined, except for the follow-up questions that were asked in the interviews, as this can make the study easier to transfer to another context (Riege, 2003). Also, in this methodology chapter the execution of the research has been clearly described, we have kept meticulous documentation and the choices made have been presented in a clear line of argumentations, thus the study should be easy to understand and replicate. Additionally, we attempted to bring the empirical findings to a higher level of abstraction in the analysis as this can help managers in other competitive industries. Based on this, we would consider this study generalisable to other settings.

3.8 Chapter Summary

This chapter has provided a detailed description of how the research underlying this Master Thesis has been conducted. The chosen approach for the thesis was a qualitative study in order to gain a deeper knowledge about which SCM practices enable competitive advantages and higher organisational performance for organisations in a UK dairy supply chain. Through the literature review, part of the research question was answered. Interviews and secondary data were used as a combination, in order to increase analytic generalisability to facilitate the utility of this study to both practitioners and future research.

4 Empirical Findings

4.1 Introduction

In this section the findings from our empirical study will be presented. Firstly, the secondary data will be presented, followed by the primary data that was gathered through interviews. The secondary data consists predominantly of newspaper articles, and dairy unions reports. The utilisation of press material was a deliberate choice made in order to showcase the live discussion surrounding the dairy industry in the UK. Naturally, this type of evidence is susceptible to bias, as diverging interests can dictate the content, depending on the organisation releasing it. Yet it is important to demonstrate to the reader that the dairy industry is affected by political and legal pressure, as well as organisations and individuals with contrasting interests. We have selected articles from reputable newspapers and have attempted to use multiple references when discussing a delicate or controversial issue. Additionally, these references were complemented by journal articles written by academics researching retail and the dairy industry in the UK, who are not affiliated with organisations interested in influencing the storyline. Therefore, the secondary data presented displays a balanced picture of the conversations happening in the dairy industry, as well as an evolution of the narrative.

4.2 From Cow to Consumer – An Overview

The broad subject of dairy includes not only liquid drinking milk, but also products such as yoghurts, cheese and a wide range of non-dairy alternatives like almond and soy milk. All across the globe, the demand for both regular dairy products (Deloitte, 2017) and non-dairy alternatives is growing (Cornall, 2017), and the global dairy sector is expected to increase with more than 2 % per annum moving forward (Deloitte 2017; IFCN Dairy, 2016; Tetra Pak, 2015; Vitaliano, 2016). According to a market report by Deloitte (2017), global growth in demand is driven largely by increasing urbanisation and from increasing purchasing power in emerging markets.

The UK dairy industry is the 10th largest milk producer in the world with a market value of £6 billion; 98% of households eat or drink dairy products (Countryside, 2017). Around 60% of

dairy is sold as liquid drinking milk, a high figure when compared to the majority of Europe where that figure is around 30% (Daneshkhu, 2016). However, consumption of non-dairy products has increased by 28.8% since 2015, indicating a trend towards these types of products (Cornall, 2017). Given the high number of dairy sold as liquid milk, the UK dairy market is sometimes said to be volatile and vulnerable to fluctuations in price. However, it is still claimed to be one of the best in the world in terms of food safety, which is said to stem from efficient supply chain management that limits the risk of corruption thus ensuring high quality dairy products (Dairy UK, 2018a).

The UK dairy industry has been the source of large discussions in recent years, specifically with regards to the relationships within the supply chain. During the last decades, power dynamics are said to have shifted, moving towards increasing power for big retailers (Beaton-Wells & Taylor, 2017; Fernie, Sparks & McKinnon, 2010; Hingley, Lindgreen & Casswell, 2006; Smith, 2006). Generally, food supply chains are now characterised by the presence of big retailers, which are said to behave opportunistic towards their suppliers (Daneshkhu, 2016). This opportunism is most present when there is some form of dependence between the parties in the supply chain (Maglaras, Bournlakis & Fotopoulos, 2012), which is argued to be the case in the dairy supply chain where dairy farmers are highly dependent on their downstream supply chain. This often results in power asymmetry between retailers and their suppliers upstream. The power asymmetry in retail supply chains has been examined by Beaton-Wells and Taylor (2017), whose findings suggest that the last decades have created an imbalance in bargaining power between big retailers and the businesses that supply them. Retailers are said to exploit this imbalance to their own advantage and push their suppliers to go into contracts that are almost punitive in order to increase margins for themselves. Overall, the food industry is claimed to have been slow when it comes to partnering within their supply chain and it is only in the last decade that SCM has moved up the agenda in the industry (Fearne, Zanquetto-Filho & Pizzolato, 2008).

The slow progress upstream is due to a lack of trust between the different parties in the supply chain (Fearne, Zanquetto-Filho & Pizzolato, 2008), where each actor traditionally thought of themselves more than trying to form trusting relationships with their supply chain partners. However, there are also people claiming that the 'milk crisis' in the UK dairy industry has come as a result of farmers receiving different prices for their dairy and that these farmers have

different processes when it comes to production, which is driving structural changes in the industry (Matthews, 2015).

As the purpose of this thesis is to examine every link of a dairy supply chain in the UK dairy market, we will examine some historical developments and the current situation of each player in the dairy supply chain in order to lay an empirical foundation for the upcoming analysis where we will assess the SCM practices in the dairy supply chain firms.

4.2.1 Farmers

Dairy farming in the UK has over the past decade been a source of media attention due to falling prices which have forced dairy farmers, particularly smaller ones, to go out of business (Anderson & Curry, 2016; Dairy AHDB, 2018a; The Independent, 2005; Langley, 2015). Already in 2005, The Independent stated that “milk has become a battleground” referring to the nationwide strikes by farmers protesting against low milk prices (in 2015 consumers could still buy milk cheaper than bottled water (Barrett & Shubber, 2015; Langley, 2015)) and against retailers taking more money for themselves. The number of dairy farms has more than halved during the last ten years (Daneshkhu, 2015; Langley, 2015) and current figures show that there are approximately 10,500 dairy farms in the UK, this figure being almost 21,000 about a decade ago (Anderson, 2016). As large amounts of milk are sold as liquid drinking milk in the UK, dairy farmers are more sensitive to price changes than their European counterparts, which is affecting their chance to make profit on milk (Daneshkhu, 2016).

In the UK dairy supply chain, farmers are put out to be the weakest player and have become the focus when the challenges facing the British agricultural sector are addressed (Anderson, 2016; Wasley, 2015). Furthermore, farmers are said to be affected most when the price of liquid milk falls in retail, which has led to calls for more transparency from the retailers and processors, and for contracts that include fairer conditions, including sharing the risk of farmers (Odell, 2015). The protests organised by dairy farmers have focused on persuading politicians into taking action not only in the long-run, but in the short-run too, saying that farmers might not live to see the effects of long-term initiatives (Anderson, 2016; The Week, 2018). A farmer was quoted in The Telegraph saying, “You can do it and make a living, but you cannot make profit” (Dakers, 2016), referring to the production costs soaring over the selling price in supermarkets (Anderson & Curry, 2016), “whose pricing policies regularly generate protests” (Glaister,

2017). However, some supermarkets have launched special milk lines guaranteed to pay extra to farmers (Poulter, 2016; The Week, 2018) and some farmers are contracted to processors, which give the farmers a higher price per litre of milk than otherwise would be possible (Daneshkhu, 2015). Some contracts are however subject to fluctuations on global commodity markets, even though they are organised in a way to avoid exactly that (Wasley, 2015; The Week, 2018).

The trend of consolidation within the dairy industry is also increasing pressure on dairy farmers and pushes them to expand their businesses (Henley, 2014; Wasley, 2015), to what is referred to as ‘mega-dairies’ that are large and highly efficient dairies (Wasley, 2015). In these ‘mega-dairies’, cows are kept inside throughout the year to increase efficiency and keep production costs down (Wasley, 2015). However, this has also received criticism from both fellow farmers and from the public whose main concern is animal welfare issues when it comes to such operations (Henley, 2014). Also, in response to the price-war on dairy and the crisis in the UK dairy industry, farmers in Northern Europe have tried to strengthen their position by starting to network with the other parties in the supply chain (Mikkola & Seppänen, 2006) and by starting to consolidate amongst farmers, which is a long-term trend in the UK (Dairy AHDB, 2018a). These partnerships within the supply chain are said to create cost savings, improve customer service, enable more effective marketing and increase sales growth (Fearne, Duffy & Hornibrook, 2005).

Nevertheless, even though much media focus has been placed on retailers and supermarkets for pressuring dairy farmers, other factors are also affecting farming. For one, climate changes have brought challenges (Langley, 2015) and to this, farmers are left powerless (Glaister, 2017). Also, fluctuations in the world economy, changes in demand and milk quotas being removed in the UK in 2015, are factors affecting the dairy industry (Glaister, 2017; Langley, 2015). However, even though these trends are apparent and many, they are out of the scope of this thesis and will thus not be expanded on further.

