Global trade & the Dutch hub: understanding variegated forms of embeddedness of international trade in the Netherlands: clothing, flowers, and high-tech products

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As global trade increases, some regions have become specialized in international trade and logistics, forming hubs to larger market areas. Although a lot is known about international trade in quantitative terms, much less is known about actual trade activities taking place in trade hubs and the ways these activities are geographically embedded.

This study investigates the characteristics and specificities of the Dutch trade hub. It can be read as a case study of the Netherlands and of the trade and distribution of cut-flowers, clothing, and high-tech products through this country. It can also be read as a study of trade itself and an attempt to theorize on the ways in which it is organized and becomes geographically attached to certain places.

Global trade & the Dutch hub introduces three ideal types of trade nodes – the trade-network node, the distribution node, and the marketplace node. With the help of these three nodes, academics and (economic) policy makers interested in the geography of international trade will gain a better understanding of the variegated forms of embedding of trade and the forces acting upon it. This book makes us aware of the many, but sometimes also restricted, ways in which policies can stimulate international trade as an economic activity.

Key words: re-exports, international trade, clusters, economic geography, the Netherlands, clothing, flowers, high-tech products

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Chapter 1

Introduction

Growing world trade and the Dutch trade hub

For almost two centuries world trade volume has grown more rapidly than worldwide GDP. Trade liberalization, reduced transport costs, and the development of modern information and communication technologies have all been instrumental in this. Industrial specialisation at the national and regional level is also said to have contributed to the growth of trade. Particularly economic geographers have argued that regions have come to play a more important role in world trade as they have become the locus of specialized economic activities with a worldwide reach and compete and interact with each other on a global scale through global flows of information and goods (Storper, 1997, Sassen, 2008, Scott, 2000). Once bound to the same geography, large corporations have started to geographically unbundle various departmental activities, locating product development, production, distribution, finance, and warranty services in different locations. In this process regions have become specialized in certain industries or activities within global value chains. Some regions are specialized in the development of computers, others in textiles, chemicals or even dairy products. Increasingly global flows of goods and/or information are occurring between specialized clusters. Within this new global economic structure, trade does not necessarily involve direct trade flows between regions of production and consumption. Sometimes goods first go to a specialized international trade and logistics region before they are routed to other parts of the globe. Sassen (2008) has called regions that function as a kind of hub between different areas of the world, where flows of goods and/or information come together, *global platforms*. These global platforms function as a point of entry to larger market areas for one or more specific types of goods or services.

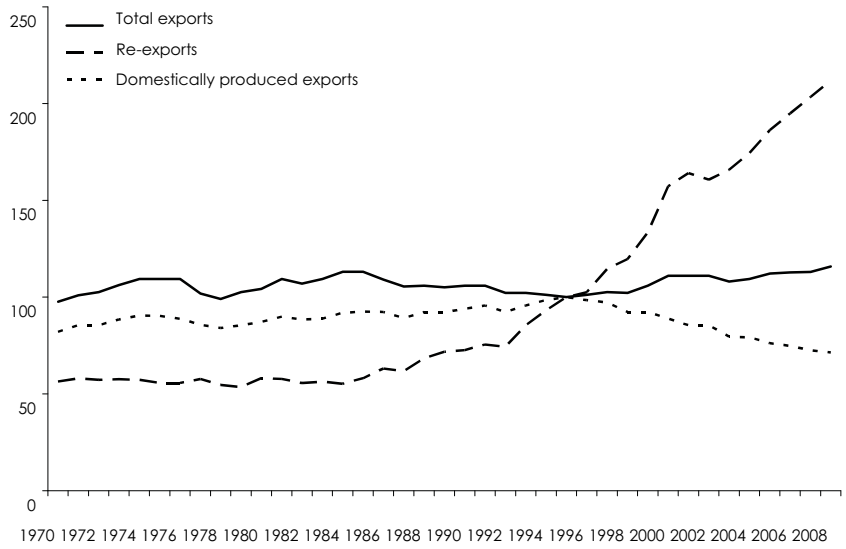
The Netherlands represents one of these places. The Dutch have a long history as a trading nation and an intermediary between production and consumption markets all over the world. This specialization exists at the level of the country as well as at the sub-national level of regions and cities. Much ofthis can be traced back to the country's Golden Age of the seventeenth century. Dutch colonial trade links through the Dutch East and West India Companies brought products from Asia, India, Africa and the

Americas to the whole of Europe via the Netherlands. Amsterdam became the epicentre of this activity, a world city or global platform in the era of trade capitalism.

1.1 The growth of re-exports

Particularly since the end of the 1980s the Netherlands has reasserted its trade prowess, strongly developing into a transit economy of import/export and becoming a node in international trade.

Figure 1.1: The development of the volume of total exports, re-exports, and domestically produced exports of fabricated goods with respect to relevant world trade[1], 1970-2008, index data, 1995=100



Source: Mellens et al. (2007, p. 26).

[1] Relevant world trade is trade in goods with a, for the Netherlands, relevant world market. See for how this is calculated exactly and a discussion on the issue Mellens et al. (2007)

Statistics show that large re-export flows[2] go through the Netherlands and that these flows are growing (Mellens et al., 2007, Kympers and Veldman, 2004, WRR, 2003, Kusters and Verbruggen, 2001, Gorissen, 2003). In the last twenty years, except for 2002, re-exports have grown faster than exports of domestically produced goods (see Figure 1.1). Not only the volumes of re-exports have grown over the last decades, as shown by the index data of Figure 1.1 but also, as Table 1.1 shows, the value of re-exports has increased substantially over the last years and count much more than forty percent of total exports ever since the year 2000. However, 2008 shows a fall in re-export as percentage of total exports which is caused by the international economic crisis.

Table 1.1: Exports and re-exports of goods in the Netherlands

Year	Export *(billion Euro's)*	Re-export *(billion Euro's)*	Re-export *% of total export*
2002	233	98	42.2
2003	234	98	41.8
2004	256	111	43.4
2005	281	122	43.4
2006	319	140	43.9
2007	348	155	44.7
2008*	368	153	41.5

Source: StatLine (Statistics Netherlands, www.cbs.nl)

* Preliminary data

To get an idea of the strength of this specialization, Balassa indices can be calculated for re-exports (see Table 1.2)[3].

2 The definition of re-export has long been unclear and un-standardized. Unmodified re-exports and re-exports after small industrial processing, to a certain extent, were grouped together as re-exports. Until recently in Dutch trade statistics it was unclear what was to be considered a small industrial processing (adding up to re-export) and what as major processing (adding up to normal export). Different public organizations used different standards. Currently standardization of data takes place in accordance with Eurostat (personal communication with representative of Central Bureau of Statistics of the Netherlands, 2007). It has been agreed to record trade as re-export when after import there is a transfer of ownership to a resident of the importing country followed by export of the same product which means that the product has not undergone a change of more than two digits in the eight digits product code of the Hamonized System (HS) of the EU (Roos and Exel, 2004). This has made the re-exports category much clearer. However, the category of re-export does not tell us much about the kind of services that are added to the value chain in the re-exporting country. Goods that are re-exported may or may not have been subject to trade intermediation, trade related juridical services, marketing, transportation, and distribution. For example packaging and customization of products included in distribution services is of a totally different kind than the buying, reselling and marketing of a product. Both kinds of services may be delivered to a re-export flow.

[3] A commonly used method to investigate a country's industrial specialization is to compare the size of a specific sector in one country with the size of that sector in other countries. The Balassa-index is often used for this. The supposition, on which the Balassa-index is based, is that strong industries export more, leading to

Table 1.2: Re-exports (in billion of Euros) in different European countries and the Balassa-index for re-exports in these countries in 2000

	Export	Domestically produced	Re-exports	Share of re-exports in total exports	Balassa-index re-exports
			(billions of Euro's)		
Belgium	153	103	50	33	1.4
Denmark	45	36	9	20	0.8
Germany	558	467	91	16	0.7
Finland	49	47	2	4	0.2
France	297	206	91	31	1.3
The Netherlands	196	112	84	43	1.8
Sweden	87	85	2	2	0.1
Total	1385	1056	329	24	1

Source: Mellens, Noordman, and Verbruggen (2007, p. 33) and own calculation

The Balassa-index in this table compares the share of re-exports in the total exports of a country to the share of re-exports for some reference countries. It is clear that within the European context the Netherlands stands out as a re-export specialist with a Balassa-index of 1.8. Belgium and France follow the Netherlands with indices of 1.4 and 1.3 respectively. Compared to Hong Kong, with a re-export share in 2001 of almost 90 percent of total exports of goods (WRR, 2003, pp. 44-45), re-export shares of the Netherlands are not that high, but Hong Kong may be the real exception in this category, even Singapore, that is also seen as an important global gateway has a share of 'only' a bit more than 45 percent (idem). A share of more than 40 percent of Dutch exports being comprised of re-exports is comparatively high within Europe (Table 1.2). 88 percent of Dutch re-exports is Europe bound and nearly half of re-exports is imported from Western Europe, while one third comes from the US and Southeast Asia (Roos, 2007). This makes the Netherlands a true intermediary between global markets.

When examining the role of the Netherlands as a trading nation, re-exports have received a lot of attention (examples of this are Kusters and Verbruggen, 2001, CPB, 2005, Roos and Exel, 2004, ESB-Dossier, 2003, WRR, 2003). However, re-exports as a category, is broad and loosely defined. It simply does not tell us much about the internal composition and proportions of goods and services included, nor does it say much about

comparatively higher exports of the products of that sector. A comparison then is made between the share in export (X) of a specific product (j) in the total of exports of a country (i) and the share in exports of that specific product in the total of exports in a set of reference countries (ref).

Balassa-index = (Xj/Xi)/(Xjref/Xiref)

When the export share of the specific product in the country under investigation is the same as it is in the reference countries, the index is 1, above 1 there is some specialization.

what an economy actually gains from re-exporting. In the Netherlands, this has led to debates on whether or not this re-export trade consists merely of "moving boxes" through the country and does not effectively contribute to the domestic economic growth, while exacting high infrastructural and environmental costs. Or, that although the return on one unit of re-export is not very high, it also does not demand much labour input, therefore making transfer and re-export economically viable and beneficial (CPB, 2005, Brakman and Garretsen, 2003). Research suggests that within entrepôt economies, that are large re-exporters, indeed more is taking place than mere transhipment since goods leave entrepôt economies much more expensive than they enter them (Feenstra and Hanson, 2004). Manshanden and Kuipers (Manshanden and Kuipers, 2003) state that more money is gained with re-exports than with transit trade, in which trade and distribution activities are not present, because of trade margins and tax revenues. If this is the case, a continuation of the argument would involve determining what policies should be pursued to enhance the Dutch role as trade hub. The discussion on re-exports shows that in fact little is known about it, especially in qualitative terms. However, to eventually come to policies that stimulate the Dutch trade hub, it is needed to know what activities are related to re-exports and how they are embedded in the Netherlands.

1.2 Theoretical approach and research questions

1.2.1 Research questions

To understand trade data and activities, one could use (neo)classical trade theory, new trade theory, and transaction costs theory. They all give some explanations for the existence of trade. However, they insufficiently explain the existence of specialized re-export economies. Neoclassical trade theory and new trade theory explain how trade takes place between places with different – given or developed – comparative productivities in the production of goods. However, these trade theories seem to assume that trade only takes place between areas of production and consumption, whereas the existence of re-export hubs shows that international trade can also be an industry in itself resulting in exports of goods that are not domestically produced. I will elaborate on this more in Chapter 2. Transaction costs economics says that whenever there is an intermediary trader between producer and consumer, this trader can only be explained by the fact that the use of the trader lowers the costs that are related to the transaction. These costs are related to uncertainty on such things as product quality, amounts needed, trustworthiness of the trading partner, delivery time, et cetera. When a trader has superior knowledge on these issues or superior relations that enable him to find solutions to problems that might arise, he has fewer uncertainties and his risks are lower.

Therefore, the transaction costs will be lower for him. That these kinds of transaction costs exist, has become clear in research on the role of traders: what they add to products are things like knowledge about markets and opportunities for trade, a guarantee of quality, logistic services and administration (Andersen, 2005, Biglaiser and Friedman, 1994). Gravitation models of trade also show the importance of transaction costs. There is more trade between countries when they are more proximate to each other spatially and culturally, have colonial ties, or common membership of international organizations and free trade areas (WRR, 2003, Linders, 2006). Yet, they are unable to fully explain trade data between countries and only take efficiency as a reason for the direction of trade flows into account – as they are based on transaction cost economics. Furthermore these models do not explain why certain places are able to develop into hubs with competitive levels of transaction costs for international trade.

This research seeks to fill in the lack of understanding regarding concentration and embedding of trade activities at specific places by studying the Dutch trade hub, not with quantitative models, but by qualitatively studying the processes within that hub. The trade hub is seen as a local production system linked to industrial systems elsewhere forming part of an international value chain. Mechanisms within this system[4] and international value chains are the starting point of the analysis.

The first question this research will begin to answer is what the development as a trade hub in quantitative terms means from a qualitative perspective: what economic activities lay behind the quantitative data? What does being a high volume trading nation really mean? Does it mean the Dutch only have the cheapest distribution methods but are totally dependent on decisions taken elsewhere, or does it mean that the Dutch have some power as a coordinator and control centre within international value chains because of the pro-active role of the Netherlands in connecting markets of production and consumption? The first research question then is:

[4] This approach to analyzing trade hubs comes close to the way in which transport geography has tried to understand the competitiveness of transport hubs and port areas. Transport geography also focuses on the local production system or cluster as a starting point to understand competitiveness, instead of quantitatively focusing on the flows that go through port areas (Airriess, 2001, Cheung et al., 2003, De Langen and Visser, 2005, Evans and Hutchins, 2002, Goetz and Rodrigue, 1999). It has made the case for the study of transport as a separate economic category in the division of labor and, just like this study, it recognizes trade as a distinguishable category. What these studies show is that to understand a container hub, it is necessary to investigate processes within the hub itself, such as local governance and collective action (De Langen and Visser, 2005) and the implementation of ICT (Airriess, 2001). However, what these studies generally do not really take into account is the influence of the external links within global value chains on these regions. Furthermore, little attention is paid to the interaction between developments in these global value chains and in the hub itself. Only in some cases the literature places the developments in the ports into developments within the transport industry. An example of this is Loo and Hook (2002) who try to understand the opportunities for Hong Kong as a logistics hub as the result of Chinese policy and the rise of containerization in the transport industry. However, they do not take the wider value chain (trade, production) into account.

(1) *What trade activities and trade role lay behind the re-export data in the Netherlands and to what extent does the Netherlands play the role of a coordination and control centre in the trading function of international value chains?*

A next important question is how strongly this trade role is connected to the Netherlands and to what extent this role is difficult to be taken over by other countries.

(2) *Through which processes are these trade activities attached to the Netherlands and to what extent are they in such a way attached that they cannot be easily relocated?*

And, as a result of this,

(3) *What are, in light of the answers given to the previous questions the strengths and weaknesses of the production system of international trade in the Netherlands?*

A very important hypothesis that will steer this research and the way that is looked at the questions, is that the trade hub, as a specific type of global platform, should not be studied and seen as one homogenous type of global platform. On the contrary, at least three types of trade hubs should be distinguished that have their own characteristics, dynamics, and processes of geographical embedding. First, a trade hub can be a place that only physically connects demand and supply through distribution activities. I call this case a distribution node. The trade hub can also be the place where supply and demand physically come together. The trade hub then is a true marketplace where goods are shown and change from owner. Finally, a trade hub can be a place where scattered demand and supply get connected through traders and their trade networks. The trade hub in that case, is not a place where demand and supply literally meet each other and are concentrated, but only the place where they are connected. I call such a trade hub a trade-network node. All these types of trade nodes can include a combination of trade (transfer of ownership) and distribution (physical handling) of goods but they do not necessarily have to. The different types of trade nodes, when combining both, can develop in a way that only one of the two remains. In the case of a distribution node, the import and subsequent export of goods that is related to distribution in the node can be replaced by mere transshipment or throughput. This means that no legal transfer of ownership takes place anymore in the distribution node, but only physical transportation. In the case of a marketplace node, physical trade can become virtual trade. Demand and supply still come together in the node but the products traded are not present in the node anymore. An example of such a virtual marketplace node is the London Metal Exchange where the metal exchanged is not physically present. A trade network node can develop into a trade node without distribution when traders directly

sent the goods from the supply to the demand side. In this case demand and supply still find each other through a trader in the trade network but physically the trade network node does not play a role anymore in the trade. To really understand a trade node, these types of nodes should be distinguished. This is what I will do in this book. It consists of case studies of each type of trade node: clothing represents the trade-network node, flower trade represents the market-place node, and high-tech products represent the distribution node. This distinction enables us to see that Dutch (trade) policy has been one-sided in a way, focusing mostly on the development of the distribution node.

1.2.2 Relevance of research questions

The questions of this research are of interest to theory development with respect to the role of local industrial systems within a globalizing economy and to the development of theory on nodes of international trade. In chapter two a theoretical framework will be constructed that enables us to investigate the questions in three case studies of re-exports through the Netherlands. The point of departure in this theoretical framework is the idea that a spatial economic structure like a trade hub, can best be understood as the result of (1) processes and characteristics of the hub itself: economic processes like the development of economies of scale or of knowledge, and characteristics such as legislation or physical conditions of the hub (e.g. tax laws, customs unions, infrastructures), (2) processes and characteristics of the global value chains of which the trade node is part (e.g. changing governance structures, power configuration, and steering), and, (3) the characteristics of industries or sectors (products and markets and the activities involved). To understand a trade hub it is necessary to look at processes within these three arenas and to see how they interact at different levels to create a given economic outcome.

The exact processes that I will be looking at in this study will be discussed in the theoretical section (Chapter 2). At this point it will also become clear why, for a good understanding of the node of international trade in the Netherlands, it is necessary to look at specific products and their value chains of which this node is part. It will become apparent that there are so many possible different economic activities involved in international trade that one must focus on the specific activities that international trading firms perform in the Netherlands. Only then will one be able to understand why these activities take place so often in the Netherlands. Therefore in the case studies of this research a description of the trade specialization in terms of activities that firms in the Netherlands do is very important. Through this perspective we can answer the question to what extent the trade functions of the Netherlands act with coordination and control capabilities, how they are attached to the Netherlands and possibly even have become embedded in the Netherlands, and how policies have added to this.

This research is also of interest to the development of economic and trade policy in the Netherlands. The idea that the Netherlands is a country of trade is felt strongly in Dutch policy and political thinking. In light of the strategic location of the Netherlands in the Rhine delta, nothing seems to be more logical than pursuing trade-friendly policy. This policy takes shape in the support of extensions of the Port of Rotterdam and Amsterdam Schiphol Airport and in large infrastructural investments such as in the freight railway to Germany, the Betuwelijn, and in the HSL (high-speed railway). Since there is a lack of knowledge about the firms and activities behind the statistical trade data that show a high specialization in trade and how these activities are related to the Netherlands and broader international value chains and production networks, it is very uncertain how these policies affect the activities of firms that currently create the high import and re-export activity within the Netherlands. It makes it also unclear whether or not the strategy taken can be seen as a strong competitive strategy in the terms of Jessop (1998). This is a strategy that improves the overall (structural) competitiveness through innovation instead of only attracting mobile resources at the expense of other localities in a kind of zero-sum game, which can be seen as a weak competitive strategy (Jessop, 1998, p. 79). Activities attracted by a weak competitive strategy are, of course, much more prone to relocation as other places are able to imitate the strategy. I will elaborate on this point in Chapter 4.