4.2.2 Processors

Processors in the UK consist of co-operatives, private limited companies and private dairy companies (Dairy UK, 2018b). When it comes to processors, there has been a consolidation trend over the past decades all over Europe, including the UK, with big processing firms

dominating production (Bailey, 2015; Dairy AHDB, 2018a). Consolidation has most often been done in order to respond to price and margin pressure, as growth has been seen as the way to go in order to increase efficiency and stay competitive (Bailey, 2015). On the British market, 79 % of the milk that is processed comes from nine of the largest processors, who only account for two percent of the UK processing companies (Dairy AHDB, 2018b). The UK dairy industry has invested approximately more than £450 million in processing capacity during the last four years, which is said to be the highest level among the largest milk-producing nations in the EU, an investment driven by the largest processors in the country (Yates, 2018).

Since 1994, when the dairy industry was deregulated in the UK, British dairy has been dominated by big processors that collect, pasteurise and bottle milk. The majority of all British milk sold to the public, is sold by Arla, Muller Wideman, First Milk and Dairy Crest, who have contracts with farmers and supermarkets. When world market prices fall, these companies are claimed to cut the farm gate price (i.e. the price paid to farmers for liquid unprocessed milk) they pay to suppliers (Henley, 2014). Even though the focal point of the societal discussion has been dairy farmers, processors too have struggled at the times when European production increases, as supply is then exceeding demand. The agriculture director at Muller Milk and Ingredients was even quoted saying “There are no winners in the dairy supply chain” referring to Muller’s own operations (Cummins, 2016).

Some argue there are no winners in the UK dairy supply chain, as seen above, and some argue processors and retailers are reaping the lion’s share of profits, taking advantage of the so-called weaker players. However, other than fierce competition there is also collaboration in the dairy supply chain. One of the fastest growing retailers in the UK, Lidl, recently announced a three-year liquid milk partnership with the processor Muller (Black, 2018). The deal encompasses the agreement that Muller will supply all of Lidl’s milk under a timespan of three years and is said to create more security for farmers across the UK, as deals like these gives farmers a certain price for every litre of sold milk (Black, 2018; White, 2018). The partnership is seen by both parties as a “long-term strategic partnership”, said to bear welfare for every player in the dairy supply chain and includes locking a portion of the milk supply at a fixed price, which will make it less vulnerable to fluctuations in price. Also, the partnership is said to enable information sharing and the possibility of innovation in dairy products and processing (Black, 2018). UK dairy companies described as having to strive to be innovative both separately and in partnerships and have innovative production techniques in order to retain their lead over

international rivals, given the demand-supply relationship in the industry and the high competition (Merrett, 2007).

A similar three-year deal was closed between Arla and Morrisons in 2017, which was supposed to focus on collaboration across a number of different initiatives to distinguish the British dairy industry from the rest of the world (Ridler, 2017). It has been emphasised that deals like these have the potential of benefiting the entire supply chain and not only the specific parties involved in signing the contract (White, 2018).

According to the Dairy Site (2011), UK farm gate prices are dependent on UK processors' ability to add value to raw milk and critics claim that processors are instead offering farmers unrealistically low prices just to retain market share. However, this competition is not only prevalent between the different players in the supply chain, but also between processors in the UK, who are said to sacrifice profit margins in order to attract and retain customers, consequently making it difficult to pass on higher operating costs to retail or wholesale buyers (Montague-Jones, 2011). However, as previously mentioned, there are also farmers that are collaborating with processors and that are bound to each other in different contractual relations within the supply chain. The contract most often focuses on the supply of raw milk, the treatment of milk and certain farm production standards. Through this, the farmer gets paid more, while the milk is also safe (Dairy UK, 2016). In these types of relationships, the processors are being urged to implement the Dairy Industry Code of Best Practice in order to increase farm gate prices (Astley, 2013).

4.2.3 Retailers

As this thesis is focusing on a supply chain characterised by low-cost retailers, this section will mainly highlight these players and their characteristics and development during the last years and how the power dynamics are currently developing alongside other aspects that are said to affect the dairy industry and the dairy supply chain in the UK.

The rapid growth of the low-cost retailers Lidl and Aldi in the UK is said to have made a perpetual change on the dynamics of the food market through driving down margins (Gale, 2018). For many years, the UK market has been dominated by four big supermarkets, often referred to as "the Big Four"; Sainsbury's, Morrisons, Tesco and Asda (McCulloch, 2017). Even though these retailers are still big in market share, they are steadily losing market share

in favour of the low-cost retailers that, especially since the financial crisis in 2007-2008, are increasingly gaining market share (Vandevælde & Megaw, 2017). The low-cost retailers' business model has consistently revolved around low prices, which has forced "the Big Four" to adjust to a changing marketplace as Lidl and Aldi have taken market share from them (Gale, 2018).

The fastest growing low-cost retailers in the UK, Aldi and Lidl (Cox, 2018), both have the strategy of encouraging consumers to buy larger quantities from a smaller product range, which consequently has enabled sales of larger volumes (Gale, 2018). The ongoing fight between retailers is often referred to as a price-war and is said to have increased the competitive pressure on the market and to have hit liquid drinking milk especially hard since it is a price-pressured commodity (Butler & Brignall, 2015). As previously emphasised, more than half of the milk that is produced in the UK is sold as liquid drinking milk with most of this volume sold at retail (NFU Online, 2018), which is one of the reasons why dairy has been at the forefront of this price-war. Retailers are often accused of taking an excessive share of milk profit at the expense of dairy farmers since they have the power to cut prices, which creates tension in the marketplace and thus increases the competitive pressure immensely (Henley, 2014).

Alongside the growth of low-cost retailers is the trend of concentration of retailers in the UK, with the effect of increasing power in the hands of major players. Already in 2006, Hingley, Lindgreen and Casswell found that the power in supply chains will increasingly lie in the hands of retailers. This was further endorsed by Fernie, Sparks and McKinnon (2010), who published a study on how retailers are controlling the supply chain in the UK, with examples from both the grocery and the fashion sector, seeing challenges with regard to environmental changes and technological developments in the future. They claim that retailers are increasingly controlling their upstream supply chain. In Northern Europe, the concentration trend is especially strong and is increasing retailers' strength and position, particularly in the dairy industry for farmers in the context of price wars on milk (Mikkola & Seppänen, 2006). Despite strong evidence that low farm gate prices are also caused by factors that cannot be controlled by retailers such as environmental issues, there is still said to be a need to tackle the retail concentration to protect farmers and the rural communities where they live and are active (Mikkola & Seppänen, 2006). However, several retailers that have been examined have said they are increasingly contributing to the concentration trend because it makes them more efficient due to increased competition on the market and to enable consumer satisfaction (Beaton-Wells & Taylor, 2017).

Hughes (1996, p. 240) also points to the creation of own-label strategies in the UK, saying that it has “creatively destroyed the pre-existing configuration of power, competitive behaviour, and cultural relations in the production-consumption chain”. Furthermore, SCM is now more driven by demand and retailers have been able to gain more control as they have developed, and are increasingly developing, their own retailers brands (Fernie, Sparks & McKinnon, 2010).

In general, in the UK food sector, most groceries are retailers’ own-label and these account for more than half of the UK grocery sales (BT, 2017; Scott-Thomas, 2014). These own-label products are now referred to as the “new weapon of choice” of the retailers and have accounted for 88.1 % of Aldi’s sales and 75.6 % of Lidl’s sales (Spary, 2014). In dairy, the UK market has proven to be the strongest market for own-label, but these own-labels have been affected by the price wars between retailers and their respective brands (Cornall, 2016) with retailers now stepping up their offer and consolidating their products in response to consumer demands for quality at low prices (BT, 2017). Some have claimed that retailers should get a fine for misusing their market dominance to reduce milk prices. Criticism has been directed to several retailers, including Aldi, who responded by saying they do not have direct relationships with farmers and had reduced prices in order to match price reductions at other supermarkets, which did not affect farmers. Furthermore, Aldi have said that their processors are paid above farm gate prices in an effort to continue to support UK dairy farmers (Barrett & Thomas, 2015).

It is noticeable that the storyline of the dairy industry is changing at a high pace. Thus, it is important to also get the views of individuals who are currently active in the dairy industry, in order to be able to illustrate the most updated version of events and understand how contemporary actors are managing their supply chain for the creation and maintenance of a competitive advantage. Hence, the primary data gathered will be presented below and will provide a holistic image of the industry and its dynamics.

4.3 Primary Data Collection Presentation

4.3.1 Introduction

As presented in the methodology, the aim of the primary data gathering was to gain an understanding of the SCM practices that are seen as significant and/or a source of competitive advantage for the actors in the UK dairy supply chain. In order to achieve that, practitioners and

academics were asked about elements of the Li et al. (2006) framework, as well as the potential existence of internal capabilities that enable a competitive advantage. However, additional topics were anticipated to ensue, not only due to the nature of the semi-structured interviews allowing for follow-up questions and clarifications, but also due to the addition of introductory and finale questions that were more ambiguous and of general nature. Furthermore, the Li et al. (2006) framework was not explicitly mentioned to the respondents, as the aim for the empirical evidence gathering was to let the interviewing process guide us, rather than attempting to fit the discussion into a pre-constructed model. The latter will be alternatively done in the analysis, where the patterns noticed in the empirics will be assessed against the Li et al. (2006) framework.

Lastly, taking into consideration the diversity of experience and supply chain position, it was expected to receive several dissimilar points of view, with respondents emphasising different elements as being essential to success. Nevertheless, there were a number of phenomena and characteristics that both academics and practitioners observed, agreeing upon their existence and importance. They will be presented below.

4.3.2 Undisputed Elements

4.3.2.1 Power Shift to Retailers

Firstly, the most widely accepted statement amongst respondents was that the power in the supply chain had moved towards retailers, who were the biggest influencers with the highest bargaining power (Respondent 1, Respondent 2, Respondent 4, Respondent 5, Respondent 8, Respondent 9). Researchers made observations regarding the shift in the entire industry owed to the increase in retailer influence, with operational changes such as the move from localised distribution based on the suppliers' networks to centralised deliveries to the retailers' warehouses (Respondent 8). They also pointed to mergers in other segments of the supply chain (notably smaller processors being bought out by larger processors), claiming that they were the reaction to a decrease in power, and thus an attempt to retaliate (Respondent 5). Nevertheless, one interviewee sought to explain that in his view, the fact that relationships between retailers and their suppliers were imbalanced in favour of the former did not mean that they were also unjust (Respondent 5). Rather, he explained, the imbalance brought stability in the industry, as the established relationships were mutually beneficial, and the lower bargaining power in the supplier side did not create an opportunity for the retailers to misbehave, as they also depended

on the suppliers for a constant flow of produce. Therefore, in this respondent's view, it was clear that retailers held the most power in the dairy supply chain, yet that did not imply a correlation with punitive contracts for upstream partners.

Nevertheless, a practitioner did perceive a form of injustice in the dairy supply chain, caused specifically by discounter retailers Lidl and Aldi. He stated: "They reduce the end price to the consumer [...] means the rest of the supply chain suffers and the consumer benefits" (Respondent 3). Yet, the respondent also further explained that the discounters were not necessarily pressuring suppliers for the lowest price, instead offering a low price to consumers as a result of other cost cutting techniques. These techniques will be expanded on below.

4.3.2.2 Growth of Discounter Retailers

In addition to the respondent above, most practitioners and academics identified the growth of discounter retailers as a prominent phenomenon affecting the supply chain and the grocery sector (Respondent 3, Respondent 5, Respondent 6, Respondent 7). One respondent equated this growth with the disturbance of the "cosy cartel" of the four biggest supermarket chains in the UK: Tesco, Sainsbury's, Asda, Morrisons (Respondent 5). Another practitioner turned the phrasing of the interview question into his own description, stating: "What you call the 'Aldi/Lidl threat' I would call the 'Aldi/Lidl beauty'. They have come to massacre all the other ones, because they are something more efficient and better managed on a daily basis" (Respondent 3). This growth was attributed, as a respondent observed, to a "shift to thrift" among UK consumers, who became more cost-conscious due to the recession (Respondent 10). In his view, discounters had a better understanding of the fact that consumers sought lower prices, and reacted to it with a low-cost offer, attracting more people than the rivals initially expected.

Interviewees furthermore believed that the recent trend of consolidation within the retail sector (such as the proposed 2018 Asda and Sainsbury's merger) was a reaction to the disruptive practices that proved successful for Lidl and Aldi (Respondent 1, Respondent 5). More explicitly, two characteristics that enabled discounter success were mentioned several times: the restricted range that the discounters hold and display (Respondent 3, Respondent 7, Respondent 8), and the dominance of the retailers' own brand items as opposed to national brands in the shops (Respondent 3, Respondent 4, Respondent 7, Respondent 8). One of the respondents explained in detail what he observed to be the practices used by the discounters and how it allowed them to attract consumers and increase market share. He believed that: "It

starts with the fact that the discounter wants to bring a better price and a higher level of convenience. And the way in which they do that, is they focus on very few SKUs (Stock Keeping Units)” (Respondent 3). The practitioner further explained that the focus on fewer SKUs and thus a restricted range enabled cost cutting through the supply chain, as the pallets used by Lidl and Aldi not only moved faster through the chain due to less complexity and higher volume, but also did not entail other costs than transport and storage, owing to the retailers’ decision to use half-pallets. This, he pointed out, allowed the discounters to offer products at a much lower price than their retail competitors.

Lastly, he also mentioned the development of own brands as an opportunity to increase profitability, since retailers could make a higher margin on them relative to selling national brands. This again was a reason discounters could attract consumers with lower prices. As he concluded, the practitioner emphasised what he thought to be the two principal enablers of discounter retailer growth, namely high buying power and having the leanest supply chain in the industry. As more interviews were conducted, the “lean” label was noticed as another common thread among respondents.

4.3.2.3 The Lean Philosophy

During the segment of the interview discussing the choices that enable the discounters’ growth and current competitive advantage, many of the respondents classified the retailers as lean and/or efficient (Respondent 3, Respondent 5, Respondent 6, Respondent 7, Respondent 9). The label stemmed from the interviewees’ own initiative and was always brought up without any verbal incentives from the interviewers’ part. Although there were diverse ways of outlining the SCM processes and choices of the discussed discounters, it primarily revolved around a description of their strong cost-cutting and efficiency increasing behaviour. However, it was pointed out during one interview that the search for lowering costs did not necessarily impact the discounters’ upstream partners, as one of the respondents explained:

“They are not always the ones asking for the lowest price. Sometimes they are giving a better price to the manufacturers than the other retailers. The reason that they can charge such a low price at the shelf is that their supply chain is so lean, and this is again due to the fact that they have very few SKUs” (Respondent 3).

A researcher expressed a similar understanding, calling Lidl and Aldi “lean and mean” (Respondent 7). However, when asked to expand on the “mean” description, the respondent

said it was owed to the discounters stripping everything down wherever they could, which was mostly internally, by employing fewer people and not unpacking the pallets before display. He followed by saying that the discounters sought to develop long-term relationships with suppliers and work with them, collaborating in order to be able to reduce cost, rather than attempt to push the suppliers into punitive contracts. The level of partnership and collaboration in the supply chain will be further examined later in the study.

4.3.2.4 Consolidation

As was briefly shown above, a common thread amongst interviewees was the emphasis on consolidation as an explanation for the shifts in power in the industry; “The story of dairy is the story of concentration”, as one responder explained (Respondent 5). The presence of this phenomenon was emphasised for every level of the dairy supply chain, as practitioners stated that there were fewer farms, processors, and retailers compared to a decade before (Respondent 1, Respondent 3, Respondent 4). One respondent described it as: “The big guys are getting bigger, and the small guys are getting fewer” (Respondent 1). He claimed consolidation was a reaction to the changing dynamics in the supply chain, with bigger players pressuring the smaller ones. One of his colleagues confirmed the trend, stating it was an opportunity to be more price competitive, which is why he believed it could be expected to continue in the future (Respondent 3). Another interviewee also saw it as a result of the ability to achieve economies of scale and lower costs to the minimum as well as increase margins (Respondent 6). Nevertheless, there was also a respondent who provided a more cautious view of this phenomenon. He agreed that there was a high degree of consolidation in the UK, yet not to the extent of that in other European countries, giving the example of the processing segment, where the UK had six big players, which the respondent thought unseen in the rest of the EU (Respondent 4).

4.3.2.5 Innovation

Another factor that several respondents saw as influential was the strive for innovation. An academic observed a movement to innovate, created as a reaction to the consolidation and the cost efficiency in the industry (Respondent 5). He believed the latter decreased consumer choices in favour of offering lower prices, which were sought by a large part of the population, but not necessarily all. Additionally, he claimed that it was the affluent minority that the dairy supply chain pursued innovation for, in order to widen the choices and increase the margins. The respondent further stated that the dairy industry presented many entrepreneurial

possibilities, as it entailed transforming liquid milk into other products. A practitioner made a similar point, explaining that processors worked very closely with their partners on both sides of the supply chain in order to innovate and provide the end consumer with a large variety of options related to dairy products (Respondent 3). He additionally claimed partnering with processors for innovation was an opportunity for retailers to control the supply chain better, as well as an attempt to capture the value of the processor's capabilities and keep them from the other retailers' reach (Respondent 3).