1.3 Organization of the book

This book is organized as follows. In the next chapter I will build an explanatory framework for the concentration of international trade based on theories on value chains and on territorialization of economic activities. After the theoretical chapter, a short chapter follows on research methods and case selections. Chapter 4 analyses Dutch trade policy, showing the focus that has been placed on developing the distribution node. Thereafter, three case studies of Dutch international trade in clothing, flowers, and high-tech products will show how varied the embedding of international trade in the Netherlands actually is. It shows the importance of distinguishing three types of trade nodes and to take into account product and market characteristics as well as the organization of the value chain when trying to understand the embedding of international trade in a specific node. Each case-study chapter (Chapters 5-7) tries to come to a conclusion on the trade activities in the Netherlands and their embedding in the Netherlands. In the concluding chapter (Chapter 8) I will reconstruct the explanatory framework for the attachment of international trade and distribution developed in Chapter 2 and will discuss this framework with reference to the case studies and the Dutch context. I will also remark on the research, the theory and methodology used and questions that remain open for discussion and research.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Chapter 2

A framework to analyze nodes of international trade

Local production systems,
value chains, and territorialization

'The fortunes of regions are shaped not only by what is going on within them, but also through wider sets of relations of control and dependency, of competition and markets.' (Coe et al., 2004)

As we have seen in Chapter 1, there are three main types of trade nodes. In this chapter the processes will be described that geographically embed these nodes. The processes that are of importance for the geographical embedding of trade as a matter of fact not only differ with type of node but also with type of product and value chain organization. This will be explained in this chapter.

Different types of products and trade nodes involve different types of trade activities and therefore require different assets. In a market-place node, assets related to the market place itself are important, for example the assortment of goods available. In a distribution node, assets related to distribution, such as physical infrastructure and logistic knowledge and regulation seem to be more important. In the case of a trade-network node, assets related to the traders in the node, such as their knowledge of markets, seem to be more important to embed trade geographically to a specific place. At the same time different types of products will probably depend on different aspects of a specific trade node. For some products it is important that a trade node enables markets to find each other, where for other products the main role of a trade node seems to be the ability to handle fluctuations in supply and demand. This also influences the assets that are needed. Understanding the assets needed for trade is important since the geographical embedding of trade activities to a specific place depends on how unique these assets are. When assets are very unique to a specific place as the result of place-specific mechanisms, relations, and developments they become *territorialized* (Storper,

1997) and therefore hard to imitate elsewhere. Competition on territorialized assets can be seen as a strong competitive strategy since it involves competition on highly immobile production factors. At the level of the local production system itself, the development of scale economies, processes of knowledge development, or direct investment in infrastructure may create such territorialized assets. At the level of the national state, infrastructural investment as well as legislation and its effects can create place specific, but often less territorialized assets as far as they are easily imitated elsewhere. In addition, supranational bodies such as the EU can influence assets of specific places through actions like the creation of a common market. Only certain assets are very country-specific and therefore difficult to emulate elsewhere; in this sense we would deem them territorialized.

Also the organization of the value chain influences the geographical embedding of trade activities. When trust and common understanding (conventions, institutions, tacit knowledge) play an important role in the trade-transaction in a value chain, trade may be much stronger related to specific traders, and through them to specific places, than in cases where pure market relations exist. Also investments made in equipment and personnel when a hierarchic organization is at stake, might increase the geographic embedding of trade.

The organization of this chapter is as follows. First I will turn to the nature of trade activities and the kind of activities and services that are involved in trade (section 2.2). I then turn to the role of trade: what different roles can trade play depending on product and market characteristics? Does this also mean that different activities and services are performed in different situations? And when are coordination and control functions part of trade (Section 2.3)? After that, I will delve into the aforementioned mechanisms that geographically embed trade activities: characteristics and assets of local production systems and the relation they have with other levels such as national and supranational institutions that create and enhance the terrritorialization of asset, or on the contrary can make them obsolete (Sections 2.4 and 2.5). Thereafter I will address the issue of the governance characteristics of wholesale trade in global value chains (Section 2.6). In the last Section (2.7) I will come back to the research questions and formulate the main hypotheses this research start with based on theoretical grounds. But before that, section 2.1 starts with a discussion of the global value chain concept that is much used in this chapter.

2.1 Global Value Chains

In this research the concept of the value chain helps us understand international trade activities and their attachment to specific places. This is done not only from a local or

national perspective, but also internationally to show relationships with economic actors at different scales. In the words of Henderson et al. (Henderson et al., 2002, p. 438)

> *"In order to understand the dynamics of development in a given place, […], we must comprehend how places are being transformed by flows of capital, labour, knowledge, power etc. and how, at the same time, places (or more specifically their institutional and social fabrics) are transforming these flows as they locate in place specific domains."*

As global value chains, consisting of flows of goods, capital, knowledge and power, transect the Dutch trade hub, an understanding of these flows and their interaction with the trade hub will help to understand the development of this hub.

The global value chain concept used in this research is based on Gary Gereffi and others (Gereffi, 1994, Gereffi et al., 2005, Sturgeon, 2003) and the work of Henderson et al. (2002) on global production networks. The value chain concept was developed in response to dissatisfaction with the commodity chain concept, yet is still closely related to it. Both concepts describe global industrial structure and focus on how regions and businesses are internationally connected to each other. The global commodity chain approach analyzes all portions of the chain, from basic resources to end products; it consists of '*sets of interorganizational networks clustered around one commodity or product, linking households, enterprises, and states to one another within the worlds-economy*' (Gereffi et al., 1994, p. 2). Originally the framework, as developed by Gereffi (Gereffi, 1994), distinguishes three dimensions of a commodity chain. First, chains have a specific territoriality. Some are concentrated while others are dispersed. Second, each chain has a distinctive input-output structure of products and services that are linked together *'in a sequence of value-adding economic activities'* (Gereffi, 1994, p. 97). Third, Gereffi distinguishes between different governance structures, that is the power relations and authority structures that *'determine how financial, material, and human resources are allocated and flow within a chain'* (idem p. 97). Both global value chain and commodity chain literature explicitly acknowledge the flows of goods, financial and human capital within the chain, and explain how the governance structures between actors determine these flows. They show how economic activities in one area connect to other areas carrying out other parts of the production and distribution process. However, the global value chain concept differs from the global commodity chain concept at the point of governance. Whereas the global commodity chain concept distinguishes only two of these governance structures, (a chain driven by the powers of a leading buyer or a chain governed by the powers and whishes of a leading producer), the global value chain concept distinguishes at least five such governance structures: market, modular, relational, captive, and hierarchic governance (Gereffi et al., 2005).

Global value chains have become a growing field of research in recent decades. The Global Value Chain Initiative, started in 2000 by Gary Gereffi, John Humphrey and Timothy Sturgeon, shows an ever-expanding list of publications on value chains by researchers all over the world[5]. All these studies show that the value and commodity chain concepts are well-suited for explaining not only how economic activities in one place are globally connected, but also how the networks that they are part of influence what is happening at one place. However, there are also limitations to these studies. A study by Phyne and Mansilla (2003) on the salmon industry of Chile shows that the global value chain perspective does not take local political circumstances into account in order to understand the development of a place within the chain. This is a critique that Henderson et al. (2002) also have. In turn, Henderson et al. have formulated a global production network perspective that explains the development of a place as part of a larger global production network resulting from firms' ownership structure and architecture, supporting institutions (governmental, quasi-governmental, and non-governmental), supporting networks (its architecture, power configuration, and governance), and the sectors (technologies, products, and markets) that act upon this place.

In addition, some scholars (Henderson et al., 2002, Coe et al., 2008) have objections about the use of the word 'chain' in the global value chain and global commodity chain approaches since this word suggests that the production and distribution processes are essentially vertical and linear. That is, a linear sequence of input/output from basic material to final product, instead of a more network-like structure of value-adding, in which feedback loops are possible and vertical relations exist between different chains. This objection against the use of the word 'chain' has also been made with respect to the supply chain concept. This concept also seems to assume linearity between the steps needed to come from raw materials to end consumers of a product. But, just as is said for the value or commodity chain, in real this linearity is often not present. Relations are much more criss-cross and steps do not neatly follow each other in time (Hagdorn-van der Meijden, 2007). This is an important point to take into account for this study since I'm particularly interested in the ways in which specific value adding activities interact with other activities in local as well as non-local production systems. To be more specific, this study is not concerned with the value chain as such, but activities within this value chain and the relations these activities have

[5] A database analysis of related publications since 1990, available on the website of the Global Value Chain Initiative (http://www.globalvaluechains.org/) shows that until now, the value chain approach has been used mostly for studies on industrial and agricultural production, as well as design and marketing functions related to each other in value chains. Apparel, textiles and footwear industries have received a particular amount of attention from researchers. A spring 2008 database query for 'apparel' returned at least 89 hits while 'textiles' returned 31 hits. Agriculture has also been well-studied (44 hits, e.g. Bair and Gereffi, 2001, Dolan and Humphrey, 2000, Sturgeon, 2003).

with other activities, actors, and places. In that sense, my approach comes much closer to the global production *networks* approach of Coe et al. (2004) and Henderson et al. (2002). That being said, it could be confusing to speak of networks instead of value chains, since the international trade-hub in this research is clearly seen as the link in a chain between production and wholesale trade and retail. This does not imply I will only study unidirectional trade flows and ignore the many other relations trade has with other economic activities and institutions and structures that cut though the value chain. In this sense I agree with Sturgeon et al. (2008), who argue that the chain metaphor does not have to *"assume a unidirectional flow of materials, finance or intellectual exchange"* and can *"usefully be conceptualized as a subset of more complex and amorphous structures in the spatial economy, such as networks, webs and grids"*, and can *"provide a snapshot of economic activity that cut through these larger structures, while at the same time clearly identifying smaller scale entities and actors, such as workers, clusters, firms, and narrowly defined industries"* (Sturgeon et al., 2008). What counts then, is how the concept of the value chain is used in the research practice.

With regard to the research practice I agree with the work of Henderson et al. (Henderson et al., 2002) that research into global production networks or value chains should pay attention to not only lead firms, but should also take into account other firms that may influence the chain including specific places and actors within the chain. The problem with only taking lead firms into account is that it might obscure the fact that, although a lead firm may lead a network in the sense that it sets the ultimate conditions that an end product should satisfy, there might be other firms that coordinate and control parts of the chain and where the lead firm does not take a direct lead. Furthermore, these networks are embedded territorially in nations, other jurisdictions and local production systems through actors within the network and their often relative geographical immobility. This geographical attachment and the many institutions that are at work at different scales influence the trade network architecture, in turn influencing the development of places it touches.

2.2 Trade activities: what are we talking about?

A theory of trade should start with a description of trade activities as a separate economic category. Trade has to be distinguished from other economic activities and as a separate unit within business organizations. This is no straightforward task. Literature on international trade does not often make a distinction between trade and production. Implicitly this literature presupposes a direct relationship between trade and production, although in practice this is often not the case. In many instances wholesale traders create international trade from third countries where production does not occur.

In these cases trade is an independent value adding activity. With this in mind we can see how a country could be a strong trading nation for products it does not produce and that international trade data reflects more than differences in the production of goods between countries. However, trade theory is almost exclusively centred on the idea of differences in production possibilities and levels of productivity between countries.

2.2.1 Neoclassical Trade Theory and New Trade Theory

(Neo) classical trade theory represented by the work of Ricardo, and the Heckscher-Ohlin factor price-equalization theorem is based on the idea of comparative advantages. When two countries are able to produce the same kinds of goods at relatively the same level of productivity, there will be no trade. But when the relative productivities for different goods differ between countries, trade will take place. This means that country A will import goods from country B even if prices in country A are lower overall. For this import to take place, the relative prices of goods must differ between the countries. This can be understood when one considers a scenario where there is no money, but only the exchange of goods. We can then express the price of a good as a relative price compared to that of another good. Table 2.1 shows an example of such differences in absolute and relative prices. In Belgium beer is relatively cheaper than in the Netherlands. On the other hand, cheese is relatively cheaper in the Netherlands than in Belgium, although in the Netherlands cheese is more expensive in absolute prices. Therefore Belgium will start to export beer to the Netherlands and get more cheese in return whereas the Netherlands will get more beer for its cheese in Belgium than in the Netherlands. As a result of this trade, the Netherlands will specialize in the production of cheese and Belgium in that of beer. Prices of beer will rise in Belgium and prices of cheese will rise in the Netherlands as the result of a larger demand. Due to this specialization, trade creates a growth of prosperity. The countries will trade until the point where relative prices for cheese and beer are the same in both countries. This is the point where productivity ratios in the countries have become equal.

Table 2.1: Example of absolute and relative prices for beer and cheese in Belgium and the Netherlands

	Belgium		**The Netherlands**	
Beer (B)	€1	1B=2Ch	€1.50	1B=5/2 Ch
Cheese (Ch)	€0.50	1Ch= ½ B	€0.60	1M=2/5B

The Heckscher-Ohlin factor price-equalization theorem states that the differences in relative prices between countries are the result of relative differences in factor endowments such as labor and capital. In fact, trade replaces the immobility of these factor endowments. Of course, this theory is not very realistic since trade between countries cannot take place at zero costs as a result of transportation costs, barriers to trade and all kinds of market imperfections. Moreover, in practice we see more trade between countries that have similar factor endowments than between countries with very different factor endowments. The most important trading partner of the Netherlands is Germany and not a country in say Africa that is richly endowed with production factors not present in the Netherlands like cheap labor, oil, diamonds, gold and other mining products. In general, the composition of Dutch imports and exports cannot be explained with the theory of Heckscher and Ohlin (WRR, 2003).

The new trade theory, of which Krugman is one of the most influential representatives, helps to overcome this problem to a certain extent. It tries to find other arguments for trade. New trade theory takes into account transportation costs (that make trade to nearby markets cheaper and more likely to take place) and the advantages created by economies of scale and home market effects (to explain differences in productivity between countries with liking factor endowments). In short, this theory shows plausibly through modeling that *'in the presence of increasing returns, countries will tend to export the goods for which they have large domestic markets'* (Krugman, 1980, p. 958). This comes close to the Linder hypothesis which states that trade takes place when high levels of production in the home market makes a product's price competitive on an export market with the export market itself being economically comparable to that of the home market (Krugman, 1980, p. 958, Van Esch, 1995, p.32)

Although new trade theory is much more sophisticated in its modeling and takes many more variables into account, the theory's basic premise is that trade is indirectly related to comparative differences in productivity in the production of goods between countries. In other words, trade in goods reflects the levels of productivity of a country. The theory, therefore, mainly is based on ideas and models to explain the location of production of certain goods and the location of their consumption. However, productivity differences in the production of goods cannot always explain trade patterns, especially not when we take wholesale trade and entrepôt centers into account. These '*entrepôt centers have a substantial effect on the prices and therefore on the magnitude of trade flows, which merits increased attention to their role in international trade'* (Feenstra and Hanson, 2004, p. 34). So it is also necessary to look at entrepôt and wholesale trade to explain trade patterns.

Trade activities do not need to be and often are not located in places of production or consumption. However, neo-classical and new-trade theories, do not explain why some places are specialized in international trade and why products and

goods take specific routes from their origin to their final destination. Trade theories are merely theories of production and productivity, but not of trade as an economic activity of its own. Therefore, these theories are often not applicable to countries like the Netherlands, which has become ever more specialized in an entrepôt economy over the last thirty years. It is, however, not necessary to abandon them altogether. We could try to use the trade theories that have production, factor endowments, economies of scale, and productivity differences as their main explanatory tools, to explain where wholesale trade takes place. Differences between nations in the efficiency of 'production' of wholesale trade then become important to explain trade flows.

2.2.2 The output of trade

Then what kinds of activities are included in trade? Essentially every kind of exchange can be understood as trade, including the services delivered by a consultant or dentist, since there is a payment in exchange for a service. In this way the whole economy consists of transactions that can be seen as trade. To explain trade, these transaction costs have to be taken into account: the lower transaction costs are the more trade will take place. Trade data can then be explained by the ability to lower these transactions costs. This is the way Den Butter has looked at Dutch international trade in his report for the scientific council for government policy (WRR, 2003). In this research I do not want to take such a broad definition of trade: the focus is on wholesale trade of goods that are not produced in the Netherlands. The delivery of services by a dentist or consultant, and retail activities therefore do not fit into the kind of trade that will be studied here.

In line with the observation made in the previous paragraph, trade as an independent value adding activity is less about the production of goods and more about the propulsion of goods within the value chain. This propulsion takes place through the exchange of property rights and redistribution of products amongst owners in space and time. The exchange of goods adds value to them. Following Haccoû (1957) and Jonker and Sluyterman (2000) trade leads to (1) an improvement in the ratio between supply and demand through the rearrangement of quantity and assortment of goods, (2) a rearrangement of capital (financing of goods), and (3) a rearrangement of characteristics of place and time of these goods. Further, trade activities change the quality of goods by adding services like advice, technical assistance or training. Product quality also increases through *'the composition of an assortment that is specifically directed to diverse groups of buyers*' (Jonker and Sluyterman, 2000, p. 11). This enables retailers to find different qualities from one source, making for easier cross-product comparisons. Often the wholesale trader also has a function in changing the time dimension of the distribution of goods. Products that have an irregular availability at the point of

production might become steadily distributed through warehouse functions of wholesale traders.

In conclusion, the input/output structure of trade activities, that describes wha *"products and services are linked together in a sequence of value-adding economic activities"* (Gereffi, 1994, pp. 96-97) is as follows. The input consists of goods, trade and distribution services. The output is a good with:

(1) different ownership;
(2) possibly a different quantity structure;
(3) potentially a different assortment;
(4) a change in the distribution in time may be added to a product, as is the case with warehousing, and transshipment, and
(5) potential change in the distribution in space.

Various trade services may be added to a product. Table 2.2 gives an overview of the services added to achieve different outputs.

It is impossible to completely describe all the activities performed by traders since there are so many and individual trading companies may deliver different types of services. However, all of these services seem to fall within one of three broad categories: trade services, distribution services, and something I have called 'semi-production'. The first category of service comes down to the creation of a connection between a producer and a consumer/user market. The second group of services is related to the distribution of goods in space and time. Many of these services might well be executed by a specialized service provider such as a logistics company. The risk implied in activities like buying at stock are not part of distribution services, but of trade services since the taking of risks by a wholesale trader implies a change in distribution of ownership. A last category of activities I have added is semi-production. This refers to activities that change the qualities of the goods at stake through the addition of packaging, after-sales services, advice, training etc. These activities change the product's content without transforming it into a different product category. For all of these groups of activities it is important that a trading company is able to manage and connect flows of orders, information, goods and money (Van den Berg et al., 1984, in Riemers, 1999, p. 49).