4.3.2.6 Control

Lastly, as could be noticed above, representatives of both the practitioners' and academics' groups have suggested control as an aim of not only retailers, but also the other actors in the supply chain (Respondent 3, Respondent 6, Respondent 9). Several respondents have articulated an opinion or observation on the underlying desire of each participant of the supply chain to control as much of the market as they could individually. A researcher claimed the retailer mergers were an example of the quest to control a market share as large as possible (Respondent 9), while another believed it was represented by a wider movement of organisations attempting to "exercise their power in a variety of different directions" (Respondent 6). The latter respondent saw the strive for control as one of the primary drivers of the supply chain, with actors making strategic decisions according to what would increase their influence, for example choosing whether, when and with whom to share data with, in order to further their control over a larger part of the chain (Respondent 6). Additionally, a practitioner saw the choice to partner as an attempt to widen individual control of the supply chain, exemplifying with the recent deal between Lidl and supplier Muller, which the respondent believed enabled the retailer to expand its influence further in the chain (Respondent 3).

However, although academia and practice have observed the same trend of power concentration in the hands of retailers, and increasingly so in the hands of discounter retailers, there is a certain degree of disagreement on what enables these actors to achieve above-average performance and thus, a competitive advantage. It could also be observed during the interviewing process that respondents highlighted different practices and management choices as present throughout the supply chain. For the most part, the variance of opinions was seen to diverge depending on whether the respondent was a researcher or a practitioner, with the two groups emphasising similar issues within the group, yet dissimilar issues relative to the other group. While the

implications of such a clear distinction in their observations will be examined in the analysis, the empirical data gathered from each group and the main phenomena they highlighted will be assessed separately below.

4.3.3 Researchers

4.3.3.1 Centralisation

As researchers with a high level of experience were contacted for the purposes of this study, they were able to discuss their observations spanning multiple decades of UK dairy supply chain dynamics. As such, several academics highlighted the trend of centralisation, not only in the dairy industry, but in the other supply chains involving fresh produce (Respondent 7, Respondent 9). It is claimed to improve efficiency, as well as agility, as the goods can be moved faster from the farmer to the retailer (Respondent 9). The respondents explained that there had been a gradual centralisation of processing, with milk being transported over longer distances to fewer processor factories (Respondent 8), as well as a centralisation of the intermediaries that distribute the produce from the farmers to the processor and/or from the processor to the retailer (Respondent 7). The latter was claimed to have enabled the dairy supply chain to “move more goods more quickly from supplier to the store, but at the lowest cost possible” (Respondent 9). This phenomenon of centralisation was used by several researchers to describe the dominant movement in the industry when asked about the trends that they had observed over time. This came in contrast to the practitioners’ immediate response of consolidation when asked the same question. Nevertheless, both groups acknowledged that consolidation was an influencing factor in the dairy supply chain, yet fewer researchers saw it as more prevalent than centralisation.

4.3.3.2 Collaboration and Partnership

As per the interview guide, there were several questions focusing on the extent of strategic partnerships in the supply chain and the amount of collaboration, or lack thereof, between the parties. There were various degrees of emphasis on the importance and extent of cooperation and partnership, yet all but one researcher agreed on the existence of collaboration in the dairy supply chain. There were academics who believed that the UK had one of the highest rates of grocery supply chain collaboration in the world (Respondent 6, Respondent 7). Furthermore, they highlighted strategic partnerships as one of the most important factors enabling higher

performance, as collaboration, in their opinion, was what allowed for faster and more efficient processes and the ability to optimise everyday activities (Respondent 6). These academics additionally confirmed observing a search for long-term contracts and of establishing long-standing relationships in the supply chain, in order to increase trust and the possibility to influence the partners' decisions (Respondent 5, Respondent 7). A respondent confirmed that some of the retailers have had long-lasting contracts with their suppliers, some spanning over 40 years (Respondent 5). He explained that these relationships allowed for the building of trust, which enabled the use of supplier resources as if they were the retailer's own. However, the academic proceeded to emphasise that there were different levels of suppliers, with retailers selecting a limited amount of "preferred suppliers" to build long term relationships with and share a higher level and quality of information with. With the suppliers on lower levels of relationships and trust, the level of information shared and collaboration were also lower.

Furthermore, it must also be mentioned that there was a researcher that expressed disappointment at the limited extent of collaboration in the supply chain, stating that "there is some collaboration, but not as much as there could be" (Respondent 9). Moreover, the respondent believed that the concentration of power in the hands of a few UK food retailers was the reason there was a lack of cooperation to a higher extent. As will be seen below, the general consensus of the practitioners interviewed coincided with that opinion.

4.3.3.3 Information Sharing

Similarly to the shown above, there was found to be a general belief amongst academics that there was a high level of information sharing in the dairy supply chain (Respondent 6, Respondent 7). Some researchers claimed it was done in order to enable efficiency and speed, given the importance of time in the dairy supply chain (Respondent 6, Respondent 7). One respondent characterised information dissemination as one of two key elements that drive the business (the other being power), stating that data and data sharing was critically important, and it would be impossible to continuously optimise the supply chain without it (Respondent 6). This, the respondent thought, was due to the fact that both in the retail and the processing part of the dairy supply chain, there were oligopolies, making it greatly inefficient to not share information if wanting a smooth movement of goods between the few players. Nevertheless, he explained that not only were some firms better at information sharing than others, there was also information that was shared, and information that was not, much influenced by the position in the supply chain, with dairies usually not having total access.

Another interviewee sought to emphasise the progress that had been “slow but steady [...] over the last twenty or so years towards a greater degree of information sharing” (Respondent 10). He saw the initial reluctance that the large players had yet observed a shift towards trust and collaboration in the supply chain, owed to a need to build a more responsive supply chain. Yet the respondent who did not believe there to be a high enough level of collaboration in the supply chain also denied observing information sharing and did not see the progress witnessed by the previous researcher (Respondent 9). In this case, practitioners had several opinions and estimations of the amount of information sharing, as will be seen later in the study.

4.3.3.4 Time

The last element mentioned by several researchers was time, highlighted as a “critical competitive variable” (Respondent 10) for a supply chain that dealt with fresh produce (Respondent 7, Respondent 10). Time was seen as an enemy of sorts for players in the dairy industry, and in the academics’ view, it was what pushed the players towards collaboration (Respondent 7, Respondent 9). Since dairy must have a fast supply chain to ensure an efficient time-to-market due to food safety, academics claimed that partnerships had to be created and a constant information flow had to be ensured (Respondent 6, Respondent 7, Respondent 9). Additionally, a respondent emphasised the high priority of customer convenience in relation to short-shelf life products that are staples, thus increasing the importance of on-the-shelf availability (Respondent 10).

4.3.4 Practitioners

4.3.4.1 Collaboration and Partnership

As previously noted, a limitation of this study has been the inability to reach practitioners from either end of the supply chain and only gathering insights from representatives of firms active in the middle of the chain. Therefore, the explanations and opinions from practitioners are either based on their direct relationships, or indirect observations from outside their realm of management. Hence, the respondents, when confronted with the questions about collaboration, generally described their closest partnerships, which were with their clients (Respondent 1, Respondent 3). One of the practitioners, a seller of processing solutions, directly replied: “We don’t partner with our customers, we sell goods and services” (Respondent 3). However, he did

believe that the level of collaboration and partnership has been rising in the rest of the supply chain, as Lidl and Aldi tended to partner with fewer suppliers.

However, another practitioner from the same organisation claimed that client partnerships were vital, as the supplier needed to prove the ability to provide the best services in order to secure further contracts (Respondent 1). He nevertheless commented on the lack of constancy of partnerships, stating that the existence of a contract did not guarantee further contracts, and past partnerships were only valuable for new contract bids, shown as examples of how successful those specific collaborations could be (Respondent 1). This situation was also used to describe the general dynamic of contracts in the supply chain. While researchers claimed there was a search for long-term contracts in the industry, practitioners stated that contracts were cyclical, and partnerships were kept only as long as they were the best deal: “They’re as loyal as their bottom line says” (Respondent 1).

A type of partnership that emerged from the discussion was the one between different business units of an organisation. Respondents supplying processing solutions described collaborating with their colleagues in the packaging side of the business not only in order to secure new clients, but also to be able to offer clients end-to-end solutions (Respondent 1, Respondent 3). This internal collaboration was seen as an advantage relatively to other suppliers who lacked packaging solutions, and thus increased the respondent’s organisation’s chances of securing contracts.