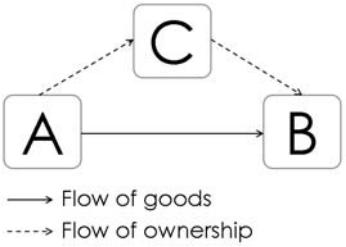
The different kind of services described apart from the core trade services make clear that a trade activity does not always imply physical transfer of goods. In the case of triangle trade (see Figure 2.1), the transfer of ownership of a good from person A to person B takes place trough an intermediate ownership of the good by person C. However, the physical flow of the good is directly from person A to person B, so that there is no physical transfer of the goods to person C although there is a legal transfer of ownership rights of these goods from person A to person C and from person C to person

Table 2.2: Overview of trade services and their output

Type of trade service	Output	Service added to get this output
Core trade services	Change in distribution of ownership of goods	- Buying and selling at order or at stock - Risk taking for stocks/ financing of goods - Administrative transfer of ownership rights - Market creation e.g. auction, internet market place (bringing buyers and sellers of ready made-products together) or creation of supply or demand side through advertising/dissemination of market knowledge - Creation of sales organization - Creation of trust between producer (product) and market e.g. through quality checks at market place/by trader - Bridging of cultural barriers
Distribution services	Change in distribution of quantity of goods	- Collection of goods - Distribution of goods - Stock management
	Change in distribution of assortment of goods	- Collection of goods - Distribution of goods - Stock management
	Change in the distribution in time of goods	- Warehousing - Speeding up the value chain through organization of transportation, handling of customs formalities, supply chain management
	Change in the distribution in space of goods	- Organization of transportation - Handling of customs formalities - Transportation
Semi-production	Change in qualities of goods	- Addition of after-sales services to goods - Addition of training to goods - Addition of packaging to goods - Addition of guarantee to goods

B. Already in the fifteenth century this kind of trade was very common. The role of a city like Amsterdam was to a large extent based on its role as centre of information that supported triangle trade in which goods did not physically come to the Netherlands but transactions were made through Dutch traders (Lesger, 1999, Lesger, 2001)

Figure 2.1: Triangle trade



2.2.3 Economic organization of trade

A next question to be discussed is how we define trade activities as separate economic activities within the value chain from an organizational point of view. Trade is a distinct value adding activity within that chain. As previously mentioned, individual activities or links within the chain can be related to each other in many different ways: there can be horizontal links when products are traded from wholesale trader to another. There can also be horizontal links in the network when two traders work together and share, for example, transportation. Vertical links also exist between producer and trader. These relations can be created through market transactions, through network relations, or even hierarchically within one enterprise. Sometimes trade activities might be organized within multinational corporations involving the redistribution of goods between the different parts or subsidiaries of these corporations. Other times they might be related to the rest of the value chain through market or other relations. I will discuss this in more detail in paragraph 2.6. As we shall see, the relation that trade has with the other activities in the value chain might influence how it is embedded in a specific place.

2.3 The role of trade: product characteristics, life cycles and worlds of production

The description of trade in the previous paragraph and the framework for analysis that I have proposed may give the impression that the role of trade is rather static. However, the role of trade and its embedding in specific places is changing continuously (see Box

2.1). Depending on the products and markets involved, other entry strategies might be chosen with other trade services becoming viable as they increase the profitability of the value chain as a whole. Products and markets change continuously and therefore also the role of trade.

Box 2.1 The changing role of trade

The changing role of trade in the 19th century
From quantity brokers to quality brokers

The role of trade is not static. The Netherlands experienced a downturn in trade after 1850 (Jonker and Sluyterman, 2000). Producers and consumers had increasing direct communication possibilities and needed trade less and less as an independent player able to keep stocks and deliver capital power for purchases. Trade lost a large part of its role and only kept going when in-depth product quality and variety knowledge was needed. Otherwise, trade became no more than an intermediary. These developments were different from those for trade in manufactured goods that emerged after 1850. Here fast growing product assortment and the fact that production in factories was often more remote from consumption than traditional production made the distance between production and consumption larger. Traders became essential for closing this gap and helping to find markets for producers of new products. For these kinds of tasks, knowledge of product and consumer markets became important as well as the creation of good sales relations. In short: different characteristics of manufactured goods resulted in a different role of trade.

Today the distinction between manufactured goods and commodities is not always easy to make. Agricultural products often have many characteristics of manufactured goods. For example tomatoes come in many different varieties and qualities and are produced in high-tech greenhouses. Also crude materials like oil or natural stone can get characteristics of manufactured products through classification and refinery. A product made with standardized input might find a very specialized market through branding an marketing and a product that needs very specialized inputs might try to find very generic markets. But although the distinction between manufactured goods and commodities in a way is getting blurred, the role of trade and how it can add to the profitability of the chain still depends on the character of a good, its market and the way it is produced. Markets and production technologies change over time and influence the role of trade.

2.3.1 The role of trade in different worlds of production

Product, input (to create the product) and output (market) characteristics all influence the role of trade. The idea that product characteristics influence trade is explored by

Duranton and Storper (2008) who show that the influence of transport costs on trade volumes between two economies is different for standardized products and more advanced, custom made products[6]. However, product qualities might not only influence trade volumes but also influence the role of trade in the value chain. To get a grip on the combined effects of product characteristics on trade, it is helpful to put them into a model of ideal and simplified product typologies.

Storper (1997) has created such ideal types to better understand how these aspects influence the kinds of innovation and competition expected to develop in different markets. He calls these different kinds of markets *worlds of production.* There are four worlds of production in which quality is assessed differently; competition takes place on different grounds; demand fluctuations are different; and flexibility is created differently. These differences are the result of differences in resources that are needed for production (specialized versus standardized resources); different qualities of products (generic versus dedicated); and differences in uncertainty (real uncertainty versus predictability) (see Table 2.3).

Table 2.3: Worlds of production

		Critical resources and competences to produce a good	
		Specialized	**Standardized**
Kind of products demanded and situation in which production takes place	**Dedicated, uncertainty**	The Interpersonal World	The Market world
	Generic, predictability	The World of Innovation	The Industrial world

Source: adapted from Storper (1997, p. 111)

It goes without saying these ideal types, like all ideal types, are never found in reality. Also in the *Market World* specialized knowledge is used at times, while producers in the

[6] Duranton and Storper show that "when a strong distinction is made between transport costs (i.e., the 'physical'costs of a shipment) and trade costs (i.e., the sum of all the costs incurred to deliver a good to its user, including in this case significant back and forth exchanges between the machine producer and its user), a decline in transport costs need not imply a decrease in trade costs" (p. 294). They explain this via transaction costs. As transport costs decline, exporters start to produce machines of higher quality for export that are more dedicated or custom-made and need more trade services such as installation, after sales services, and training. This increases trade costs. "When transport costs are sufficiently high, this quality effect more than offsets the direct effect of lower transport costs" (idem).

Interpersonal World and the *Innovation Model* (hereafter: World of Innovation) use standardized inputs. But generally speaking, in the Interpersonal World and the Market World, buyers are much less uniform and more differentiated than in the Innovation and *Industrial World*.

Storper's worlds of production show very different possibilities and constraints to increase profitability. In principle, the profitability of a firm is the result of the gross profit divided by its costs. Storper (1997, p. 118) has written this down in the following function.

$$r = \frac{EBE}{K + AC + PC}$$

where:

r = profitability
EBE = total surplus of gross profit
K = fixed capital
AC = active circulating capital (upstream, intermediate, and final stocks and short term credit to clients)
PC = passive circulating capital (short-term credits from suppliers)

We can deduce from this function that the levels of fixed capital and circulating capital greatly influence profitability. This is especially true in a world of production with a generic demand where in stock merchandise can absorb fluctuations in demand. Stocking, however, increases the amount of active circulating capital. This does not seem to be a good strategy in a dedicated market since there is a great risk that stocks will never be completely sold off since they are only suitable to a very specific and uncertain demand. At the same time, when production capacity is not completely used, total surplus of gross profit becomes lower. This is a problem for production worlds with a dedicated market.

Because of differences in demand, uncertainty, and means of production, in different worlds of production firms compete in different ways, looking for new innovations to stay ahead of competitors. We most often think of product innovations, but process innovations are also possible. This latter type of innovation involves the aforementioned value chain and how it is organized. It includes, amongst others, how the propulsion of goods and trade are organized within it. This is of interest in this research. How could trade then influence the profitability of firms in the chain and what different roles can be expected in different worlds of production?

To answer the question above I refer to Storper's (1997, p. 120) overview of the strengths and weaknesses of these different worlds of production. Trade can possibly

influence these strengths and weaknesses in order to increase the profitability of the chain. Table 2.4 gives an overview of the strengths and weaknesses of firms in different worlds of production. Departing from these strengths and weaknesses, and with the aid of knowledge about the use of trade that De Jong (1981) has described in his *Dynamische Markttheorie* (Dynamic Market Theory), we can determine what the main contribution of trade is in different worlds of production and the assets needed for this trade. This is shown in Table 2.5.

In the Interpersonal World direct contacts between supplier and buyer are important. Specialized resources become critical for delivering products that are dedicated to a specific buyer. Trade can play a role here as broker between specialized supply and demand by adding customization, installation or training to goods. In this way trade can add to the product scope and variety producers can attain. However, this can be a delicate task since this supposes substantial product and market knowledge from the trader otherwise he/she will not be able to see possibilities available to broaden product scope and variety with the given specialized inputs. When the trader succeeds in this task, the volume of trade can increase relative to the available production capacity (increase sales to installed production capacity), as well as the value added relative to the amount of labour. Trade can also play a role in lowering labour costs or installed production capacity, by connecting the demand of different dedicated suppliers (of goods to end users) to specialized production capacity available in lower cost areas. For this not only is product and market knowledge important, but also cultural skills and awareness to bridge knowledge gaps between demand and production in order to transfer tacit knowledge needed for production. In this world of production the main task for trade then is to search for dedicated markets for specialized production capacity and/or to find specialized production for a dedicated demand. When trade pursues the latter it can take the form of coordination and control of production to fulfil the wishes of a dedicated demand. In this world of production contacts between production (development) and demand most likely need to be strong.

In the World of Innovations, in which products are still new and do not have an established market, competition takes place via learning and demand follows supply. Market creation is essential in this phase. Companies often prefer serving a generic market, using specialized inputs. It is not about finding customers with a very special demand, but rather finding broad markets for a particular product. These demand characteristics emerge at the start of the product life cycle, when a market is found or created for a new product. When the use of a product can be broadened without making the product dedicated, costly investments in product development can be recouped leading to steadily increasing profits. This can only be realized when a market grows and one unit of labour yields higher profit with less capital needed per unit of sales.

Table 2.4: Production values that affect profitability in each world of production

World of production	Profitability	
	Favourable	*Unfavourable*
Interpersonal World	- High gross margin per unit sold - Not much circulating capital to sales - High value added to fixed capital - Low fixed costs to number of workers	- High installed production capacity to total sales - High labor costs to value added - Low value added to number of workers
Market World	- High gross margin per unit sold - Not much circulating capital to sales - High value added to number of workers - Low labor costs to value added	- High installed production capacity to total sales - High fixed capital to number of workers - Low value added to fixed capital
World of Innovations	- Low installed production capacity to total sales - High value added to number of workers	- Low gross margin per unit sold (result of high investment and labor costs and circulating capital costs) - High circulating capital to sales - High labor costs to value added
Industrial World	- Low installed production capacity to total sales - High value added to number of workers - Low labor costs to value added	- Low gross margin per unit sold (result of high investment and labor costs and circulating capital costs) - High circulating capital to sales - High fixed capital to number of workers - Low value added to fixed capital

Source: adapted from Storper (1997, p. 120)

Table 2.5: Main trade services and assets for these services in different worlds of production

World of production	Main trade services	Main trade assets
Interpersonal World	- Buying and selling at order - Customization, installation, and training - Creation of sales organization	- Product knowledge - Market knowledge - Cultural and language knowledge to bridge information gap between production and demand
Market World	- Speeding-up the value chain - Collection, distribution - Buying and selling at order - Creation of sales organization/market - Creation of trust through quality checks and guarantee to goods - Advertising - Coordination of part of the chain	- Product knowledge - Market knowledge - Cultural and language knowledge to bridge information gap between production and demand - Organizational skills - Transport and distribution infrastructure and knowledge and customs practices
World of Innovation	- Market creation and safeguard of intellectual property - Information intermediation between production and market - Creation of trust through addition of guarantees, training, and after sales services to goods	- Juridical infrastructure and knowledge - Product knowledge - Market knowledge
Industrial World	- Buying and selling at stock - Market creation/ opening up new market areas - Collection, distribution, stock management, warehousing of goods - (Organization of) transportation - Handling customs formalities	- Taxes - Market knowledge - Physical infrastructure - Distribution knowledge - Labor costs

Trade can supplant a growing market by opening up generic markets for new products, providing producers with information about demands in the market, and the market- with information regarding new product possibilities. Trade can also increase sales margins by increasing consumer trust in a product (branding, warranties, etc.). In this manner the market for a given product can grow while margins increase. Trade plays a role as market creator in this world through advertising and the addition of value-added information, training, and product guarantees. Trade can also help protect intellectual property rights of producers when they enter new market geographies. Trade-related tasks will often be organized within a company since these tasks are quite specialized in this phase of the product life cycle and it can be very difficult to find traders possessing enough knowledge to act as an intermediary (De Jong, 1981).

Both in the Market World and in the Industrial World producers aim for economies of scale. In the Market World, where demand is uncertain, it is important to keep product stock as small as possible in order to minimize storage costs and to maximize flexibility for adaptation to changes in demand in a dedicated market. To keep production levels as high as possible, products have to be differentiated time and again (to open up new markets) or production has to react as fast as possible to changing differentiated demands. Trade can play an important role here. Wholesale trade can increase the use of production capacity by finding specialized markets for large-scale production. This can be done through the creation of an image to a product (branding). For a very standardized product like beer, a specific consumer market can be reached through the creation of a specific image around a specific brand. In this way, production does not demand specialized resources, whilst the market of the products is dedicated. Trade can also increase the value added to fixed capital by branding or by the addition of guarantees to goods. Decreasing the reaction time of production to new demands not only increases production levels, but can also increase product value since new product prices are often higher at the entry phase of the product life cycle. Speeding up the chain can be accomplished by assuming coordination and/or management of parts of the value chain. For example, design tasks or organization of the supply chain and transport can be outsourced. When speed is of the essence, fast and efficient customs are important for traders.

Another issue is high fixed capital cost to number of workers and installed production capacity. Coordination of outsourcing by traders and buying and selling at order can diminish the fixed capital ratio to number of workers or decrease the installed production capacity needed at a brand name firm without its own production capacity. Per unit sales margin is relatively high in the Market World. Trade can help increase these margins for more standardized products in this world by bringing supply and demand together at a large scale and redistributing standardized supply into smaller mixed batches that can find their way to dedicated demand. The addition of

customization in the form of packaging can also increase margins. When we suppose that trade possesses superior market knowledge, uncertainty about demand is much smaller for traders than for producers. This superior market knowledge, organizational and (tacit) abilities (transportation and logistic infrastructure and knowledge, cultural and language skills) to quickly bridge barriers between (cheap) standardized production and dedicated demand give trade its right to exist in the Market World. The superior knowledge and skills of traders can then result in higher levels of sales, a more efficient use of production capacity, and higher profit margins.

In the Industrial World trade does not look for dedicated demand, but rather for generic product demand. Producers prefer maximized production capacity without leading to large amounts of in stock merchandise, as this leads to an increase in active circulating capital, decreasing profitability. Therefore, at any time, costs should be kept as low as possible through cheaper transport and distribution, and lower-cost locations for these activities. Local labour cost and tax rates become important factors for firms to consider when deciding where to locate trade and distribution activities. Trade can increase the costs in the Industrial World since markets are quite predictable, yet still have ups and downs. Producers often face high circulating capital costs in the form of unsold stock when markets are down. Trade can use stocking to own account and speculation on future price developments in order to absorb demand fluctuations and diminish circulating capital costs. Examples of trade in this world of production are the futures markets for raw materials like oil, metals, or certain food products. Of course trade can also increase possibilities for large-scale production by opening up new markets to producers. For example, a producer can use a trading company to reach a market where he does not want to set up a sales organization but still wishes to sell his product. Branding also opens up new markets, however this introduces product differentiation. Branded products differentiate themselves from other products through image to stimulate sales and get a higher per unit profit margin. As products gain dedicated markets, they become part of the Market World and should no longer be seen as part of the Industrial World. In the Industrial World, then, important skills for traders become being able to foresee future demand through market knowledge, as well as stock management skills for collecting, warehousing, and distributing goods appropriately.

To conclude, it seems likely that trade plays a different role in each world of production. When this is the case, it is also probable that each type of trade node plays a different role in different world of production, making other trade services in that node more important[7].

[7] For example, storage capacities might be an important asset of distribution nodes in the Industrial World whereas the quick handling and customization of goods through value added activities might be the main asset of such a node for Market World products. In the Interpersonal World the trade-network node might be especially used to get access tot the very specialized supply networks of traders, whereas in the Market World the quick response time that traders can achieve might be of greater relevance.

2.4 The concentration and location of trade activities within the value chain

Paragraph 2.2 has defined trade as a separate activity within a value chain and paragraph 2.3 has defined its role for different goods and markets. The link of trade in value chains has, in many cases, a tendency to concentrate in specific places. An explanation for this tendency could be that characteristics of product, demand and supply often result in the development of only a few very large trade centres. This will be discussed in the next section. This explanation is not sufficient. To answer the question of why certain places attract more trade than others it is important to know what input is needed for trade services. Basically three things are important to bridge property rights and the time and space of goods in the value chain. First a juridical infrastructure is needed for crossing national juridical borders. These borders and infrastructure are not held constant and often influence the location of trade. Second, especially when timely physical distribution of goods is needed, physical infrastructure is very important. Last, and basically all encompassing, knowledge is needed. For example, knowledge of products and demand, knowledge to bridge cultural barriers, and knowledge to organize legal ownership transfers are all needed. Places well supplied with this knowledge base can be very attractive loci for international trade. Knowledge and information in trade is so important that it needs some elaboration. This will be given after a short discussion in the next section on the mechanisms inherent in trade leading to its concentration. Subsequently, we will look at the location characteristics that might attract and concentrate trade. Of course location factors important to trade might be different depending on the services involved in trade. We will look at this issue in the last section of this chapter.

2.4.1 The concentration of trade

The discrepancy between the variety of products demanded and offered and the geographical scale at which both can meet is an important determinant of the geographical scale of concentration of trade. The larger the discrepancy, the larger the trade and distribution node will be. While the baker next door can deliver all kinds of breads their customers ask for without the help of wholesale trade, the greengrocer cannot. Just like the florist the grocer needs intermediate trade, a market or auction, or their own direct links to many different farmers to meet year-round demand for broad and deep assortments of fruits and vegetables. Volatility in demand can also play an important role. In the oil markets, for example, a combination of many secondary or oil-based by-products following refinery and highly fluctuating supply and demand renders a profitable market for intermediary traders on various spot energy markets like the Rotterdam spot market. In addition, intermediary agents play a major role in the fish

industry, one of the largest, most globalized value chains in the world. Fish catches are highly volatile, varying widely in composition; both producers and sellers are manifold. The kind of good at stake plays a role: for perishables, warehouses are likely not as large and centralized as for non-perishables since long-term storage does not suit items with short shelve lives. However, cooling technology and ever increasing speeds of transport create new possibilities for the centralization of trade in perishables.

With respect to product characteristics, the ratio between value and weight is important: the heavier the product compared to its value, the less international trade will take place. Companies will try to set up production lines in different domestic markets or make contractual agreements with foreign firms for production in countries to which they otherwise would have exported their product. Here we touch upon the issue of entrance strategies of firms having an influence on the use of international wholesale trade centers. Market characteristics and especially market failure plays a role here. For example, impossibilities in exploiting economies of scale in production stimulates firms to transfer goods across national boundaries within their own organization (Dunning, 1988, p. 43). Firm characteristics like degree of risk averseness, experience, size, and frequency of transactions play a role in the market entry strategy decision of firms (Veldman, 2004). The entrance strategies of individual firms are, however, explanations for trade we will not explore further or use in this study since they do not add to our understanding of concentration of trade and its attachment to specific places.

2.4.2 Knowledge and information in trade

In the words of Jones (1998, p.2) trading companies *'can be seen as knowledge and information based organizations rather than capital based.'* As already mentioned above, trading companies handle not only flows of material goods, but also flows of orders, information, and money. For all of these flows different kinds of knowledge and information are needed. Casson (1998) makes a distinction between routine and more strategic information. Routine information is *'information required for procurement and distribution'* (idem p. 35). More strategic information *'relates to the management of major risks that the company faces. (…) [T]hese relate, first, to the estimation of the overall demand for intermediation in the products the company handles, and, second, to the opportunity to speculate on, or conversely the need to hedge against, movements in the price of goods that are passing through the company's hands'* (Casson, 1998, p.35). Another kind of strategic information might be information of the production sites and the knowledge needed to be able to lower the risks of delays in delivery or mistakes in production.

Yet another kind of information often mentioned as important strategically is in-depth product knowledge. Biglaisser (Biglaiser, 1993) has shown that intermediate trade appears particularly when the quality of products at offer is difficult to asses.

Traders invest in their knowledge of that field to become specialists for the assessment of product qualities. The idea of the importance of product knowledge (besides market knowledge) for trade intermediaries also comes to the fore in the studies of Feenstra and Hanson (Feenstra and Hanson, 2004) who show that traders in Hong Kong often resolve informational problems in exchange. *'Hong Kong markups on re-exports of Chinese goods are higher for differentiated products, products with higher variance in export prices, and products sent to China for further processing'* (Feenstra and Hanson, 2004, p. 3). This view on the importance of knowledge is also supported by Petropoulou, (Petropoulou, 2005) who concludes that information costs lead to the use of intermediaries. It is his expectation that when information frictions disappear, intermediaries will also disappear in trade. However, it is questionable if this will ever happen. As the description of developments in trade in the Netherlands in the nineteenth century by Jonker and Sluyterman (Jonker and Sluyterman, 2000, see box 2.1 The changing role of trade) shows, information friction can appear very suddenly when new products enter a market. During that century the Netherlands lost a lot of its trade but industrialization led to a rapid increase of new products, making wholesale traders important again to conveniently arrange all these new products. Another reason for the increase in demand for wholesale trade was that mass production and transportation had in fact increased the distance between production and consumption. Wholesale trade with knowledge of production and consumption markets could connect both. Wholesale traders were able to open markets for producers who were much too busy with production for their expanding markets (Jonker and Sluyterman, 2000, p. 189).

In short, knowledge is key for trade and crosses many different fields: financial, administrative, product, and in-depth market knowledge. Market knowledge includes knowledge about what is offered and demanded. It also includes knowledge about how to operate in these different markets including how to create trusting business relationships in order to lower the transaction costs in trade. Every trading company has different operations and offers different services. Different kinds of goods often demand different trading roles. Therefore, we can expect the knowledge each individual trading company uses in operations to differ in some extent.

2.4.3 Location factors attractive to international trade

International trade cannot exist without certain physical and legal structures. However, there are more factors attractive to international trade, including the aforementioned development of trade knowledge. The concentration of this knowledge and the location of related activities in close proximity can create trade clusters and locations that offer advantages for firms involved in trade. All of these location factors attractive to international trade will be discussed in this section.

Physical characteristics

Physical factors and geographical circumstances can be an attractive location factor for trade. Trade centers often develop near seaports or a waterway to the sea. Of course these port connections are partly also the result of human action and investment (e.g. to dig a canal). Other man-made physical infrastructure supporting trade are highways, railways, airports, and even high quality internet connections enabling electronic trading. The first of these seem especially relevant to distribution nodes, although also marketplace nodes might be very much dependent on these as products need to be transported to and from the marketplace. Internet and other infrastructures for electronic trade, such as connection to a fiber optics cable network, are probably also very important to the marketplace node.

Characteristics of legislation

Other assets influencing trade flows consist of legislation, rules, and their enforcement. Legislation can create great location advantages such as low corporate taxes. Other legislation, like strict environmental laws, can create location disadvantages. The importance of legislation is reflected in international rankings of the most attractive countries to locate; rules, legislation and practices in the field of taxation, labor, and customs formalities and duties are often taken into account in these lists (e.g. Arvis et al., 2007, FedEx and International, 2007, NDL/HIDC, 2004b, NDL/HIDC, 2005a). Trade agreements might also attract investments and trade. Countries that have trade agreements with a lot of countries might develop into a hub in which trade agreements with many countries overlap. Exporters in the hub country have an advantage over exporters in other countries that do not have free access to so many foreign markets. Additional production near this hub could be cheaper since intermediate goods can be obtained at lower prices (Wonnacott, 1996). Singapore is a good example of such a country that has developed into a hub and has gained economically from its openness to trade (Feridhanusetyawan, 2005, Rajan et al., 2003). However, legislation on the origin of goods that mostly accompanies trade agreements (to prevent exporters from one country to by-pass tariffs by exporting through a third country) makes the advantage of being a hub less direct. Administrative surveillance and legislative puzzles on these rules of origin, including how different trade agreements might be used and combined, can even rise the costs of trade and limit freedoms to trade with countries with which no agreement exists (Rajan et al., 2003, Feridhanusetyawan, 2005). However, one of the main purposes of trade agreements is to increase the volume of trade by lowering costs (Baier and Bergstrand, 2006). Touching on the aforementioned legal matters surrouding trade, institutional quality as expressed inter alia by the regulatory quality and rule of law has a positive influence on trade patterns, as Linders (2006) has shown.

Locational external effects

Although location assets such as legislation and physical characteristics certainly play a role, economic specialization is often also explained with the help of localization theory that describes how a location of firms within the same or closely related industries in each others vicinity gives these firms advantages (Malmberg and Maskell, 2002). Mentioned briefly earlier, cluster literature is part of this theory. It has much to say about the way in which a firm's surroundings can be advantageous for its functioning in terms of costs, knowledge and innovation, increasing the competitive power of companies at a specific place. These insights explain the economic concentration of specific industries in specific places (see for example the work of Henry and Pinch, 2000, Lazerson, 1993, Lazerson, 1995, Schmitz, 1992, Henry et al., 1996). However, this theory has also been criticized as being a chaotic concept (Martin and Sunley, 2003) that is not clear in defining geographical boundaries and scales, which firms can be seen as part of the same industry, and the links between firms in the clusters involved (Martin and Sunley, 2003). In this research I will use the explanations given in cluster and localization literature and research for the co-location of firms within the same industry (although it remains unclear what 'the same' means exactly). I identify four groups of arguments to explain advantages created by proximity of firms in the same industry: economies of scale, transactional efficiencies, knowledge spillovers and development, and labor market effects.

In the first group I include the basic argument of Alfred Marshall that *"the concentration of firms in close geographical proximity within 'industrial districts' allowed all firms to enjoy the benefits of large-scale industrial production"* (Newlands, 2003). Production en grosse is more efficient and cheaper than production of small numbers and it creates products of better quality. Through co-location, economies of scale internal to the firm in the form of operational efficiencies become external economies of scale in the form of lower prices (Krugman, 1991). Examples of the efficiency generated by co-location of the same kinds of firms that together create a large market for specialized services are lower transportation costs and possibilities for developing specialized transportation when trucks are shared through a logisitic service provider, or more efficient and skilled customs clearance when performed by a specialized service provider for individual firms. Marshall's argument on the advantages of co-location included also ideas on the cooperation between firms enabled by it. This idea resurfaces in the second two advantages created by co-location: transactional efficiencies and knowledge spillovers.

The second argument states that proximity to each within a local system can result in a specific culture, or local ways of doing things that lower costs for transactions. Local reputation that prevents opportunistic behaviour is an example. Amin and Thrift (1994) have used the term *institutional thickness* to describe the many local insitutions such as firms, financial institutions, local government, chambers of commerce, workers

organizations, etcetera that frequently interact and stimulate, inter alia, the innovation and adaptation capacities of companies and specific regions. Storper (1997) refers to the ways of doing things that make transaction costs lower as *conventions*. Institutions are a special form of conventions for him: those that are a formal rule. Formal institutions, then, need to have a 'soft', conventional foundation to be succesful. Many other authors, however, also include informal rules in their description of institutions. Amable (2003) describes them as socially shared rules that provide information about one's own and others' behaviour and in the words of Zijderveld (2001) institutions are *'patterns of behaviour, traditional ways of acting, thinking and feeling'* (Zijderveld, 2001, p.22). He makes a distinction between institutions and organizations. To be clear, we should then make a distinction between informal institutions (or conventions), formal institutions (rules, laws, and prescriptions that can be enforced), and organizations (in which both formal and informal institutions operate). A well known case in which local institutions and conventions played a major role in lowering risk and increasing trust in transactions is that of the Third Italy[8]. In the clothing district of Modena, when designer firms outsource production, there is no contract needed to prevent producers from leaking information on designs to other producers: it is simply the convention not to do so (Lazerson, 1995). This makes outsourcing a lot cheaper than if there were no such a convention of trust within the district and contracts would have been needed to protect designs.

The third argument is based on the idea that when companies are located close to each other and there is a possiblitiy for frequent face-to-face contact on a formal and informal basis, codified and tacit knowledge can easily circulate from company to company. This gives firms within a knowledge cluster advantages over firms outside of the cluser and stimulates the development of further knowledge (see for example Bathelt et al., 2004, Malmberg, 2003, Malmberg and Maskell, 2002, Storper, 1992). This is, of course, also stimulated by local institutions (formal and informal) that help the dissemination and understanding of tacit knowledge. Also in literatures on communities of practice informal knowledge is an important issue. However, in this literature it is not so much co-location but rather organizational or social proximity that is taken into account when understanding how knoweldge is developed an circulates (Amin and Cohendet, 2000, Brown and Duguid, 1991, Lam, 2000, Brown and Duguid, 2001). But when the two go toghether, geographical proximity might lead to knowledge exchange in local communities of practice.

[8] The Third Italy refers to regions of the North East (Veneto, Friuli), Emilia and Central Italy (Tuscany, Marches). This region has a lot of attention from economic geographers and sociologists because of its economic success in the 1980s based on flexible specialization. The industrial structure of the region is characterized by mall family-owned enterprises operating in a dense network of outsourcing.

As discussed in an earlier section, strategic knowledge about demand and supply and qualities of goods is very important to trade. A trader has to know what the issues are like in different markets. That requires the trader to be close to these markets knowing it is impossible to be near to every market.

> *"The typical trading company does not have sufficient personnel to monitor all these sources [of strategic information m.l.] at first hand. Its strategy is therefore to develop a network of contacts through which much of the relevant information can be obtained at second hand. Some of these contacts may be of a personal and confidential nature, but others may simply involve scanning newspapers, journals, and other impersonal sources of published information."* (Casson, 1998, pp. 35-36)

Concentration of markets may then be efficient for traders. Also temporary concentrations such as trade fairs, conventions, and other professional gatherings are an example of the efficiency of concetrated market places for the exchange of information. They can be seen as a vehicle for the existence and creation of non-local knowledge communities: temporary clusters make it possible for firms to learn from interaction with normally distant suppliers, customers, peers and rivals. (Maskell et al., 2004). They enable access to distant markets and

> *"integrate local and global communication flows and connect distant pockets of knowledge in different parts of the world. […] They do not replace, however, the stable and continuous forms of knowledge creation in permanent clusters."* (idem, p. 5)

The last argument states that when companies are close to each other, labor can switch easier from company to company and people will be more inclined to invest in their skills because they are more certain to get a higher return on the investment. This investment not only strengthens the position of labor itself, but also the knowledge development and advantage of a region (Glaeser, 1998).

2.4.4 Location factors important to different kinds of trade services

The importance of the location factors mentioned above might vary with world of production and trade services at stake. This has an important implication, namely, that with changing supply or demand characteristics, the assets of a trade region might become obsolete and the attachment of trade activities to a place might diminish. Physical infrastructure and customs practices are most important when it comes to the

distribution services added in trade. Juridical infrastructures and trade agreements are the basis for trust and influence the transaction costs in the exchange of ownership of goods. But local available market knowledge is also central to the execution of core trade services. Finally, labor costs seem to be more relevant when it comes to labor intensive services such as transportation, warehousing and value added logistics (e.g. (re)packaging of goods). Table 2.6 gives an overview of possible location factors that are important for different trade services. It does not do so exhaustively, but serves as an example of the location factors that might be important for different kinds of services. At top of this, it might differ form one to anohter type of trade node which location factors are most relevant: trade legislation might be more central to the marketplace node than to the trade-network node, and customs practices seem to be more decisive for distribution nodes than for trade-network nodes.

In paragraph 2.3 these services have been related to the worlds of production. Each world has its own specific mix of services that seem to be most important. Therefore, in each world other location factors seem to be most important to accommodate trade. To explain the attachment of trade to the Netherlands, the descriptive part of the empirical study will look for the presence in the Netherlands of the location factors mentioned in this section and how they are related to the worlds of production and services included in the international trade of goods through the Netherlands.

Table 2.6: Location factors important for different trade services

Type of trade service	Main location factors
Core trade service	- Juridical infrastructure and trade agreements - Cultural and language knowledge - Market knowledge
Distribution service	- Physical infrastructure - Customs practices - Distribution/logistic knowledge - Labor costs
Semi-production	- Product knowledge - Labor costs - Import processing rules & practices

2.5 Territorial specificiy

2.5.1 Territorialization

In the previous paragraph I have only mentioned concentration and location factors for different trade activities to a specific place. But if we want to understand how strong these factors attach trade to a specific place – whether or not they are able to concentrate trade at a specific place and embed them in such a way that they can hardly be relocated – we have to look for more than location factors in relation to product characteristics. What emerges is what Storper has called *territorialization.* Storper (Storper, 1997) introduces this concept to describe a situation in which economic activities are *'dependent on territorially specific resources'* (Storper 1997, p. 170). There are many reasons that can lead to the concentration of certain activities in a specific place. However, to say that activities are concentrated is not the same as to say that they are territorialized in the way Storper explains this concept. For him: *'The essential condition of territorialization is that the activity be dependent on resources with specificities that are strongly territorialized and where the supply of these resources is subject to important inelasticities'* (Storper 1997, p. 179). The opposite case of a territorialized economy is the case in which place can be played off. Storper calls this a *pure flow economy. 'The essential condition for a pure flow economy is that a location offer only those factors of production that could potentially be substituted by a large number of other locations'* (Storper 1997, p. 178).

Territorialization then is different to agglomeration, localization and urbanization effects in general. It relates only to those cases in which these developments lead to assets that are specific to the area at stake and are not available in many other places. The locational substitutability of these assets is low. Based on this idea a distinction can be made between production systems that are territorialized and systems that are not (assets are easy to substitute for geographically). The latter are in the words of Storper, *pure flow substitution economies.* These can be seen as international production systems in which places compete against each other on easily replicable production factors such as labor costs or legislation. Attachment to a specific place is in this case only temporary, based on business economic considerations such as sunk costs or costs of operation but not on territorialized external effects. In the words of Jessop (1998) regions that enter into this kind of competition follow a weak competitive strategy. In a pure territorial economy the opposite is the case: territorialized assets (external advantages) keep activities attached to a location, leading to a strong competitive strategy because it is difficult for others to imitate.

Territorialization can be the result of the availability of specific natural resources, but it could also be the result of *'assets that are available only in the context of certain interorganizational or firm-market relationships that necessarily involve geographical*

proximity, or where relations of proximity are markedly more efficient than other ways of generating these asset specificities' (Storper 1997, p. 170). This latter kind of asset does not appear out of the blue but often develops in time as assets become regionally specific and relational in an evolutionary process. In this way regionally specific worlds of production develop that have their own '*conventions, rules and other practices'* or *'regional specific relational assets'* (Storper, 1997, p. 76).

Territorialized assets lead to geographical monopolies. Territorialized assets can be seen as *new combinations* as described by Schumpeter, (Schumpeter, 1934 (reprint 1980)) since they are the result of the combination of possibilities at a specific place in a geographically unique way. Terhorst and Tordoir have called this the monopoly power of place (Terhorst and Tordoir, 2006). In Schumpeter's view, development is about *'employing existing resources in a different way, in doing new things with them, irrespective of whether those resources increase or not'* (Schumpeter, 1934 (reprint 1980), p. 68). As soon as the same developments (imitation) or new developments start off at other locations and make obsolete the monopoly assets of the first location, this first location will lose its monopoly position. This means that territorialized assets and possible monopoly powers resulting from them are always only temporary in character. As an illustration, we could take the Swiss Jura. This area has been the world's number one watchmaker: there was no other area with a comparable technical knowledge base for mechanical precision work. All kinds of organizations such as contests in watch making and awards, stimulated the continued learning and innovation in the field, to stay ahead of competitors abroad. However, at a certain point in time a new technique for watch making was developed, digital instead of mechanical, and not in Switzerland, but abroad. The Swiss were then not able to adopt this new technique and lost their position as world leaders of watch making (Glasmeier, 1994, Landes, 1979). An example like this shows that a territorialized asset, in this case local knowledge and know-how on mechanical watch making, can lose its value and is never static in character. Therefore it is important that an area is able to adapt to new circumstances. Storper (Storper, 1997) describes this as the adaptive capability of regions.

So what we have to keep in mind in this research is that assets important for trade and present at a particular place are not necessarily territorialized assets, or assets not available elsewhere and difficult to imitate. To be able to understand the embedding of trade to a place we have to distinguish territorialized assets from non-territorialized assets. Two things are then important to take into account: first, the development path of these assets, and, second, the institutional context in which these assets have been developed or on which they depend.