4.3.4.2 Information Sharing

When questioned about information dissemination, one of the practitioners vehemently denied sharing information outside of the organisation (Respondent 1). The respondent emphasised that the firm established its profitability on providing services based on patents and trade secrets, therefore was unwilling to share anything other than publicly available knowledge. Furthermore, the respondent also believed it to be a threat to relationships and against client confidentiality to share information that was of value to contracted clients of the firm. Thus, the respondent described the information sharing as only between his firm and its immediate clients. This was substantiated by another respondent, who described the information sharing in the supply chain as a strategic choice between partners, usually done to isolate others outside of their specific relationship (Respondent 3). In this case, the respondent was describing the relationship between a discounter retailer and its processor of choice. Hence, restricted levels of information sharing were observed by practitioners throughout the supply chain.

4.3.5 Miscellaneous

There were other elements mentioned in the interviews conducted, some that were explicitly referenced in the Li et al. (2006) framework, others that were absent from it. Notable examples include outsourcing and agility. Yet since these components were only brought up once throughout the interviewing process, a decision was taken to not focus on them further, in order to ensure the relevance of the refined model. The exclusive use of elements mentioned multiple times in the primary and secondary data increases the reliability of the research, as it is shown that the same answer was given by several sources when asked a particular question.

5 Analysis

5.1 Introduction

In this section, the analysis of the patterns unveiled in the empirical data will be presented. The aim of the analysis is to see how the empirical material fits with the preliminary theoretical framework (see Figure 4), if there are new discoveries or any discrepancies. The analysis will thus be guided by the empirical material and in order to improve the reader's understanding about the connection between the elements, it will be structured in a different order than the original preliminary framework, although still illustrating all of its practices. After the existent practices and the suggested refinements are presented, a new framework is showcased.

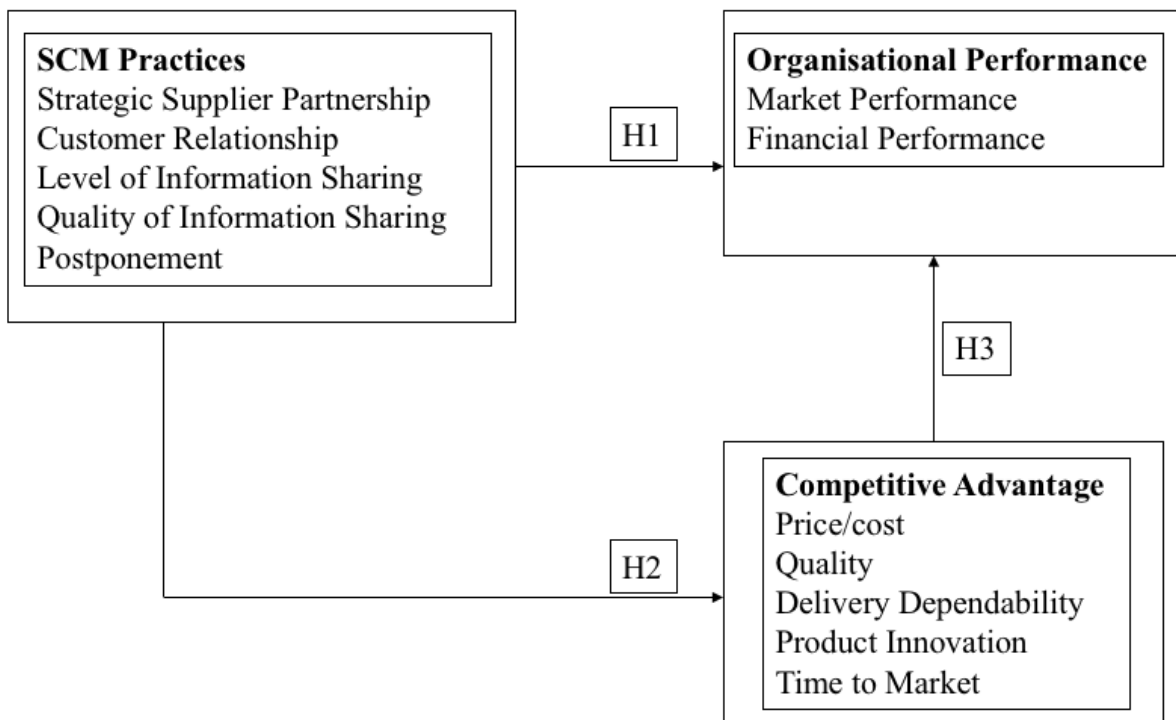


Figure 4. Preliminary theoretical framework (Li et al., 2006).

5.2 SCM Practices

5.2.1 Customer Relationships

In the Li et al. (2006) model, customer relationships are the practices that are used to manage complaints and improve satisfaction, referring primarily to the end-customer. In this thesis, the definition was expanded to include any clients in their role as customers, in order to understand whether firms upstream of retailers also see customer relations are important. When assessing firm practices with regards to improving customer satisfaction at several stages of the supply chain, a few observations emerged. Firstly, it became evident that actors in the middle of the supply chain associated consistent work towards improving client relationships with higher performance. The suppliers of processing solutions explained that these relationships with processors (their customers) had to be permanently fostered, in order to get a chance of being selected for the processors' new projects. Thus, the suppliers made sure to put in a lot of effort in maintaining customer relationships, since they were a source of profitability, and thus performance.

Furthermore, in the retail segment, the growth of discounter retailers was partially explained by interviewees as an end-customer need for low-cost grocery stores. Thus, these discounters understood their customers better and saw the opportunity to gain an advantage over upper-scale supermarkets, due to the British "shift to drift". With the successful implementation of the cost leadership strategy, it can be said that these retailers have a competitive advantage in a Porterian view. However, it must be stated that in the empirical data gathering, there was no direct contact with end-customers, so the conclusion regarding discounters' competitive advantage is solely based on secondary data and interviewee observations regarding the retailers' success, which is confirmed by their continuous rise in market share over the past few years. Interestingly, the respondents also mentioned that the upper-class supermarkets such as Waitrose were also profitable, confirming once again Porter's (1980) claim that either differentiators, low cost leaders, or focus pursuers will perform better than "stuck in the middle" firms.

Therefore, it was established that both in the restricted definition (with customers being end-customers) and in the expanded one (with customers being the clients that buy goods and services from supply chain actors), these relationships are considered important for

organisations and their pursuit of higher performance. Customer relationships were demonstrated to be amongst the drivers of profitability and enablers of competitive advantages. As such, the element in Li et al.'s (2006) model is deemed relevant for the purpose of answering the research question and will thus be kept in the revised framework.

5.2.2 Level and Quality of Information Sharing

The preliminary theoretical framework suggests that sharing of information consists of quantity and quality, both of which are of importance to facilitate the creation of a competitive advantage and higher organisational performance. As shown in the empirical section, there was found to be a general belief amongst researchers that the level of information sharing was high in the dairy supply chain, which was agreed upon by all researchers but one. There was also a consensus amongst the interviewed researchers that if there was information sharing, both quantity and quality was high. One researcher also pointed to the fact that there had been a slow but steady increase in sharing of information during the last twenty years, stemming from a higher degree of trust between the actors in the supply chain, which corresponds to higher quality of the information shared according to the theoretical framework. Also, it was said that in order to facilitate innovation within the supply chain, additional information was shared to take advantage of the different actors' capabilities and knowledge in dairy.

As for the practitioners, one respondent vehemently denied sharing information outside his own organisation, as the operations of this specific organisation were dependent upon proprietary information. However, the same respondent also pointed to some degree of information sharing limited to his organisation and its immediate clients. Hence, even though the practitioners seemed reluctant to admit to any information sharing, even the most sceptical one acknowledged there being some information sharing with the closest partners. The differences between researchers and practitioners could possibly stem from the fact that researchers gained a more holistic view of the industry as they have focused not only on one actor in the supply chain, but several, as they are not bound to a specific organisation in the way that practitioners are.

From this, two trends can be distinguished. The information shared by suppliers of processors and their closest partners are enabled by the partnerships between these actors. There seems to be a willingness to share information within relationships, as this can bring competitive

advantages through improving time-to-market and quality of produce. Secondly, these actors also do their utmost to keep the information from spreading outside the relationship as this can increase competitors' chance of imitating their operations. Thus, the empirical material pointed towards information sharing leading to competitive advantages and enabling higher organisational performance, hence corresponding to the theoretical framework. Our research also revealed that if information was shared, the information was of high quality, meaning that it reached the correct individual, at the right time and that the information was useful.

Nevertheless, as mentioned, one researcher still expressed scepticism about both the quantity and quality of information that was shared within dairy supply chains in the UK, thus raising the question as to why this respondent's view differed from the rest of the interviewees. During the interview, the respondent emphasised a "disappointment" in how little information was shared, which did not correspond to the rest of the respondents' observations. Despite the interviewee claiming there to be low information sharing, no additional evidence that confirmed this view was found. However, other practitioners also emphasised that information sharing was limited exclusively to their partners, which could mean that the wording "there is some but not so much" given by the sceptical respondent instead referred to a wish of having a generally open supply chain, rather than information shared only between partners. However, as this response was received via email, there is also a risk of the respondent defining 'information sharing' differently from how we defined it, which also can be seen as a limitation, as we could not ask to clarify what the respondent meant by low information sharing and get a comparison to what the other respondents said.