2.5.2 Development of territorialization: assets and path dependence

Concentration can be both a result of territorial assets and the generator of such assets (Storper 1997, p. 180). A more or less accidental concentration of related activities may, beyond a certain threshold, generate scale economies, consequently attracting more related activities. This is the idea of cumulative causation developed by Myrdal in the 1950s. In this way territorial assets are the result of concentration. Concentration of production may also start with territorial assets that appear to be favorable to a specific economic activity. This is an important notion since it implies we must search for explanations for the existence of certain assets both in history before an industry was concentrated somewhere and as a result of concentration itself. This is a notion well developed in evolutionary economics; it is the notion of path dependence.

Within evolutionary economics the spatial pattern of an industry is at first instable. Over time a more stable pattern establishes (Boschma et al., 2002). This is the result of mechanisms of chance leading to path-dependent developments such as spin-offs and processes of cumulative causation that generate agglomeration advantages, such as superior physical infrastructure connections, a local network of specialized suppliers, local knowledge spillovers, and other territorialized assets. There may be areas with a much better starting position for a specific industry, but this does not mean that an industry will necessarily concentrate there. It might be a matter of chance where processes of cumulative causation can first develop or where more spin-offs appear. Firms are not passive actors; they can move to another location when a specific location does not satisfy their needs. They can also develop and create the favorable conditions they need, and in this way, stimulate further developments in that industry (Boschma et al., 2002). So to understand the current spatial pattern of an industry we have to look at the distribution of assets and the industry itself in the course of time, as well as the mechanisms through which these assets and the spatial distribution of that industry have developed. Key processes to keep in mind are spin-offs and cumulative causation. With this in mind, we should also take into account the role of government investments that create favorable starting positions for industries and might stand at the basis of asset developments.

Of course the spatial distribution of an industry never becomes stable in the sense that a time never arrives where no changes occur. With technical and organizational innovations territorial assets may loose their value and new locations may gain an opportunity to develop as a centre for a specific industry, as is shown by the earlier example of watch making in the Swiss Jura. In evolutionary terms a *window of locational opportunity* opens up (Boschma et al., 2002). Triggers might be new demands that make old industries obsolete and create new opportunities. In addition, a new technique to which an industry cannot adapt quickly enough can lead to its decline and

the rise of new industrial areas. But the productive environment of an area may also favor new developments through the presence of, for example, highly educated labor, the availability of capital or certain raw materials. In this way a continued position at the forefront of an industry may be safeguarded for a region. Windows of locational opportunities do not necessarily lead to the development of new industrial places (chance always plays a role) but can. Over time, however, a window of locational opportunity closes and the spatial pattern of an industry stays relatively stable until new developments in an industry or in the market open new windows of locational opportunities (Boschma et al., 2002).

With respect to the concentration and territorialization of trade and distribution, evolutionary reasoning leads us to think about opportunities for the development of an industry in the past that have created advantages until today. It also makes us aware of possible processes and developments that may make current assets obsolete or open windows of opportunities for other places.

2.5.3 Territorialization: multilevel institutional complementarities of assets

As already mentioned above, territorialization involves assets that are only available at a specific place partly as a result of specific interorganisational and firm-market relations that need geographical proximity to exist. This idea comes close to the ideas developed in the geographical literature on clusters, learning regions and innovative milieus that have been mentioned earlier in this chapter. This literature develops the idea that geographical proximity is important for the circulation and development of knowledge. Local tacit knowledge is especially believed to create competitive advantages to local firms vis-à-vis non-local competitors. One way proximity stimulates knowledge exchange is by enabling informal contacts between employees of local firms and literally enabling inter-competitor spying (Pinch and Henry, 1999). Cultural homogeneity can also stimulate local knowledge exchange. Apart from that, cluster literature points to the fact that when strong social relations exist and reputation is important, transactions are facilitated by less complex and costly contracts. The well known example of the Third Italy supports this idea of the importance of local characteristics very well (Crouch and Streeck, 1997, p.14). In short: proximity matters.

However, it is far too limited to look only at local characteristics and relations to explain knowledge advantages. It is also too limiting to only take knowledge advantages into account as a result of formal and informal institutions. With respect to the first: Bathelt and Glückler (2005) maintain that it is very important for local clusters to absorb knowledge about technological and strategic developments in other (competing) areas. To do so, a cluster needs to develop a common institutional base with other areas, for example, through the structure of a multinational. Frequent contact

within non-local relations of exchange and outsourcing, can also create strong relations and the ability to share tacit knowledge, as has been documented for the region of Baden Württemberg (Grotz and Braun, 1997). In the opinion of Terhorst (2009) cluster literature is too focused on the horizontal complementary nature of institutions within a local context – such as conventions on knowledge sharing, trust, and transacting – while institutions at other scales and vertical relations and complementarities are important. They are not only important for creating assets related to knowledge and innovation, but also to other assets such as flexibility in production. In particular the combination and complementarities of these institutions can create unique assets that strongly attach a specific industry to a place. The example of the Third Italy can illustrate this point.

In the Third Italy complimentary exchange relations are important: people tend to trust each other, contracts are seldom made, and firms do not increase prices much in busy times, as they do not lower them during downturns. All of these institutions are supported by family relations and a supporting small enterprise structure consisting of family members (Lazerson, 1993, Lazerson, 1995). These conventions enable these companies to work flexibly, reducing costs. The assets mentioned are a clear example of locally or regionally territorialized assets. A closer look at the situation, however, shifts our understanding of the assets of the Third Italy. The regional functioning and success of small enterprises in the Third Italy is also the result of institutions and conventions at other spatial levels. National policy has created subsides and exempted small enterprises from certain legislation (Crouch and Streeck, 1997, p.14). To understand the competitive advantage of small enterprises here, insight into the political and policy practice is necessary. Although a lot of legislation is created at the national level, implementation at the local level is often very poor. There is a *'duality between the 'overt' aspect of the Italian institutional environment – […] – and the more 'covert' aspect of their inadequacy which enables constraints to be circumvented'* (Regini, 1997, p. 106). Small enterprises can particularly take advantage of this institutional environment: they are much more able to find flexible solutions within an uncertain legislative environment in consultation with local officials than large companies. In the words of Regini (1997) Italy is characterised by an *'interweaving between weak institutional regulation and effective but unstable voluntaristic regulation'* (idem p. 107). The lack of institutional regulation exists particularly at the national level, while voluntaristic regulation is present at a much lower level.

This example illustrates that the functioning and competitiveness of a region and its economy are also dependent on institutions at other levels, especially when institutions at different scales are complementary and reinforcing, a specific region might become very attractive and competitive for a specific industry.

2.5.4 National level institutions

When we look at institutions at the national level, we find literature on varieties of capitalism and business systems that studies the complimentary nature of institutions on a national level. Complementarity means that the presence of one institution, increases the efficiency of another (Amable, 2003, p. 6). This makes it difficult to assess the efficiency of just one institution, since it is always interconnected to another. In case of institutional complementarities different parts of a system influence each other to jointly create a specific result (see for example Crouch and Streeck, 1997, Hollingsworth and Boyer, 1997). Hollingsworth and Boyer (1997) look at the structures of organizations in different countries (more egalitarian or more hierarchical), rules for transactions, and how individual and collective compliance is exerted. This comes to six types of institutional arrangements. Companies are embedded in an environment consisting of a combination of different arrangements each supporting a different kind of production. In some arrangements large volume production might flourish, whilst others might be favorable to small batches. Some arrangements make quick adaptation to new circumstances possible, while others do not. Some arrangements might stimulate competition on quality, while others compete on price. For example, the West-German system, with high labour costs and socially-bounded labour markets, has stimulated companies to compete on quality instead of price, nationally and internationally (Streeck, 1997). Competition on quality is supported by labour organizations and business associations when they work together to improve the staff education levels, technology, products, or the organization of work flows (idem). In contrast to the German case, with an extensive system of on the job training, long-term loans from banks, fewer job changes by labour, and incremental innovations, the USA is characterized by shareholder capitalism focussed on short-term gains. Job changes are frequent, and the strength of American companies lies in their ability to create real innovations. Longer-term product improvements are generally not the speciality of these companies (Streeck, 1997, Hollingsworth, 1997).

Terhorst (2009) highlights that within the *varieties of capitalism* literature, just like with cluster literature, little attention has been paid to the vertical complementary nature of institutions. Capitalism literature has mainly focused on the complementarities of national institutions. According to Terhorst, it is also important to pay attention to the vertical complementarities of national, regional, and/or local institutions, including how these institutions are intertwined with each other. He stresses this importance by stating that the more integrated institutions are at different levels, the stronger the competitive power of an area is (Terhorst, 2009). Therefore, it is important we not only look at a local production system to explain its assets and to investigate territorialisation. We also have to analyse institutional structures present at the regional, national, or supranational

levels, which on their own or in tandem, create territorialized assets adding positively to the functioning and competitiveness of a regional economy, and in our case, the attachment of trade.

2.6 Territorialized production systems and international interaction

The last piece of the analytical framework consists of value chain characteristics. Although an international trade node can be highly dependent on territorially specific resources, relations with other places and areas are essential. In other words: flows transect trade nodes.

2.6.1 Governance in global value chains

The way in which a value chain is organized adds to the geographical attachment of value chain links. Connections between network or value chain members (the architecture, durability, and stability of relations) not only determine the individual network attachment of agents, but also the structure and evolution of the network itself (Henderson et al., 2002, p. 543). Different relationships between actors in a value chain are possible. Gereffi et al. (2005) have distinguished five types of coordination of transactions between links in value chains: market, modular, relational, captive and hierarchic. These governance types in transactions differ on two basic points. First, the balance of power between the actors involved in a transaction, as well as the degree of explicit coordination is different in each type of governance. Second, the governance types differ with respect to the type of information exchanged in the relationship, the complexity of the transaction and the ability to codify the transaction (see Table 2.7).

Table 2.7 Key determinants of global value chain governance

Governance type	Complexity of transactions	Ability to codify transactions	Capabilities in the supply-base	Degree of explicit coordination and power asymmetry
Market	Low	High	High	Low
Modular	High	High	High	↑
Relational	High	Low	High	↕
Captive	High	High	Low	↓
Hierarchy	High	Low	Low	High

Source: Gereffi et al. (2005, p. 87)

In principle, price is the only type of information exchanged in a market. Products are generally straightforward so their qualities are clear from the outset and there is no need to make contracts with agreements of specifications. Transaction partners are equal to each other. It is very easy for them to switch suppliers or for buyers to have more than one at the same time. The latter is also the case in a modular relation. At the same time, in a modular relation there is slightly more power on the side of the buyer since the supplier needs to deliver products to the codified specifications given by the buyer. However, the responsibility for the production process always stays with the supplier.

In the case of relational governance of transactions, mutual dependence is much greater. Not only codified, but also tacit knowledge is exchanged. This kind of relationship is found especially in cases where codification of transactions is impossible. Social relations with their conventions of trust and reputation make it possible to exchange tacit information with relatively low costs. In the case of captive governance of relations, power is mostly concentrated at the buyer. The buyer sets the terms to which a product should be produced. The terms are delivered at the supplier in codified form but transactions are still complex since the capabilities of the supplier are not very high, requiring the buyer to give many specifications to the supplier to enable delivery of products the buyers wants. Lastly, in hierarchical governance of transactions, codification of transaction information is difficult. Therefore the supply side is controlled by the demand side. The demand side has organized the supply in its own company; it is vertically integrated. It is important to look at these governance types in order to understand the position of geographical areas within global value chains.

The degree to which an activity within a value chain is embedded in a specific location is different for different governance types. It depends on the degree to which territorialized assets are important to perform the activities of this link, the degree to which investments in social relations are important to accomplish transactions, and the degree to which investments in equipment and staff bounded to a specific location are important (see Table 2.8). The geographical embedding of links in this table is not the same as territorialization since even without any kind of territorialized assets, some kind of (temporary) geographical attachment exists (e.g. when a lead firm has invested in a location). They could have made these investments anywhere (no territorialization) but once made, sunk costs fix activities to this place. Geographical embedding is the result of the strength and importance of territorialized capabilities, shared conventions and institutions in transactions, and the investments by a lead firm in a location.

When there is a relational link in the value chain, capabilities in the supply base are high. These capabilities might be highly territorialized. If so, this adds to the geographical embedding of this link in the chain. Also existing social relations with shared conventions and institutions might add to the geographical embedding.

Table 2.8: The key determinants of geographical embedding of links in value chains with different governance types

Governance type	Importance of territorialized capabilities	Importance of shared conventions and institutions in transaction	Importance of investments in location by a lead firm	Strength of geographical embedding
Relational	+	+	-	Strong
Modular	+	+/-	-	↕
Market	+	-	-	
Hierarchy	-	-	+	
Captive	-	-	+/-	Weak

These conventions and institutions are a kind of network knowledge that is built up through personal experience. Workers may take this experience with them when changing jobs, and in this way, spread this knowledge geographically. However, in the words of Malmberg (Malmberg, 2003, pp. 154-155) *"restricted mobility (or even spatial fixity) of people"* can keep this network knowledge geographically concentrated and fix the geographical structure of two distant links in the value chain.

The importance of investments in the location by foreign lead firms, does not seem to be great in the case of relational as well as modular governance, since in these cases capabilities at the supply base are high. However, investments in social relations can be seen as very big in the case of relational governance, and even in modular and market relations conventions are not absent altogether (Brown and Duguid, 1991). Modular and market relations theoretically don't include intense social contact since transaction-related information is basically price information. Other information needed can easily be codified. However, the codification used, needs to be understood. In that sense, some kind of shared conventions are still needed in a modular and to a lesser extent also in market transactions. In case of relational and hierarich governance these investments in understanding may even be larger as codification of transactions is very difficult. The need for more or less specific shared conventions to enable transactions means that every transactional relation implies a kind of investment in building or understaning these conventions. In the case of a hierarchy these investments become more prominent as it includes formal training, acclimating employees to corporate culture, and training for specific tasks. Of course this formal learning might also result in informally shared conventions as employees become part of a professional community of practice (Brown and Duguid, 1991), but the difference is that within a hierarchy a lot of ways of doing things are in de end backed by formal hierarchical authority. In the case of all other types of governance, exchanges cannot be compeled by a hierarchical authority. Hierarchical governance presupposes direct investments in people, building,

and machinery. The sunk cost for investments in people and capital goods create, at least a temporary embedding in a location. In the case of captive governance of relations, less investment in the location is expected to be present. The capabilities at the supply base are low, but transactions are easy to codify. Therefore, little knowledge is needed at the supply base. However, some investment might take place, for example to learn the supply base how to read and understand the codification of transactions the lead firm uses. This eventually creates some sunk costs when the lead firm changes its supply base. To conclude, to understand the relation between the trade node and the wider value chain, it is important to take the investments in and existence of shared conventions into account as they influence the embedding of trade relations.

Firms almost always have relations in two directions into the value chain: upstream and downstream. It is possible that the relations they have with their supply side are different from demand side relations. The combination of the relations of a regional economy, with supply and demand in the value chain at other locations, helps create the position of a regional economy. When a region has, for example, a hierarchic or a captive relation with demand, it is clear its position is not very strong. Its capabilities are not very high and it is relatively easy for the demand side to shift orders to a different location in search for the most favorable production conditions. In the case of market or relational governance, this appears to be more difficult since with relational governance of transactions, trust, and conventions built up over years are important to settle transactions. Therefore a dependent hierarchic or captive relation to other parts in the value chain involves a weaker position in the chain than a relational interaction. The weakness of a supplier position in a market or modular exchange relationship comes not so much from the lack of territorialized capabilities and assets (these can be, on the contrary, very high), but from the fact that if there are no such territorialized assets involved, it is much easier for the demand side to change to a new supplier elsewhere; the costs to do so are relatively low. Here the strength of the supply side really has to come from territorialized assets: that is what geographically attaches a value chain. A hierarchic or captive relation towards a lead firm elsewhere does not necessarily imply an easy shift to new locations in the short-term. Although capabilities in the supply base are low, the lead firm might have invested quite a bit of knowledge and equipment in the supply side. In the short term, sunk costs related to relocation of supply keep activities at a location. Nevertheless, lead firms will always look for better (often cheaper) opportunities elsewhere.

In general, firms that contract out are the most powerful in an exchange relation. However, what is contracted out (production or trade or distribution) differs in each situation. Three basic routes of contracting out in value chains have been distinguished. Gereffi (1994) uses the term producer-driven chain to describe a situation in which producers mainly coordinate and organize the activities in the chain. The best

known example of such a chain is that of the capital and technology-intensive car industry that is driven by large producers who coordinate production and trade. These large producers determine the terms of trade. Trade creates and reaches markets these producers want. In a consumer-driven chain, (Gereffi, 1994) large retailers and brands coordinate production and distribution not necessarily with direct ownership, but with strong coordinative power. Some authors (Gibbon, 2001, Ziegler, 2007) have proposed distinguishing a trader or middleman-driven chain as a third kind of chain. In this case middlemen such as wholesale traders are the key players that link producers and consumers in a worldwide system, and are the centre of coordination and control of a value chain.

Whoever drives a value chain influences the dependencies within the chain and makes the position of specific activities within the chain more understandable. In general the strongest position in the chain seems to be the driver. Nevertheless, this driver is also limited in its possibilities, due to competition from other companies, its dependence on territorialized assets and its investments once made.

The governance types discussed above describe vertical relations within the chain. Of course there are also many horizontal relations possible within a specific link in the chain. For example, two competing wholesale traders may work together in a government-directed lobbying group. Producers may also cooperate to create a marketplace to sell their products. Literature on business systems describe all kinds of horizontal relations that can exist such as networks, communities, associations, and markets. This brings us back to the literature on clusters and varieties of capitalism. The issue in the literature on value chains is on the vertical relations in the chain, but these chains interact with local systems where many different horizontal (as well as vertical) relations exist. Sturgeon (Sturgeon, 2003) describes the double function of Silicon Valley as both the breeding place for new technology through tacit knowledge exchange, and a place where this same knowledge is codified, making coordination of global production networks possible. Here a local production system, where local conventions, hierarchies and modular relations play a key role, interacts with and drives a global value chain where captive and hierarchic relations are much more important.

With respect to the relations between value adding activities, it is important to note that the type of governance between these activities might also be related to the phase in a product's life cycle. In the earlier phases of the product life cycle there may simply not be enough possibilities for trade intermediation for producers. This is something De Jong (De Jong, 1981, pp. 190-195) has mentioned. In the introduction phase of a good, vertical integration takes place out of necessity. There are still none or not enough suppliers of basic materials for the new product and time presses on a growing market. Producers often take up supply and sales themselves. They might also do this out of strategic consideration that they want to keep production knowledge

secret. In the expansion phase the increased scale of production will lead to disintegration in order to take advantage of economies of scale that specialized producers can offer. When expansion is over, it becomes attractive to integrate backwardly in order to control the supply of basic materials, since prices may rise as a result of increased demand and scarcity. The question of forward integration into trade and distribution revolves more around power and strategic issues. In the maturity phase business failures and takeovers are the main change in the organization of the value chain. We could say that in this phase the market is set, product qualities have become well known (no longer tacit) and the role of trade becomes more focused on marketing products, than of gaining tacit product information. Important to notice as well is that strategic considerations of actors might influence the organization of a value chain. These are not mentioned in the framework of governance of value chains as developed by Gereffi et al. (2005).

Interrelations of global value chains and local industrial systems may take many forms depending on what drives the chain; the organization of the local production system, the territorialized assets of the local system, the product life cycle phase and related strategies of firms. The role of the local system can only be understood in the context of the value chain in which it operates. Therefore, to understand the role of the Dutch trade node it is important to understand the interaction between the Dutch production system of trade and the global value chains transacting it.

2.7 Conclusion

This chapter looked at the localization and territorialization of trade in order to create a theoretical framework for analyzing the position of the Netherlands as an international trade node in global value chains, and to be able to answer the three research questions. To answer the first question:

(1) *What trade activities and trade role lay behind the re-export data in the Netherlands and to what extent does the Netherlands play the role of a coordination and control centre in the trading function of international value chains?*

I will investigate the activities that trade companies and companies related to international trade through the Netherlands carry out, how the chain is organized in which they carry out these activities, and what role they play. I expect coordination and control functions to be limited located in the Netherlands. Intermediary traders are mostly not the lead firms of a chain. Only parts of the chain might be controlled and

coordinated by traders or trade-service providers as lead firms outsource tasks. This will be the basis to answer the second question.

(2) *Through which processes are these trade activities attached to the Netherlands and to what extent are they in such a way attached that they cannot be easily relocated?*

To answer this question it is important to first look at the location factors needed to perform the trade services found in the first question. After that, the territorialization of these factors can be found by investigating how these factors have been created or developed, and on what they are based. Lastly, one must take relations within the value chain into account. Together this gives an idea on how and to what extent these trade activities are embedded in the Netherlands. The more important territorialized assets are for an activity, the stronger the embeddedness of this activity is supposed to be. But I will also look at what is actual happening: a geographical shift of activities indicates that assets that are important change or that they are not strongly territorialized (anymore).

The theory set out in this chapter leads to several tentative answers to these questions. First the discussion regarding the many activities and roles involved in trade and production allows us to conclude that no general answers can be given. These answers depend on the activity and world of production involved. More importantly, I expect the relation between the world of production and trade activities to be mediated through the organization of the value chain. A product, like flowers of the Industrial World, might be traded on a market *or* within a network. In both cases the activity of the trader is different. In the former case, products are probably bought at stock, where in the latter case, buying takes place at order. For the flower trade in the Market World I expect the availability of cultural, linguistic and local market product knowledge as important to be successful. Other essential factors in analysing the concentration of the cut-flower industry in the Netherlands are related to other activities of the same value chain located here like floral production and propagation. Though this production and propagation occurs in other parts of the world, I expected a connection between international trade and these other value added links to exist in the Netherlands and to be part of the explanation for the concentration of the import and subsequent export of flowers in the Netherlands. Knowledge needed to operate successfully in the Market World might be part of a local cluster. In the case of relational governance of trade in the clothing sector I expect these local factors to be important as well, but I also expect the availability of trade network connections to be more important due to factors like in-depth product sourcing knowledge. This could be knowledge connected to a local trade milieu but it can also be something more organizationally versus geographically bound. For the Industrial or Market World and hierarchically organized value chain of high-tech products, I expect juridical infrastructure, trade agreements, taxes, physical

infrastructure technologies, labour costs, and customs practices to be important location factors. Although in the case of the Market World or the Interpersonal World, when logistic demand are more complex, localized knowledge of logistics may also play a role. An overview of Dutch economic and trade policies and the institutional structure of the Netherlands will, when placed in the light of the findings of the cases, make it possible to draw conclusions on the strength and weaknesses of the Dutch trade specialization; the subject of the third research question.

(3) *What are, in light of the answers given to the previous questions the strengths and weaknesses of the production system of international trade in the Netherlands?*

The assets that a location has for trade in different types of goods and the assets on which the different types of trade nodes are built, most likely have quite different origins and histories. In this way different types of trade nodes are expected to be embedded through different assets and processes in the Netherlands. However, as we will see in Chapter 4, this is something that is neglected in the debate on the Dutch trade node and the focus of Dutch trade policy has been quite limited paying mostly only attention to the distribution node. Above that, policy for the Dutch trade node has not been fine-tuned for specific types of goods. However, the case studies will show that it could be very relevant to make this distinction between different trade nodes and types of goods. Therefore this study can be seen as a plea for a more case specific and focused trade policy and theoretical discussion on trade.

Now that the framework for the empirical part of this study is set and the hypotheses and objectives are clear, I will turn to the methodology and empirical design. This is done in the next chapter.

Chapter 3

Methodology and case selection

A small-N comparison of international trade nodes of different products and value chains within the Netherlands

In a way this study has a hybrid character. In one respect we can label this study that is focused on the current position of the Netherlands as an international trade node, as a single outcome study: a study that takes as point of departure a single case with a relatively stable outcome on a clear dimension, and tries to explain that outcome. The quantitative and theoretical work presented in the WRR report on the Netherlands as a trading nation (WRR, 2003) can be interpreted as a single outcome study. Different arguments are put forward to explain the relatively strong Dutch position in international trade. In line with this reasoning, the WRR report can be seen as a precursor to this work: it is a closer examination into nodes of international trade in the Netherlands.

The hybrid character of this research appears when we take into account that, on theoretical grounds, it is quite doubtful any trade node, regardless of its setting, can be fully understood as a single-case study. An important assumption that I make is that at least three types of trade nodes can be distinguished and that the embedding of trade differs quite strongly between each of these types of hubs, and from one type of value chain and world of production to another. Consequently, I expect trade to be embedded differently in different places and cases in which it occurs. Viewed from this perspective, the Dutch trade node is no longer a single outcome, but rather a series of multiple outcomes of multiple cases, each covering different trade activities with their own particular attachment to the Netherlands. In this vision, the WRR report and general gravitation models on trade do not sufficiently account for the large variety of activities hidden behind quantitative trade data. Research into Dutch trade nodes of different value chains and in different worlds of production could then result in a comparative small-N case study into the mechanisms and circumstances that generate different kinds of trade nodes and attachments of trade.

Instead of approaching the Netherlands as a single case and comparing its outcomes to foreign trade node cases, the level of analysis in this study will be focused on value chains and related trade activities within the cases: I compare different types of trade nodes and embedding of different products and value chains within the Netherlands. This elucidates which mechanisms and characteristics are important for the development of different types of trade nodes and different types of value chains and worlds of production. Consequently, the cases in this study are cases of international trade nodes within global value chains located in the Netherlands, rather than an isolated view of Dutch trade nodes as independent entities. I have chosen three such cases for this study. Comparing these three cases will illustrate the attachment of trade nodes to a location in general and to the Netherlands in particular. The overall picture of the Netherlands is a unique case of its own, and as such, a single outcome study.

3.1 What can a case study tell us?

The aim of this study is not to test the explanatory framework for the place-specific embedding and development of international trade activities I have constructed in the previous chapter. Rather, the aim is to use this framework to gain a clearer understanding of the situation in the Netherlands and, where possible, to explore the different mechanisms that lead to place-specific concentration and location of international trade in global value chains. This will result in a clearer and more developed set of hypotheses on the development of international trade hubs. Consequently, this research is explorative in character.

Nevertheless, it is essential that we isolate conclusions drawn from the comparison of cases only applying to the Netherlands from those that have a broader validity. Accordingly, we must distinguish conclusions on trade mechanisms from conclusions that are merely specific to the Dutch context. This can be complicated since the context of Dutch history and government is to a large extent the same in every case studied. However, with experiments of thought we can try to get these general mechanisms into view. Retroduction is a way to translate knowledge of a specific case into knowledge of something else. We then ask the question: what makes X possible? (Danermark et al., 2002). Counterfactual thinking is possibly the most important tool in this. It includes the asking of questions like: '*how would this be if not…? Could one imagine X without…? Could one imagine X including this, without X then becoming something different? In counterfactual thinking we use our stored experience and knowledge of social reality, as well as our ability to abstract and to think about what is not, but what might be* (Danermark et al., 2002, p. 101). A lot of general correlations like those between high trade volumes and small countries, nations bordering the sea, and working populations with good

language skills are already proven to exist. My focus is on the mechanisms behind these correlations and the situations in which these mechanisms are at work. These case studies will then lead to the formulation of better-informed hypotheses on the mechanisms behind these correlations.

Case studies are very good tools for explorative hypotheses generating research since they give the opportunity to delve deeper into the subject, gain insight in causal mechanisms and to go further beyond mere statistical reasoning like that done in cross-case studies that find regularities or correlations within a large database of trade flows between countries and various national characteristics. Case study research and an intensive research design make it possible to get more understanding of why and how variables relate to each other and allow us to place these relations within a historical and geographical context.

The explorative character of the research should not be mistaken for a mere descriptive account of trade and distribution sectors in the Netherlands in the tradition of ideographic regional science, since it is possible to use a case study for theory building. This is what the (critical) realistic approach in social science claims (Sayer, 1989). According to a critical realistic conception of science, science revolves around gaining insight into actual existing structures and generative mechanisms and tendencies that create reality. This is not a search for mechanisms as laws, since what is also important in a critical realistic social science is the idea that these mechanisms do not alone define what happens and what we happen to observe. Circumstances influence whether a specific causal power will manifest itself or not (Danermark et al., 2002). The world operates through conjuncture, not through law-like mechanisms that operate independent of place and time. In short, context matters (Hall, 2003).

A realist approach to science, as Sayer (2000) describes, is not pessimistic and relativist at all: it does not state that we can never know which interpretation is better than another. Although we can only know the world in our own terms, we can evaluate different discourses and explanations and discriminate better ones from worse. Of course observations, like those in this study, are theory laden, this does not necessarily mean that they are determined by theory: it is possible to see new things not yet incorporated by theory (Sayer, 2000).

3.2 Research method and method of analysis

To really understand an object of study, in this case the embedding of international trade in the Netherlands, it is important to place it in a geographical and historical context. I will do this in Chapter 4 by paying attention to the historical developments in policy and institutions related to international trade in the Netherlands and the respective case

study chapters. Small-N comparisons are especially suitable to understand mechanisms and place them in their context (Hall, 2003). In this way I have tried to develop theoretically informed insights into the mechanisms of trade concentration and embedding and into the context in which these mechanisms were able to lead to the embedding of trade activities in the Netherlands.

Following an intensive research design to get a rich set of data on my cases from different fields of expertise has enabled me to analyze the subject from different angles and to contextualize my findings. A literature and document study has been conducted into the role of international trade and distribution in Dutch economic policy. For the three case studies I have conducted semi-structured interviews with around seventy (high-level) executives in companies and associations of the industries involved in this research and other experts in the field. In the interviews with firm representatives I used the topic list found in Appendix 1. In addition, I have used global, European and Dutch statistical data on the trade and distribution of flowers, clothing and high-tech products. Professional journals and company websites and publications form other data sources I have consulted. In the case of flower trade, reading and analyzing the traders' magazine 'Groot Handelsblad' for more than two years has been a very important source of information. My research is rounded out by my attendance and observations of meetings and trade fairs in the flower, clothing, and logistics industries. An overview of the interviews and meetings I attended can be found in Appendix 2.

To analyze my cases I have labeled transcriptions of interviews and meetings I have attended as well as all the other written materials such as websites texts, reports, and official documents. The qualitative data analysis software of Atlasti has helped me to search through all the labeled text fragments, documents, and texts that I had in digital format and has, I think, reduced the chance of overlooking parts of the information gathered. However, it has only been by reading and re-reading that I have been able to get grip of the data gathered and to interpret them. I have tried to use the last interviews in every case study also to test (parts of) my interpretations of earlier interviews and readings into the subject. In this way I have tried to come to well informed insights and conclusions. To preserve the anonymity of firms, each firm in the research has been given an industry initial beginning with P (which refers to the primary documents in Atlasti) and a randomly assigned number to refer to them in the text.

3.3 Case selection

3.3.1 Concentration of trade

When there is no concentration of trade the connections in a network between producers and users will look like figure 3.1. This study is primarily concerned with more centralized trade concentrations pictured in figure 3.2. This figure shows three ideal types of international trade concentration.

Figure 3.1: A value chain with only local entrepots or no concentration of trade and distribution

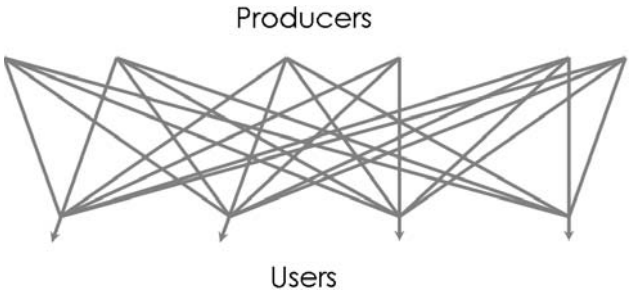


Figure 3.2: Three ideal types of spatial patterns of value chains in which concentration of trade exist

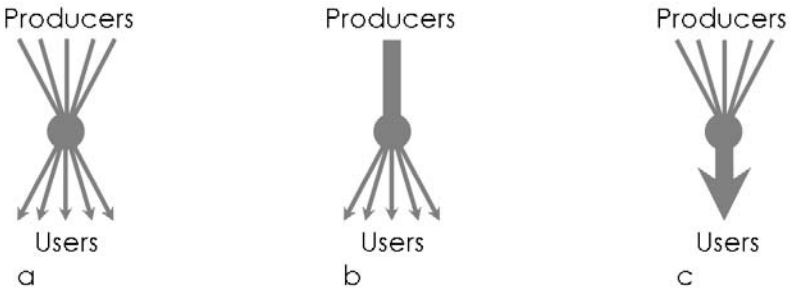


Figure 3.2a shows a case where a trade concentration takes products from many different producers and geographical locations and redistributes them to many different users in many places. Figure 3.2b illustrates when connects geographically concentrated producers to users in many different places. Figure 3.2c reflects the case in which the concentration of trade and distribution links a geographically scattered supply to a single area of demand. This study focuses on all the cases of figure 3.2, in which there is a clear concentration of trade, and trade forms a kind of node within an international value chain. These trade flow forms can, of course, be found on a larger, more international scale as well as a smaller, local geographical level. For example, American, European and Asian markets can be connected through one large trade node, but a concentration of trade can also connect markets at a national level. An example of this could be found in a national trade centre or a regional wholesale centre for fresh products. The cases in this study are all examples of situations in which a trade node connects international markets.

Pragmatic considerations have made me focus my selection of cases where both trade and distribution take place. When only trade takes place in the Netherlands (goods do not enter or leave the country) this is called triangle trade. Data on this kind of trade is only available as an aggregated category of 'trade in goods'. This 'trade in goods' category includes many different kinds of goods. The commonality of this trade is not the good involved, but the fact that it is involved in triangle trade. Accordingly, it is impossible to use this category for case selection of a specific good. Therefore, in my case selection I have used data on trade in goods that physically enter the country, come into the legal possession of a Dutch based company (which can also be a branch of a foreign multinational) and subsequently get exported: re-exports.

3.3.2 Re-exports

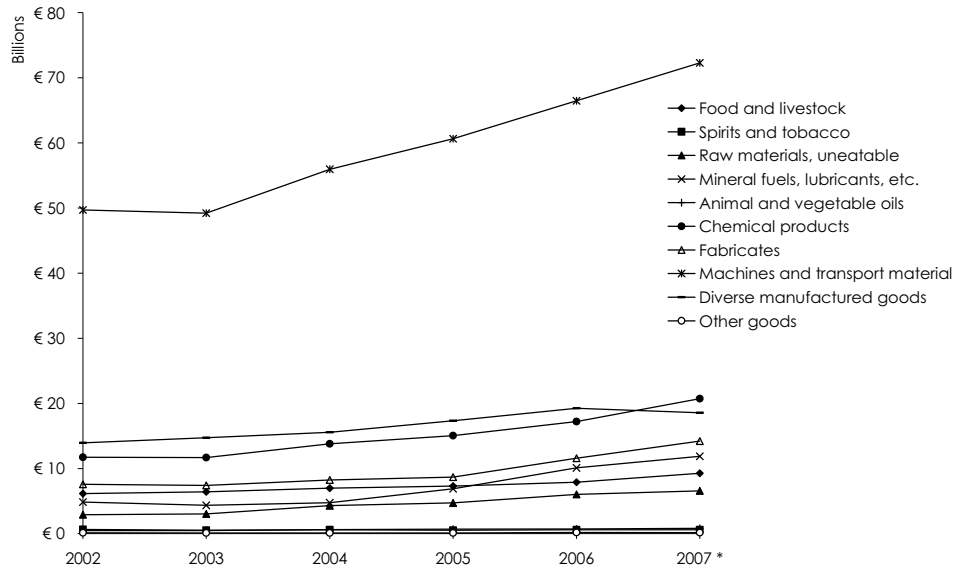
Since we are focusing on the international trade of goods in the Netherlands, cases of throughput are not included. Throughput includes goods transported to foreign countries through the Netherlands, as is the case when say goods from China destined for Germany are routed through the Port of Rotterdam and from there are trucked to Germany. We are focused on cases of re-exports, that is, goods that are imported, come into legal possession of a Dutch firm and are subsequently re-exported. These goods do not undergo any industrial processing that transforms them into another statistical category. Since the data on re-exports is very limited, I have consulted other import, export and production data to verify whether or not it shows concentration for the selected cases in the Netherlands. The Central Bureau of Statistics of the Netherlands (CBS) gives only data on re-exports at a highly aggregated level (Table 3.1 and Figure 3.3).

Table 3.1: The value of re-exports from the Netherlands from 2002-2007

	2002	2003	2004	2005	2006	2007
					(billions of Euro's)	
Food and livestock	6.2	6.4	7.0	7.3	7.9	9.3
Spirits and tobacco	0.6	0.5	0.6	0.5	0.6	0.6
Raw materials, uneatable	2.9	3.0	4.3	4.7	6.0	6.6
Mineral fuels and lubricants	4.8	4.4	4.7	6.9	10.1	11.9
Animal and vegetable oils and fat	0.5	0.5	0.6	0.7	0.7	0.8
Chemical products	11.7	11.7	13.8	15.0	17.2	20.8
Fabricates	75.8	7.4	82.4	8.7	11.6	14.2
Machines and transport material	49.7	49.2	56.0	60.7	66.5	72.3
Diverse manufactured goods	13.9	14.7	15.6	17.3	19.2	180.6
Other goods	0.1	0.1	0.1	0.1	0.2	0.1
Total for goods	98.1	98.0	110.9	122.0	140.0	155.1

Source: StatLine (Statistics Netherlands, www.cbs.nl)

Figure 3.3: The development of the value of re-exports in the Netherlands from 2002 to 2007



Source: StatLine (Statistics Netherlands, www.cbs.nl)

From this data it is clear that machines and transport material, chemicals and diverse manufactured products are all important re-export categories. However, this level of data aggregation does not suit my selection of cases well. For more suitable data I

analyzed import and export statistics of specific goods. Intracen data records show that in 2003, the Netherlands was the second largest world exporter of computer equipment and the largest exporter of automatic data processing machines (8.4 percent share in world trade). Eurostat data showed the importance of the Netherlands in Europe as an exporter of clothing, taking into account the fact that, contrary to some other large European clothing exporters, there is almost no production of clothing in the Netherlands. Per capita, the Netherlands was the tenth largest clothing exporter in the world in 2006 (Intracen). The case of the flower trade seems rather remarkable since the Netherlands is the largest flower exporter and flower market in the world, with more than fifty percent of the world's exports in 2006 (Intracen) of which an increasing share consists of re-exports of flowers imported from Africa and South-America.