5.2.3 Postponement

The SCM practice of postponement was not relevant in relation to our choice of supply chain, as we have been examining a fresh produce supply chain. As previously mentioned, the UK dairy market consumer needs consist to a high degree of drinking liquid milk with short shelf life, which disables the possibility to postpone activities. For example, a processor cannot postpone their processing of milk to retailers as the retailers sell the finished product and vice versa. However, even though the relevance might not be high for postponement in our chosen supply chain, postponement needed to be included as we are aiming for higher analytic generalisability for the study, meaning that we still examined it. The research carried out in the literature review showed that many supply chains have the possibility of benefiting from

postponement, but when asked about this, the respondents found it to be out of the scope for this industry. Thus, the practice is kept in the revised framework, as it can enable performance and a competitive advantage in other supply chain types, and we do not believe it to be an incorrect addition to the list of relevant practices, regardless of its limitations in fresh food supply chains.

5.2.4 Strategic Supplier Partnerships

According to Li et al. (2006), for a relationship between parties to qualify as a strategic partnership, it has to be a long-term affiliation that brings value to both participants and entails collaboration in the form of problem solving and trust. That being considered, we were initially unsure whether the most visible relationships in the dairy supply chain, those between retailers and their suppliers, qualified as strategic partnerships, given the secondary data portraying retailers as exploiting their upstream contracted partners. However, upon the gathering of primary data, a diverging type of opinions ensued, with respondents suggesting that although retailers were indeed the most influential players in the supply chain, it did not imply they were taking unfair advantage of their partners. In fact, while the relationships between retailers and their suppliers were imbalanced in the favour of the former, they nevertheless brought value to both parties, and the collaboration was mutually beneficial. Several interviewees claimed that the imbalance still did not allow the retailers to function independently, therefore their need for the constant support and timely delivery from the suppliers ensured both parties benefited. Hence, these relationships qualify as strategic supplier partnerships as Li et al. (2006) described them.

When assessing these partnerships, we discovered that respondents referred to multiple types of partnerships and several levels of relationships, which both influenced and were influenced by an array of factors. The most often mentioned was trust, which when present, enabled the partners to have a higher level of information sharing and collaboration between them, which in turn allowed for the creation of the competitive advantages listed by Li et al. (2006). Another factor was time, which distinguished the close partnerships from the other ones. The relationships that had been established for a longer period of time were described by respondents as a vital factor for performance, as they could trust and share resources with ease, as well as enlarge each other's spheres of influence in the supply chain. The latter was another reason for searching for strategic partnerships, as they enabled the control that was claimed to

be one of the biggest drivers in the dairy industry. Lastly, the partnerships depended on the position of the participants in the supply chain, as it was seen that retailers had a few “preferred suppliers” that they trusted and had long-term contracts with, as well as tens of other suppliers that were not privy to as many privileges or level of information as the preferred ones. Yet, processors and their suppliers were seen to have relationships that were based on the deals that were mutually beneficial at a point in time and were prone to change based on the best pitch heard for a specific project, rather than have decades-long relationships that did not shift. Hence, it can also be observed that there is no continuous link between all the participants of a supply chain, with one-on-one relationships being much more common, as they could create tailored mutual benefits and competitive advantages for the two parties involved.

We thus reached the conclusion that strategic supplier relationships are an important source of competitive advantage, as the relationships that were described to us enabled the majority, if not all, of the Li et al. (2006) competitive advantages. Through successful partnerships, the actors in the dairy industry ensured better time-to-market, higher delivery dependability, better cost/price, due to cost savings and negotiations in the supply chain, as well as innovation, which will be expanded on later. However, the biggest finding was that not only did the partnerships give an advantage directly, they were also the ones at the foundation of all the other SCM practices. According to the accounts of the practitioners, the level and quality of information sharing was only high between strategic partners, and the customer relationships were also influenced by the strategic interactions between the involved parties. These, in turn, also facilitated the creation of competitive advantages and higher performance.

Hence, as seen from the primary and secondary data, strategic supplier partnerships must exist in order to allow for the successful implementation of the other practices, and therefore the competitive advantages and organisational performance. Since practitioners emphasised not only the direct importance of these partnerships for their profitability, but also for the information sharing, trust and innovation, we decided to modify the preliminary framework in a way that underlines the importance of the partnerships for the success of firms in competitive supply chains. The framework (as seen in Figure 5), now showcases that strategic supplier partnerships must be at the basis of all other practices for the model to truly show the connection between the elements that work in practice.

There also must be some restrictions explained, in order to provide the reader with a complete picture of this finding. Firstly, part of the secondary data focused on portraying retailers as

exploiting their suppliers and receiving unilateral value from those relationships, while primary data did not show injustice in the lack of balance. While measures were taken to ensure the accuracy of the data and the conclusions drawn from it, including interviewing active researchers who could provide an impartial, holistic view of the industry, it is suggested that further research examine who is appropriating the value in the dairy supply chain and whether there is an individual player that is appropriating more. Additionally, as could be seen in the empirical data, relationships between business units of a firm (such as processing and packaging) were cited by the suppliers of processing solutions as being an enabler of performance. Since they were not mentioned by any of the other respondents, it was considered to be exceeding the scope of the thesis, yet a potential valuable avenue for further research is internal collaboration as a source of competitive advantage.

Lastly, centralisation and consolidation were often discussed as major trends of the dairy industry, often done in order to improve time-to-market, cost, dependability, and therefore performance. We debated whether they were elements that should be included in the framework, since they dictated a large part of the industry dynamics and hence, to a certain degree, performance. Yet, we decided they did not qualify as partnerships, since the descriptions found in the empirical material primarily involved bigger players taking over smaller players, or the latter accepting a move due to desperation in the face of failure. Therefore, centralisation and consolidation cannot be said to be SCM practices, as these practices must involve a managerial decision, rather than an action that is forced upon a firm.

5.3 Additional Findings

In this section, the additional findings from our empirical research will be analysed. As these elements were discovered during discussions about the sources of competitive advantage and organisational performance, the respondents clearly believed these to be enablers of higher performance/competitive advantage. Thus, including these elements in a revised version of the framework provides a more complete understanding of the practices that lead to success in a competitive industry and supply chain. The concepts presented were also supported by the literature review and the secondary data that was previously illustrated.

5.3.1 Lean (and Mean)

Throughout the interviews, one of the strongest and most consistent findings was the fact that retailers are lean, at times referred to as “lean and mean”. The lean factors were mostly mentioned by both researchers and practitioners when they were asked what enabled discounter retailers to gain a competitive advantage and higher performance relative to other retailers. Hence, this led us to drawing the conclusion that the lean capability was prominent within this supply system. However, one respondent also mentioned the fact that the lean factor eventually could be imitated by competitors, thus not enabling a sustainable competitive advantage as defined by Barney (1991). Nevertheless, not only does Li et al.’s (2006) definition of a competitive advantage not match the Barney (1991) definition, but the purpose of the framework and the thesis is to unveil the practices that lead to a competitive advantage. The sustainability of said advantage is not to be guaranteed solely by the existence of an SCM practice, rather by the overall management of the organisation. Therefore, it can be stated that a lean philosophy was seen as a source of a competitive advantage, although not necessarily a sustainable one.

We then assessed the actions described as part of the lean capability: there were parts that were related to how discounters dealt with supplier relationships but also decisions made internally about their SCM, such as the usage of half-pallets, fewer employees and low lighting. Thus, it was debated whether the lean capability referred more to the way that a firm decides to manage its value chain internally by making all of its components and activities as efficient as possible. However, it was seen to be additionally about linking these activities with the activities of a supplier, which is also consistent with the Porterian view of the Value Chain (Porter, 1985). Therefore, lean can be considered an internal capability that is partly enabled for the discounter retailers by the fact that they have such strong relationships with own brand suppliers. Accordingly, the implementation of a lean philosophy stems both from managing relationships, and from getting additional value from the activities in the firm’s internal value chain, which will be illustrated in the revised theoretical framework.

The lean capability showed to be prominent both in literature and through our empirical study. In the empirical study, the lean element was brought up from the respondents’ own initiative, which makes us consider this finding even more important for the SCM field. Thus, our wish is to refine the preliminary theoretical framework with the lean competence in a half-separate side, to show that even though partnerships within a supply chain are relevant towards obtaining

a lean supply chain, the lean way of managing a firm is relevant as well, as it is shown to bring a competitive advantage of reduced time-to-market and cost through cost-cutting and efficiency. Nevertheless, a limitation of the lean stance finding is that it was mostly mentioned in relation to retailers with one respondent claiming that the highest performing processors already were as cost efficient as possible. This led us to believe that future research could benefit from investigating whether other segments of the supply chain are also utilising the lean philosophy in order to gain a competitive advantage and subsequently higher organisational performance.

5.3.2 Innovation

Innovation as a source of competitive advantage and higher performance has been brought up both in the secondary and in the primary data. Although Li et al. (2006) mention product innovation as a competitive advantage, what was unveiled in the empirical material has been a broader definition, as well as it being a source of advantage rather than a result. For example, it was mentioned that Lidl and Muller partnered in order to enable innovation and the free sharing of information between the organisations. Retailers and processors also partner in order to better innovate in the area of consumer needs, thus improving customer relationships and performance by attracting more consumers with improved offers. Furthermore, the suppliers of processing solutions explained that they partnered with their clients to foster innovation, as it was seen as a source of efficiency improvement, and therefore lowering cost and waste, assisting profitability and performance. Innovation therefore can support the creation and maintenance of a competitive advantage in the form of time and cost/price.

Interestingly, this phenomenon has been discussed both as a joint effort from firms collaborating in order to innovate, as well as an internal decision of a firm to independently invest in innovation. It can thus enable closer partnerships as firms work together, but also better customer relationships, as organisations transform themselves to better serve their clients' needs. Hence, as was explained above with the lean philosophy, there was a discussion about the source of innovation and the boundaries between our units of analysis: were the firms benefiting only from innovating with partners, only from independent decisions, or from both? We decided, by taking into consideration the literature reviewed and the empirical material, that the effort to innovate is a practice that both involves collaboration with other players in the supply chain, but also is an internal capability of a firm that makes the conscious effort to invest

in advancements. This practice, together with lean, will be separated from the other ones, in order to showcase its internal capability aspect.

It must however be mentioned that although practitioners, researchers and secondary data have pointed to the importance of innovation for performance and the creation of a competitive advantage, the tangible measurement of innovation benefits has been of somewhat of a debate in both academia and practice. It is outside the scope of the thesis to discuss the measurement of innovation in the dairy supply chain, yet the reader must be warned that several narratives exist and not all believe in the profitability of investing in innovative projects.

5.4 Chapter Summary

Taking into account the assessment of the practices provided above, Figure 5 presents the refined framework that shows the relationship between SCM practices, competitive advantage and organisational performance. In order to show the importance of their existence for the other practices, strategic supplier partnerships were moved outside the initial box. Two additional practices were added, and in order to illustrate their primarily internal capability nature, they were also separated from the practices that are fully created as a response to the firm's position in the external environment.

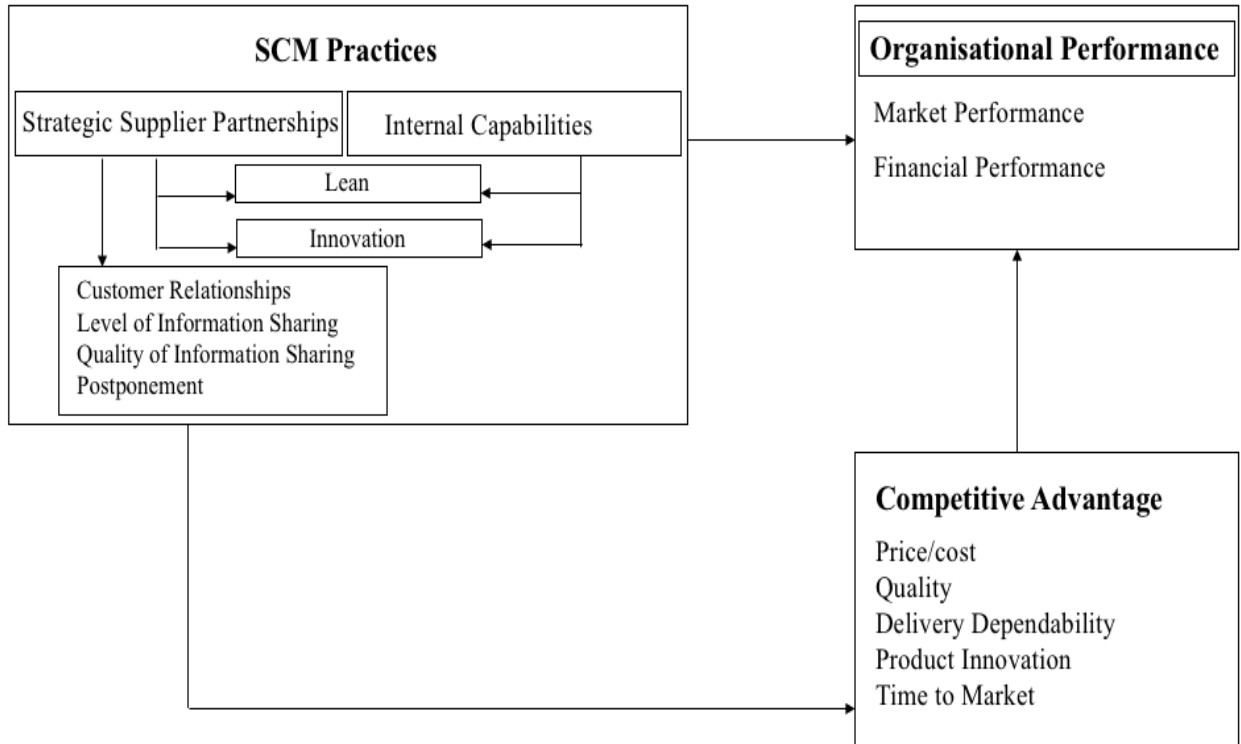


Figure 5. Refined theoretical framework, based on Li et al. (2006).

6 Conclusion

For decades the area of SCM has been under scrutiny, with both practitioners and researchers attempting to decipher what practices and managerial decisions led to best results for a firm in a supply chain. There have been multiple explanations put forward, both from the IO school of thought, which sees strategic decisions as reactions to the firm's position in the external environment, as well as from the RBV, which emphasises the importance of internal capabilities for the creation and maintenance of a competitive advantage. This thesis has been an attempt to provide a balanced and empirically tested view of the SCM practices used by high performers and owners of competitive advantages in order to establish and retain dominance. In order to do so, we found a preliminary framework that linked certain practices with higher market and financial performance and the existence of supply chain related competitive advantages and have endeavoured to refine it, by assessing the participants in a low-margin supply chain in the UK. This has led to what we tentatively consider to be a more complete picture of the managerial reality of a competitive supply chain.

6.1 Research and Objectives

The aims and objectives that we wished to fulfil in this thesis were to provide an accurate representation of the relationship between certain SCM practices, competitive advantage, and organisational performance in a UK supply chain, with the research question being: *What SCM practices have become sources of competitive advantage and superior performance for firms in a low-margin UK supply chain?* This was answered through the fulfilment of the objectives, as will be described below.

(1) Define and assess the concepts of SCM and its practices, competitive advantage, and organisational performance;

(2) Find the SCM practices that have repeatedly been linked in literature with higher performance and the creation of a competitive advantage;

(3) Identify a theoretical framework that illustrates the link between certain practices and organisational performance and competitive advantage.

As could be seen from our literature review, the field of SCM contains a broad array of research, with academics aiming to find the SCM practices that organisations need to focus on in order to become successful. We thoroughly examined the literature in the area and critically assessed it, in order to bring the reader a comprehensive, impartial understanding of the concepts utilised in the thesis and the framework chosen was the one showcased in the Li et al. (2006) article. The discovery and critical analysis of this model and the fields that it purports to illustrate represented the fulfilment of our first three objectives. This framework also became the foundation of our own empirical testing and subsequent findings, as seen later in the conclusion.

(4) Test the framework in a specific supply chain, in order to prove its relevance to practice.

Through our empirical study and analysis, we tested the theoretical framework in the dairy supply chain in the UK market. The analysis was executed on the data gathered from both a vast array of secondary sources, as well as interviews. This gave the reader an understanding of both the historical overview and the live debate with regards to the dairy industry and its supply chain system. It also enabled obtaining a higher level of abstraction, as the particularities of the dairy supply chain were primarily shown to be margin reduction related, which can be the case in many other competitive industries. Therefore, accomplishing the refinement of a model that attempts to explain what SCM practices lead to success is a feat that can prove highly relevant to practice.

(5) Provide a revised model in case any variances are detected during the empirical testing.