3.3.3 Theoretical arguments for these cases: diverse case selection

As discussed above, I have chosen cases of re-exports that show concentration in the Netherlands. A second criterion has been to include cases that cover the different types of trade nodes that I distinguished earlier. An important hypothesis this study starts with is that different types of trade nodes show a different way of geographical embedding. In order to see if this is true, cases have been selected that cover the three basic types of trade nodes. Also the type of goods and markets as reflected in the world of production are believed to influence the role and embedding of trade. Therefore the cases have been selected in order to cover different worlds of production. Lastly, the cases cover every governance model in the value chain that has been distinguished in chapter two: market, modular, relational, captive, and hierarchic.

With the Dutch flower auctions being so prominent in world flower trade this case represents a market node of trade. I expected trade in the value chain of the flower industry to be mainly organized through market relations.

I have chosen trade in high-tech products as a case of a distribution node because of the importance of European distribution centers of high-tech products like computers in the Netherlands (BCI, 1996, De Ligt and Wever, 1998). I expected trade in this case to be mainly hierarchically organized but also a modular way of organizing trade activities to be important since literature on high-tech producers suggests an importance of outsourcing by lead firms through modular relations (Sturgeon, 2003).

The case of clothing trade has been chosen as an example of two types of trade nodes. On the one hand I expected international clothing trade in the Netherlands to be part of the distribution node and to take place within a highly integrated value chain like in the high-tech-product industry (BCI, 1996). However, literature (Scheffer and Duineveld, 2004) has illuminated the role of private-label providers in the value chain and the relative importance of the Netherlands as private label-provider. Trade through

these private-label suppliers could be understood as trade through a trade-network node. In the private label sector I expected the existence of network types of governance (modular, relational, and captive) to be present since traders in the trade-network node connect a supply base with limited capabilities to a highly demanding market. I expected personal relations and shared conventions to be more capable of understanding and translating market wishes to producers. Therefore, I included trade in clothing as an example of a trade-network node and a value chain with network types of governance of trade and focused in my research intently on these private label producers. In value chains organized with Dutch private label providers, I expected the existence of relational know-how to be the most important explanation for the strength of the Netherlands in the trade of this good.

To get different worlds of production within a selection, I used general knowledge of industries and goods. I expected cut flowers mainly to be part of the Industrial and Market Word. I expected clothing also to be part of these two worlds (basic collections and fashionable ready-to-wear), but also possibly be part of the Interpersonal (made-to-measure) and Intellectual (haute couture) World. Lastly, high-tech products could also be part of every world of production, but in the many European distribution centers in the Netherlands, I expected products from the Industrial World and the Market World to be the most important. The wide variety of worlds of production that are present within and among the cases, enables to compare the embedding of trade within one world of production but within different types of trade nodes and for different worlds of production within one trade node.

Being so different with respect to product and market characteristics, value chains, and the activities that take place in the Netherlands, I expect the case studies to cover the possible set of mechanisms that attract trade and distribution to a specific place and to give a good picture of the varied embedding of international trade in the Netherlands. Furthermore, although a study of diverse cases cannot tell much about the distribution of these cases in the Netherlands, it is a useful tool to generate hypotheses since they probably represent the full range of possible trade activities and outcomes related to the embedding of international trade activities.

Chapter 4

The creation of the Dutch trade node

Nationwide support for the development of a distribution node through industrial and spatial policies

"For many years the Netherlands has had a very strong position in international supply chains due to our […] geographical location and hinterland connections, but also because of our policy, coordinated between government and business interests – for which we are commended internationally – to strengthen the competitiveness of the Netherlands as a business location[9]*"*

This chapter outlines the political-economic context in which the Dutch trade hub and its specific assets or conditions have developed. In the previous chapters three main types of trade business that create re-exports have been mentioned, each depending on different assets.

(1) Distribution centre: no trader is involved in re-exports of goods here, only logistics service providers and European distribution centres with some semi-production activities. Control of the value chain and generally also coordination of the distribution activities is in the hands of (foreign) lead firms. Distribution efficiency is the main reason for location in the Netherlands. This is created through a multilingual labour market, an attractive fiscal climate, and fast customs, and an excellent physical infrastructure for logistics activities.

(2) Marketplace: a central place where buyers and sellers find each other. Distribution efficiency is important here, but logistics, and product and market knowledge needed to operate the market is also important. Further domestic

[9] Commissie Van Laarhoven (2006, p. 5), translation mine.

production plays a role since it is the basis for the creation of that market. Products and traders are attracted by the already existing marketplace. Although control of the marketplace is in the hands of local players, the control in the value chain does not necessarily have to be. The marketplace mainly operates in a value chain that is not very integrated.

(3) Trade-network node: companies operating as part of the trade-network node function as a gateway to international production and market areas. These companies are intermediaries and coordinators of parts of the value chain. This type of trade role comes closest to the classic trade role of the intermediary between different cultures, languages, conventions, or institutional environments (such as in the work of Biglaiser, 1993, Biglaiser and Friedman, 1994, Feenstra and Hanson, 2004, Petropoulou, 2005, Rauch, 2001, Schröder et al., 2003). Coordination of parts of the chain, especially production, does not imply any control of the chain. Control of the chain is in the hands of lead firms that are certainly not always Dutch.

Of course, as has been explained in the previous chapters, within these different types of trade nodes every case has its own specific characteristics, which make it difficult to speak generally about the trade function of the Netherlands. Nevertheless, it is possible to see some general trends in Dutch economic policy that explain the conditions and trade roles the Netherlands has developed over time.

The first point I will make is that Dutch economic policy has been very focused on the development of the first type of trade, that is, trade created through distribution centers. Only recently has trade created by trade-network nodes received some attention. Lastly, the marketplace seems to be forgotten all together in economic policy. Although the development of the role as distribution centre has become deliberate policy from the 1980s onward, many assets related to this role have already been created and developed long before, first as a result of neutral and very liberal stances in trade issues when these were still part of foreign policy. Later on, especially after the Second World War, the role of the Netherlands as distribution centre has been developed as part of an industrial policy that had export stimulation as an important cornerstone. In the corporatist economic structure the interests of an industry and business elite played an important role. In this political environment the idea of a de-industrializing country that could develop a role as international trade node did not gain much strength. Instead, industrialization and export stimulation were the backbones of the economic policy of those days. But when this policy of industrialization, when necessary with financial support from the state, led to a fiasco in the 1980s, change took place.

A view began developing that the strength of the Netherlands was not to be found in its industries but instead in the service sector. A strong coalition was formed in

favor of the development of international distribution activities in the Netherlands. This led to large state investments in infrastructure in the 1990s up until today. The crisis in the early years of this new millennium has created the most recent shift in thinking on the competitive strength of the Dutch economy. For the first time the attention on the role of trade-network nodes has become more prominent, as different policy documents argue for the development of coordination and control functions in the Netherlands. A closer look at these arguments reveals, however, that they still mainly support the distribution hub.

An important question is whether or not this policy to develop a distribution hub can be seen as a strong competitive strategy, as described by Jessop (1998), that really territorializes international trade in the Netherlands instead of only temporarily capturing mobile factors of production. A second point I will make in this chapter is that, although the Dutch strategy has been prone to imitation and has characteristics of a weak competitive strategy, it also shows signs of a strength. This is especially true because of the adaptive capacities present in the Netherlands, as a result of joint action by public and private institutions that enable shifts to new competitive strategies once an old one has passed its prime.

4.1 Trade-related policies in the Netherlands up to the 1980s

4.1.1 Neutrality and free trade

For a long time Dutch trade policy was part of the Ministry of Foreign Affairs. It consisted primarily of a free trade policy with instances of protectionist measures in difficult times. Nevertheless, protectionism was never strongly supported by interest groups and policy makers (Moquette, 1993). The interests of the business elite in colonial trade, banking and shipping, who were in favor of free trade and non-intervention in trade issues, had a great influence on Dutch trade policy (De Vries, 1977, Van Zanden, 1999)[10]. Of course Dutch trade policy was also very dependent on the policies of its

[10] An example of this is the situation in the eighteenth century when Dutch industries were in decline because of competition from abroad, but the country did not become protectionist. Following Van Zanden (1999) this was the result of the very influential interest of the Dutch business elites in colonial trade, banking and shipping. Also, between the First and Second World Wars, when world trade was in decline due to increasing protectionist measures by various governments like France, Spain and Germany, the interests of trade, shipping, and large export-oriented industries played a role in Dutch trade policy. These interests got much more attention than those of the rising, home-market oriented industries in the south and east of the country, for which protectionist measures could have been beneficial (Klemann, 2007). But what also plaid a role was that Germany and France, which started to use negotiable tariffs on import during the 1920s, did not depend to a fair extent on any product exported by the Netherlands. Therefore it was almost impossible for the Netherlands to react to the German and French tariffs with own negotiable tariffs. The volume of Dutch exports was simply too small to become a dominant party for negotiations (Klemann, 2003, Klemann, 2007,

larger neighbors and main trading partners like Germany, the UK, and France[11]. However, the Netherlands followed a relatively liberal trade policy in which non-intervention and neutrality were the pillars. Economic development was not a goal of trade policy far into the twentieth century, notwithstanding the fact that trade was a fast growing sector[12].

From 1932 on, trade policy became part of the Ministry of Economic Affairs, meaning that more attention was paid to the economic effects of international trade policies (Moquette, 1993). This didn't necessarily change the Dutch stance in international trade. After the Second World War when trade policy became part of relatively closed economic blocks, first within Benelux, and later on within the EEC and its successors, the Netherlands stayed relatively open to trade (Kol and Mennes, 1992, Klemann, 2003). Between 1978 and 1984, for example, the Netherlands, together with the other Benelux countries, Germany and Denmark used the option to restrict trade with exemptions on European import quotas much less than other European countries (Kol and Mennes, 1992).

4.1.2 Industrialization and export stimulation

In 1949 when Indonesia became independent, the Dutch who had always thought of themselves as *'a nation of farmers and merchants which could prosper thanks to its large colonial empire',* had to find a new *'destiny'* for themselves, as Van Zanden (1999, p. 185) describes it. Industrialization became this new destiny from which the whole country should benefit. An equal distribution of economic development, growth, and prosperity became an important goal of economic policy. Since the Netherlands is only a small country, export markets were thought to be needed for Dutch industries to develop and

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De Vries, 1977). Moreover, other interests became important as well during this period, resulting in some protectionist measures between 1930 and 1950. The agricultural sector was particularly protected from the 1930s onward. Dutch agrarian products had lost many of their export markets so protectionist measures and government aid had to keep this sector on track. Although these measures were detrimental to prices and competitiveness, a strong agrarian lobby, their electoral importance, and sympathy from the urban public resulted in continued aid to the sector (Klemann, 2003).

[11] For example, in the 19th century trade liberalization took place in the Netherlands to a large extent as the result of pressures from the British, who ended lots of protectionist measures in the 1840s (end of Corn Laws, lowering of import tariffs, end of Navigation Acts). Also in France, Germany and Belgium liberalization began. The Netherlands followed these countries by reforming its trade laws, abolishing its shipping and Corn Laws, and by lowering import tariffs to an internationally low level (Van Zanden and Van Riel, 2000, pp. 233-235). Around 1870 trade was liberalized in the Netherlands. The 'Cultuurstelsel' (Forced cultivation) in which villagers in the Dutch colonies had to give two-fifths of their agricultural products or one fifth of their working days in a year to the Dutch, was almost dismantled and Dutch private entrepreneurs were free to operate in the Dutch East-Indies (from 1824 onward only The Dutch Trade Company NHM had had the right to trade with the Dutch East-Indies) (Jonker and Sluyterman, 2000, p. 177).

[12] In the 19th century trade and traffic were the fastest growth sectors of the economy in the Netherlands, but they counted only for 11 percent of jobs for the working population. So the contribution to national income was probably lower than that of industry and agriculture (Griffiths, 1980). However, trade and traffic were very dynamic economic sectors in the nineteenth century (Griffiths, 1980).

grow. In this way trade policy became part of a policy to stimulate exports of Dutch industrial goods. The main tools for export stimulation were measures to create competitive cost levels to compete on price, the development of infrastructure to easily reach export markets, and the creation of different associations and organizations to stimulate exports through knowledge dissemination. Collaboration between different levels of government, from national to local, and support from the private sector has been important in many of these policies.

Competitive cost levels: labor costs

To stimulate exports and employment, cost of living and wage containment were considered essential. Wages were kept low through coordinated wage negotiations that started as early as the 1930s at the national level (Klemann 2003). After the war a new structure was created where labor and employers' organizations, guided by the government, negotiated about wages. Until the end of the 1950s, this system of tripartite wage negotiations was very successful in keeping wages low (Van Zanden, 1999, p. 184). However, as soon as the goal of full employment was reached through this low-wage competitive strategy, there was a price to pay: a sharp increase in wages. This happened in the 1960s and 70s and again in the 90s (Klemann, 2003, Klemann, 2007). With increased labor shortages wages exploded in 1963[13] and it was only with the national Wassenaar Agreement of 1982 that an end came to more than a decade of severe wage increases. In the Wassenaar Agreement government, workers and employers organizations agreed upon wage restraints. The idea that labor costs are important for Dutch competitiveness has remained an important idea in policy up until today. In the current economic crisis wage restraint is also seen as a strategy to improve the competitiveness of the Netherlands (NRC-Handelsblad, 2009, Ministerie van Algemene Zaken, 2009).

Although wage levels at Dutch companies cannot be translated directly to wage levels of multinationals operating in the Netherlands (Fortanier, 2008), the Dutch collective wage policy including relatively few strikes do seem to have played a role in the development of the Netherlands as international trade node. European distribution centers particularly seek such labor conditions. Price levels and risks for strikes are important determinants for the port a shipping company decides to use, as they determine the reliability of the logistics in a value chain (interview Voorlichtingsbureau

[13] From 1953 onward actual wages started to increase faster than official collectively set wages (cao-wages). Employers started to seek ways to escape from these tight wage regulations in times of fast economic growth. In 1959 a differentiated wage policy was introduced where increase of labour productivity in an economic branch, instead of the whole economy, became the measure to decide upon how much wage increase was allowed. It turned out to be very difficult to specify increases in labour productivity in specific branches and therefore, in 1963 the system of *wage leadership* failed and the system of wage regulation came to an end, except for the system of centralized wage agreements (Van Zanden, 1997, p.117-119).

Shortsea, March 23 2005 & Hau Lee symposium 1-11-2008). So these wage agreements and restraints and the corporatist structure where labor issues are settled in relative harmony, can be seen as conditions that support a role as distribution centre.

Competitive cost levels: taxes and corporate laws

Through different tax laws, the Netherlands has tried to stimulate exports and become an attractive location for investment. A short overview of such laws shows the effort the Netherlands has taken to create an attractive fiscal climate. Although this has primarily been created to attract foreign industries, it has also become an important strategy to attract European distribution centers.

One of the first measures to attract investment after the Second World War was the Tax Reduction for Investing Companies law that provided for lower taxes when investment took place. This law was introduced in the industrialization plan of 1949. In 1975 this measure was replaced by the WIR (Wet Investeringsrekening), a law to give premiums to investment companies. The execution of this law was not successful and in 1988 the tax reduction for investments law was re-introduced (Van Zanden, 1999). Through other tax laws the Netherlands has tried to stimulate industrialization and position itself as an attractive place for foreign investments. The relatively low corporate tax rate (Lambooij and Peelen, 2006) is a case in point. The participation exemption applying to Dutch holding companies is another method for creating an attractive tax regime. This exemption prevents double payment of tax when a company operates in different countries. This can be very beneficial to companies since earnings are not taxed at a high rate in the Netherlands, meaning if a firm is only obligated to pay taxes to the Dutch state, the overall tax payment for this firm may be dramatically reduced. The Netherlands has also tried to attract foreign companies through transfer pricing laws. Transfer prices are the virtual prices companies use for the delivery of goods and services between its own different branches. Companies can use these prices to adjust profits and losses to those parts of the company located in jurisdictions that are most profitable in terms of tax regime. Transfer prices have become a point of concern and the Netherlands has had to change its transfer pricing laws after criticism from other countries that Dutch laws enabled firms to avoid paying taxes, creating unfair competition (Pijl and Hählen, 2001, p. 615)[14]. A more recent measure for creating

[14] The new law is much more transparent than the old one and real transactions within companies are more closely monitored, instead of only looking at the transactions on paper. In the new law *substance* is very important. Companies need to have the authority to make financial decisions in the Netherlands to be considered for Dutch taxation. If the Dutch tax authority suspects this is not the case, it will contact their foreign colleague authorities. (Pijl & Hählen 2001, p. 620). With the new taxation law, the Netherlands meets the OECD obligations and in that sense can no longer officially be seen as a tax haven with no transparency. In practice however, the Netherlands still seems to be a relatively attractive location for international companies. In the first place, it is very difficult to assess whether or not the transfer prices a company uses are correct. So there is still some room for tax-efficient transfer pricing. Furthermore, the new system is faster and

favorable conditions for foreign investments is the Office for Potential Foreign Investors (OPFI), created in 1990. This office deals with all tax-related matters and streamlines potential foreign investment by eliminating the need for foreign investors to discuss consequences of investment with different officials in the fields of corporate taxes, VAT, wage taxes etcetera (Pijl and Hählen, 2001). Such an Inland Revenue authority that *'thinks along with companies and acts quickly'* is generally seen as attractive to foreign firms and, in the words of Grotenhuis, *'can be an impulse to locate a head office in the Netherlands'* (Grotenhuis, 2008, June 21). More recently the fiscal law 'Werken aan Winst'[15] (Work on Profits) was created. It improves the Dutch investment climate and stimulates innovation, seeming especially favorable for multinationals, since it enables them to organize their internal money flows in order to pay relatively low taxes (Dohmen, 2008b, February 21, Dohmen, 2008a).