During the analysis of the empirical material, and its comparison with the preliminary framework, a discrepancy was found between the practices emphasised by Li et al. (2006) and those highlighted in the primary and secondary data. Although all of the existing practices in the preliminary framework (with the exception of postponement) were found to be relevant, other findings were also uncovered. The outcome of the analysis was then a new and revised model with two additional components to the framework, namely the lean capability and innovation. Additionally, the empirical study and the analysis suggested that strategic partnerships were the foundation for the rest of the existing SCM practices, while both the lean way of operating and the ability of organisations to be innovative stemmed from both supply chain partnerships, as well as internal capabilities. These discoveries and the revised model supported findings that could aid managers from multiple other supply chain types, and

researchers attempting to get the most recent picture of the reality of the business world, as will be expanded on below.

6.2 Theoretical and Practical Implications

The findings of this thesis have multiple inferences that can be drawn, of value for both academia and practice. Firstly, our theoretical contributions stemmed from empirically testing the model initially presented by Li et al. (2006), which in itself presents useful evidence that furthers the academic understanding of the relationship between SCM practices and the ability to obtain a competitive advantage and higher performance. Since the preliminary framework used consisted of elements gathered by Li et al. (2006) through a literature review, it was important to test whether the theory corresponded to the reality of practice. This thesis was thus an attempt to endorse the practices emphasised in the 2006 model. It was also constructed in a way that allowed for adjustments to the preliminary framework, owing to the choice of the abductive method. Therefore, the iterative approach of looking at theory and the empirical material, as well as the choice of semi-structured interviews permitted the discovery of further elements that were considered relevant in the area of SCM practices. Namely, the addition of lean capabilities and innovation to the list of practices that enable higher performance/competitive advantage is another theoretical contribution that we have attempted to showcase. These two elements not only offer a more holistic view of the practices that are considered important in competitive, low-margin industries, but we argue they also provide a more balanced theoretical approach, since they account for the internal capabilities of a firm, instead of focusing on the firm's reaction to its external environment.

As for the practical implications of our study, they naturally firstly aid managers active in the dairy industries of Western developed economies, such as the UK. These practitioners can benefit from the list of practices that enhance performance and enable competitive advantages, by assessing whether their organisation is implementing them. They can also be aided by the trends illustrated in the empirical section of the thesis. These trends, such as consolidation, centralisation, high level of information sharing between partners, etc. can improve the supply chain managers' choices and support their decision-making. By monitoring the practices and trends and reacting swiftly, practitioners and their organisations can survive the movements that thwart their profitability, and instead manage to enhance performance.

However, given the competitiveness of the dairy industry stemming from the threat of low margins that the players must protect themselves against, an understanding of the SCM practices of the highest performing participants in each supply chain segment can then provide valuable insight to other practitioners in similar industries. Considering SCM practices in the revised model have all been mentioned throughout literature, they have a wider utilisation than solely the dairy industry. Organisations that are part of supply chains of similar length and complexity could all benefit from an understanding of successful SCM practices. Therefore, we expect the findings will be considered useful by all grocery supply chains, supply chains involving low-cost pressures, as well as the ones where one participant is thought to have a much higher influence than the rest of the players. Tentatively, we hope that the list of practices that bring performance/advantages can be useful in all low-margin industries, as a framework worth examining when engaging in supply chain activities.

6.3 Limitations and Further Research

In order to give the reader a full context and explanation of the obstacles that have limited us during several steps of the research process, we have attempted to highlight and clarify directly in the text the limitations that we encountered. These were specific limitations related to discrepancies between theory and practice or gaps in literature, such as:

- Value appropriation in the dairy supply chain;
- Performance increase from collaboration between business units;
- Measurement of innovation;
- Lean capabilities in other segments of the supply chain.

These areas, although outside the scope of our research, can become fruitful avenues for further studies, expanding the knowledge regarding the management of a supply chain and its intricacies.

Furthermore, at a methodological level, our biggest limitation was the lack of primary data sources from either end of the dairy supply chain: farmers, retailers and their customers. Therefore, we would consider it a constructive avenue for further research to interview or otherwise examine these players. Moreover, our time constraints limited our ability to observe the industry to its fullest extent. Thus, it can be of interest to observe the developments in the

industry for a longer period of time since it has been shown to be in constant movement and prone to centralisation and consolidation. By assessing relationships between participants and the general power dynamics of the industry, more can be elucidated in the debate of unjust value appropriation. Further studies should consider the time span available and the access provided before attempting to research a complex and dynamic supply chain.

Lastly, research could benefit by taking a consumer perspective on dairy, as the trends are globally shifting due to animal welfare issues, the increasing presence of dairy substitutes and legal pressure. While it was outside the scope of this thesis, the consumer power could impact the dynamics of the industry in significant ways and is worth taking into consideration.

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Appendix A

Interview Guide - Practitioners

Introductory Questions

1. Can you tell us about your position and what it entails?
2. How long have you been in the industry?
3. How much contact do you have with partners in your supply chain?
4. What do you think are the key success factors in your Supply Chain Management system?

→ *Explain the concept of SCM practices*

SCM Practices

5. Can you tell us about your SCM practices?
6. How would you say these practices affect your supply chain?
7. How would you say these practices affect your partners in your supply chain?
8. Would you say that you are powerful in relation to your suppliers?
9. How would you describe the power dynamics in the industry? Who has the most bargaining power?

→ *Explain the purpose of our thesis and that we are testing specific SCM practices.*

10. What type of strategic partnerships do you have with your partners in the supply chain?
 - a. Would you say that these partnerships are emphasizing and encouraging mutual planning and problem-solving efforts *or* are the operations characterised by individual organisational work and stemming from your own organisational capabilities and procedures?
11. Can you describe your customer relationships? Both with end-customers and customers within your supply chain.
 - a. How do you manage customer complaints?
 - b. Are you aiming to build long-term relationships with customers?

- c. How are you working to improve customer satisfaction?
12. How much information would you say is shared between organisations in the dairy supply chain?
- a. How much information do you keep to yourself?
 - b. Without specifically telling what information; is there a large amount of proprietary information that you keep to yourself?
 - c. How would you consider the quality of the information being shared between organisations?
 - d. Would you say that the communication is accurate, timely, adequate and credible and reaching the correct person? Or is there anything you feel could be improved?
13. Do you postpone any activities within your supply chain?
14. Is there anything you would say we have missed with regards to SCM practices/activities?

Competitive Advantage

15. What capabilities would you say that you have that your competitors do not have?
- a. Why are you successful?
 - b. What are your key success factors overall?
16. Do you think these capabilities enable higher organisational performance? For example, higher market performance or financial performance?

Appendix B

Interview Guide - Researchers via phone.

Introductory Questions

1. Can you tell us about your position and what it entails?
2. What has been your main research focus throughout your career?
3. What would you say are the key success factors in the dairy supply chain system in the UK?

SCM Practices

4. What do you believe to be the supply chain choices/activities/practices that enable firms to gain a competitive advantage in the dairy supply chain?
5. Would you say that collaboration between actors in the supply chain or are individual decisions more prominent?
6. Would you say there are any specific capabilities within an organisation or within a dairy supply chain that are particularly important for the organisation or supply chain to achieve a competitive advantage? *(If the respondent wants examples: e.g. lower cost, time-to-market, or similar factors)*
7. What do you think enables the recent growth of discounter retailers such as Lidl and Aldi in the UK?
 - a. Is it their supply chain practices, and if so, what practices in particular?
8. Do you think there is a high level of information sharing between actors in the dairy supply chain, or does isolation play a bigger role in establishing a competitive advantage and higher performance?
9. How has the growth of discounter retailers impacted the rest of the supply chain, given their push for lower margins?
 - a. For example, how do you think it impacted the dairy supply chain, given it is an already price pressured industry?

Appendix C

Interview Guide - Researchers via email.

Our thesis attempts to test a theoretical model that links supply chain practices with organisational performance and sources of competitive advantage, which is why we would be very grateful to have your opinion on this:

1. What do you believe to be the supply chain choices/activities/practices that enable firms to gain a competitive advantage in the dairy supply chain in the UK?
 - a. Is it more collaboration with other actors in the supply chain or individual decisions?
2. Would you say there are any specific capabilities within an organisation or within a dairy supply chain that are particularly important for the organisation or supply chain to achieve a competitive advantage?
 - (Could be e.g. lower cost, time-to-market, or similar factors)

The supply chain that we chose for the empirical test of the model is the dairy industry in the UK, which is currently going through shifts of power dynamics due to the growth of discounter retailers. Thus:

3. What do you think enables the recent growth of discounter retailers such as Lidl and Aldi?
 - a. Is it their supply chain practices, and if so, what practices in particular?
4. Do you think there is a high level of information sharing between actors in the dairy supply chain, or does isolation play a bigger role in establishing a competitive advantage and higher performance?
5. How has the growth of discounter retailers impacted the rest of the supply chain, given their push for lower margins?
 - a. For example, how do you think it impacted the dairy supply chain, given it is an already price pressured industry?