In short, there are many indications that the Netherlands has followed a policy to attract foreign investments. When we relate the fiscally attractive business climate created through these tax laws to the role of the Netherlands as an international trader, we can see this tax policy is especially attractive for (foreign direct) investments in European distribution centers. In the case studies when competitive advantage compared to competitors abroad was discussed, these measures were never mentioned by clothing traders operating as a trade-network node, or by companies in the Dutch flower trade. On the contrary, when European distribution centers were at stake these fiscal measures were often mentioned as an important asset of the Netherlands. This is confirmed by data showing the important share investments in European distribution centers take in total foreign direct investments in the Netherlands; this share is much larger than those in marketing and sales or research and development (NFIA, 2008). It's clear these measures mainly stimulate a role as distribution centre. The creation of an attractive fiscal business climate is an important part of Dutch policy up to today. In 2004 the Memorandum 'Peak in the Delta' from the Ministry of Economic Affairs (Nota Pieken in de Delta) named a competitive fiscal climate as one of three generic measures to stimulate the Dutch economic competitiveness (Ministerie van Economische Zaken, 2004).

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the administrative burden for companies is much lower, resulting in lower overhead costs for organizing tax payment. Also the increase in countries with which the Netherlands has tax agreements makes it easier for firms to avoid double taxation (Doets and Van Dam, 2006, p. 345, Lambooij and Peelen, 2006, p. 335, Pijl and Hählen, 2001).

[15] Shortly after the introduction of this tax law it became clear this law enabled firms to find a loophole to only pay a ten percent tax rate. Since this was too harmful to the public treasury, the law was adjusted, but the law still includes many opportunities for multinationals to avoid paying taxes (Dohmen, 2008a).

Infrastructure development

The development of infrastructure to connect the Netherlands with its neighbors already began before the Second World War and continued after that time. It can be seen as the start of investment to develop the Dutch role as distribution centre that would come later. National and local governments and industry elites supported the policy. For example, the decision to dig the Amsterdam-Rijnkanaal to improve connections between the Port of Amsterdam and the German hinterland was already made in 1931. This waterway was completed in 1952. As early as 1945, Schiphol as the national airport, received funding from the national government to improve and enlarge its facilities. Municipal authorities helped to develop infrastructure as well (Van Zanden, 1999, Bouwens and Dierikx, 1997). In Rotterdam, the municipality and local players like captains of industry were important in the enlargement of the port and the investment of new business from the 1960s onward (Jacobs, 2007, p. 84). In Amsterdam the municipal government was involved in enlarging the mouth of the port and creating of new port areas near the sea for industrial and transhipment activities in the 1960s. Amsterdam had hoped to become an important general cargo port (Bosscher, 2007). However, the development of national infrastructure-based economic strategy became much stronger only from the 1980s onward. We will cover this in further detail ahead.

Organizations for export stimulation

To stimulate exports many institutions have been set up. Some of them were already created before the Second World War, but after the war export stimulation really developed as part of Dutch industrialization policy (Salzmann, 1994). Some of these institutions are public, but have been created through joint action of private companies. Together these institutions form a large source of information on international entrepreneurship and stimulate Dutch companies to look beyond the Dutch border. Important institutions in this respect are the Economische Voorlichtingsdienst (EVD, economic information service) that was established before WWII to stimulate exports, the Netherlands Council for Trade Promotion (NCH)[16], set up by Dutch commerce and industry in 1946, and Fenedex, the federation of Dutch exporters. Members of the NCH are companies and enterprises both large and small. They can all use the worldwide network the council has, including its knowledge to become active in international markets. Fenedex was created in 1954 by ten companies that operated internationally and wanted to share their experiences and knowledge to improve the quality of export and internationalization of Dutch companies. Fenedex now has 1350 members and is the

[16] Since 1998 the organization works together with regional chambers of commerce. Since 2007 the NCH cooperates with the largest business organization VNO-NCW and the organization for small and medium enterprises in the Netherlands, as well as the Federation of Dutch Exporters (Fenedex) and organization of technological entrepreneurs (FME-CWM) to improve services for exports.

largest independent Dutch organization of exporting and internationally-operating companies. Knowledge exchange is still an important goal of the organization[17].

Although these organizations could be a great source of knowledge, as we will see in the case studies, they haven't been very important in the development of re-exports in the Netherlands. Companies almost never mentioned these organizations as an important source of knowledge, for example, on how to operate abroad and enter new markets. Specific industry organizations such as those for flower traders and clothing firms seem to be much more important for trader knowledge on how to operate abroad than these export organizations. It is difficult to determine why this is the case, but it could be related to the specificity of these industries or the fact that these organizations only focus on exports, whereas imports are also important to firms that re-export. It is likely that their specialized industry organizations can help them with both, and are therefore more important for them.

4.1.3 Business interests in industrial policy

As Fennema and Heemskerk (2008) show, business elites have had a strong influence on Dutch economic policy for a long time. Although after WWII influence from the state in economic policy increased, there were many interrelationships between the state, policy makers, and the largest Dutch companies that resulted in policies often beneficial to specific industries. In post-war reconstruction labor unions were part of this close collaboration between the state and industry. This resulted in the well-known corporatist structure of the Dutch economy. At the highest levels of state, industry, and labor unions, people changed jobs easily. A Minister could become a member of the board of commissioners in a large company, a chief executive officer could become a high state official, and a leader of a national trade union could become a Minister. But many boards and committees also advised the government, creating strong relations between the state, policy makers, and business elites. The Ministry of Economic Affairs had particularly strong relations with business elites during the era of reconstruction (Fennema and Heemskerk, 2008).

In this business climate, in which vested industry interests had a large say in all different kinds of advice and policy committees, it is no surprise that industrialization was central to economic policy. Although, as we will see ahead in the case of clothing, sharp wage increases were one of the main reasons for early foreign outsourcing of production work and, in the end, has added to a competitive advantage of Dutch

[17] All members should have experience with exporting or at least start exporting in the near feature when they become a member. The organization offers education and training programs, consulting, and literature on exports. The organization also supports the interests of exporting companies, for example vis-à-vis embassies, export education, and language education.

clothing firms later on, at the time it was only seen as very problematic. The Dutch clothing sector transformed from a production to trade based industry. In this transformation the amount of jobs did not change in the 1970s, only the type of work changed dramatically, as industrial companies became wholesalers (Scheffer and Duineveld, 2004). But that was not yet understood in the 1970s. As late as the 1980s many thought retaining domestic production of industries like clothing, shoes, and furniture was important (WRR, 1980). Nowhere was the idea being espoused that Dutch industries, as they outsourced production and developed into wholesalers operating in international trade networks, could represent an important new development of competitive strength.

The strong relations between state and industry were very effective in the time of reconstruction since they gave the state a lot of information on what was happening in the largest industries in the country, making all kinds of political decisions easier to make. On the other hand, in the 1980s it appeared these strong relations also resulted in bad policy, as business interests and loyalties towards specific companies could shroud bad policy decisions. The best known example of this is the financial aid the state gave to Rijn-Schelde-Verolme, a large Dutch ship-building company. In spite of two billion guilders of financial aid, under the responsibility of a minister that had been an important businessman in the Dutch shipbuilding industry, Rijn-Schelde-Verolme could not survive and had to be closed (Fennema and Heemskerk, 2008). As a result of this affair, investigated in 1983 and 1984 by a committee of the Dutch parliament, financial aid to specific companies or industries was no longer accepted. However, this did not result in an end to the influence of specific industries on Dutch economic policy. One can argue that the crisis of the 1970s and 80s and the affair described above, freed the way for a new kind of industrial policy *'through the back door'* (Terhorst and Van de Ven, 1998).

4.2 Trade policies from the 1980s on: focusing on strengths, becoming a *mainport*

4.2.1 A focus on strengths: trade and distribution

When the policy of financial aid to industries had become a fiasco, the very strong relations between the Ministry of Economic affairs and industry were no longer accepted. This did not mean the interrelation between policy and industry disappeared altogether. From the 1980s onward, a new coalition developed at the centre of which no longer stood the Ministry of Economic Affairs, but rather the Ministries of Traffic, Public Works, and Water Management (Ministerie van Verkeer en Waterstaat) and Spatial and Environmental Planning (Ministerie van VROM). The economic strategy resulting from

the coalition of these Ministries with transport organizations was one to develop the Netherlands as a trade and distribution hub within international transport flows. For this, large infrastructure projects and the development of efficient border procedures and customs were deemed necessary.

The coalition developed in a time when more and more discussion took place about the way in which the Netherlands could overcome the economic crisis and increase prosperity. The economic crises of the seventies and eighties were seen as the result of economic policy too focused on an equal distribution of economic investment across the country and among different industries. This policy resulted in keeping poorly performing industries alive instead of pushing them to become competitive. New reports and advice to government pleaded for stimulation of economically competitive industries and regions (Wagner, 1981, WRR, 1980)[18]. The 1980 report of the Scientific Council for Government policy (WRR, 1980) was still very focused on the revitalization of Dutch industries[19]. The wish to keep clothing, shoe, and furniture industries in the Netherlands could be deemed a last breath in the failed policy of the 1970s that aided poorly performing industries and protected them against cheaper imports (Mennes, 1980). At the same time, the policy proposed was new as it provided for much less influence of industry interests and much more influence of independent professionals on economic policy. The report indicated the geographic location of the Netherlands and its hinterland connections as an asset for export of these industries, but did not see trade and distribution functions as an industry on its own yet. In fact, as a commentator stated, trade, transport, and transshipment, and the agricultural sector were completely forgotten by the report of the WRR, although these sectors were already indicated as important by two earlier government memorandums (nota Wetenschapsbeleid, 1975 and Innovatienota, 1979) (Beek, 1980).

It was only with the 1982 report of an advising committee to the government (Wagner, 1981) that trade and transport were deemed favorable economic sectors to develop as part of a more selective industrial policy to focus on the strongest sectors in the Netherlands. In the view of those who supported this advice, it was very logical to further develop the Dutch role in international distribution since the Netherlands had a clear competitive advantage in distribution, whereas capital goods industries were weak. The Netherlands had to make sure that it would stay ahead of other countries in international distribution. Many important businessmen were part of the advising committee to the government, as well as a representative from a large Dutch labor union. The advice was taken over by the Cabinet of Prime Minister Lubbers in 1982. From then

[18] The WRR report of 1980 was a report on industrial policy and not on the economy in general. However, the idea put forward in this report fit well into the ideas that followed, namely that the strengths of the country should be supported and, like in earlier eras, exports should be stimulated.

[19] In the report the following industries are mentioned: petrol, chemical, steel, clothing, shoe, and furniture industries, and the equipment sector of machine building, electronics, transport equipment, and instruments.

on, the development of the Netherlands as a country of trade and transport became an important policy goal. This was a major shift away from the post-WWII industrialization policy. The Netherlands was to become a country of transport and distribution of goods made elsewhere, a country of ports and infrastructure instead of a country of industry. For this goal large infrastructure investments were needed.

In the view of Terhorst and Van de Ven (1998) this '*Dutch infrastructure policy'* that became so important from the 1980s on, '*is actually an industrial policy through the back door'* (p.470). Besides the domestic objections that had been raised due to state support of declining industries, EU member states were no longer allowed to pursue national industrial policies through direct financial aid at that time. However, infrastructure investments by the state were still permitted and were now used to strengthen specific industrial sectors.

4.2.2 The mainport lobby: a strong coalition in favor of infrastructure and port development

The idea that the Netherlands should develop into a gateway or central hub in international trade and distribution flows was supported heavily by the port of Rotterdam, Schiphol Airport and the associations of transport and distribution firms. From the 1980s on they created a strong business lobby that supported investments in transportation and distribution. The strategy became known as the *mainport*[20] strategy. Following this strategy Schiphol Airport and the Port of Rotterdam were defined as the engines of the Dutch economy. Therefore, these ports and their hinterland connections should be further developed to ensure Dutch development into the most important logistics and distribution hub of Europe. From 1983 onwards, a whole flow of reports emerged endorsing the importance of the ports and logistics sector for the Dutch economy and the competitiveness of the *mainport* strategy. Although the *mainport* strategy was very focused on the development of the Netherlands as a node in international transport networks, it also showed close resemblance to the previous strategies of industrialization; it was focused again on price competition (keeping wages and taxes low was deemed as important as before). Furthermore, the strategy, as it provided for large infrastructure investments to improve the hinterland connections, also still strongly supported domestically produced exports.

[20] The English word 'main' in *mainport* refers to the importance of the second part of the word 'port'. The word does not exist in English but has become very popular in Dutch speech to denote the Port of Rotterdam and Schiphol airport, or the entire country as a transportation hub in international flows of goods.

Port of Rotterdam and Schiphol airport

In 1983 a report was published that would become very influential. It was produced under the authorities of the municipality of Rotterdam, a public authority for Rijnmond (the area of the Port of Rotterdam), and the association of transport and seaport companies, SVZ. Written by Poeth and Van Dongen (Poeth and Van Dongen, 1983) the report took a broad view on the possible role of the port of Rotterdam and many other ports in the Netherlands, which they called *mainports*. The *mainport* was understood as a node for one or more specific goods and also included a leading role in information flows and logistics knowledge for these goods (Van Duinen, 2004). The report by Poeth and Van Dongen of 1983 also proposed some institutional innovations to take the lead as a gateway. The port should use fast customs as a competitive advantage and create a free-trade zone (vrijhavenzone). These are especially vital for imports due to leave the country as re-exports. In spite of ideas mentioned on information flows and logistics knowledge, the part of the report that became influential was the idea of the port of Rotterdam as a distributive node in international flows of goods (Van Duinen, 2004). In 1985 the planning department of the government (RPD) introduced the idea that the Port of Rotterdam could become a *mainport* (Van Duinen, 2004p. 78), a unique port that attracts a large part of international distribution flows to and from Europe.

As early as 1980, the 'Beleidsvoornemen Masterplan Schiphol 2003' (Policy Intention Masterplan Schiphol 2003) included the following ambition: *"to stimulate the continuance of Schiphol airport as an international trans-shipment and distribution centre for passengers, cargo, express shipments, and mail"* (Bouwens and Dierikx, 1997, p. 380, translation mine). In 1985, Schiphol policy document 'Course 85' focused on the importance of growth in volume of passengers and freight, and transfer and transit passengers using the airport (Van Duinen, 2004). The ambition of Schiphol to become a major focal-point of Dutch economic policy was really developed in 1986. In that year Schiphol airport set up an 'independent' committee of advisers on the future of Schiphol until the year 2000. This board was headed by Van der Zwan, who had also been part of the 1982 Wagner committee and had worked on the WRR report of 1980. The Committee Van der Zwan presented Schiphol as an important economic engine for the Netherlands and used the metaphor of a gateway for Schiphol. Freight's importance for Schiphol was particularly stressed (Van der Zwan and Bletz, 1986). To develop Schiphol as a kind of "Rotterdam of the sky" and an engine of the Dutch economy, several recommendations were made. They can be summarized as a plea in favour of better road connections around Schiphol, improvement in service level inter alia through automation of customs procedures and freight handling with the Sagitta and Cargonaut systems[21], setting aside

[21] In 1986 collaboration between the customs authority and Schiphol made it possible to introduce an automated system for customs clearance (SAGITTA). From 1987 customs clearance became possible without any paper documents (Bouwens and Dierikx, 1997). In that same time also the airport communication system

space for possible future growth, attracting foreign firms, and ensuring competitive cost levels. Speed was of the essence since Schiphol was behind her competitors. The report also includes a plea for establishing a project development company to create more business-related zoning and attracting foreign firms. This resulted in 1987 in the creation of the Schiphol Area Development Company (SADC), in which the Province of Noord-Holland, the municipalities of Amsterdam and Haarlemmermeer, and the Schiphol Group participate. This reinforces how broadly *mainport* development was supported, by private and public parties, from national to local levels.

To the present day the idea of the Netherlands as a *mainport* is very alive in documents related to Schiphol and the Port of Rotterdam. Schiphol and the Dutch national airline KLM still aim to keep Schiphol one of the few European *mainport*s for passengers and intercontinental cargo flows. For this, improvements to inland connections by motorway and high-speed rail are still stressed, as well as maintenance of a strong position with respect to landing rights. Schiphol also must remain an international passenger hub, to be supported by a region attractive to logistics operations, head offices, tourism, and business trips (KLM Air Traffic Control and Schiphol Group, 2006). A recent government advising committee concluded that from 2010 onward Schiphol should focus especially on flights strengthening the *mainport* role of the airport, to ensure it maintains its international node role (Alders, 2008). In other policy documents on the Port of Rotterdam and Schiphol airport (Ministerie van Economische Zaken et al., 2009, Commissie Ruimtelijke Ontwikkeling Luchhavens, 2009) the *mainport* is still very alive as a concept. But, as we will see in paragraph 7.4, the idea of what a *mainport* should be is changing in these and other reports.

Distribution and transport companies

As Van Duinen (2004) describes, until the mid 1980s most lobby groups for distribution and transport operated independently from each other: Schiphol, the Port of Rotterdam, and transporters all had their own organizations. But in 1985 these lobby groups combined forces around a common concern over what they saw as poor Dutch infrastructure leading to increased highway congestion. Their study of this situation showed how bad the coordination and promotion of Dutch logistics and distribution qualities were and how the Dutch gateway position could be strengthened with more marketing and promotion coordination, and better infrastructure and information

Cargonaut was developed by airport Schiphol. The system makes possible the exchange of information between for example cargo handlers and transportation companies enabling the latter to better plan the work (Interview ACN 08-03-2005). This has raised the pace of cargo handling and in this way decreased logistics friction at the airport. The creation of port communication systems in the ports of Amsterdam and Rotterdam has taken a bit more time. In 2000 PortNet was introduced and in 2002 Port Infolink was introduced in Rotterdam with the help of government and the official inspection services (interview CBRB). In 2009 the two systems have merged with the ambition to create one national port communication system and improve the competitiveness of the Dutch ports.

systems and services. In 1986 the pleas of this initiative resulted in a committee set up by the Ministry of Transport, Public Works, and Water Management: Commissie Nederland Distributieland (Netherlands Distribution Country Committee). The report of this committee 'Gateway Holland: shaping an initiative' (*Gateway Holland, vormgeven aan een initiatief*) became very influential (Van Duinen, 2004). The report stated that transport and distribution activities are very important for the Dutch economy. Furthermore it argued that Schiphol airport and the Port of Rotterdam were essential for this, but that competition from abroad could result in the loss of this strong position. Therefore action should be taken at a national level. The committee resulted in the creation of a new association in 1987 to support the role of the Netherlands in international distribution: Nederland Distributieland/Holland International Distribution Council (NDL/HIDC).

NDL/HIDC was not only a council of the Schiphol and Rotterdam lobbies. Government (Ministries of Economic Affairs and of Transportation), large banks, and other firms (NedLoyd, ECT en KLM) participated as well. NDL/HIDC became not only a lobby for the development of the Netherlands as a *mainport* for the government and Dutch public, but also an institution that gives advice and publicity to foreign companies with the aim of attracting their European logistics and distributive activities to the Netherlands (Van Duinen 2004; Websites NDL, HIDC). Following its website *"NDL/HIDC (Holland International Distribution Council), which represents the logistics sector in the Netherlands, helps international companies make a smooth entry into the European market through the region's leading gateway, the Netherlands"* (www.hidc.nl 01-10-2008). National business organizations such as FENEX (Dutch organization for expedition and logistics), TLN (Transport and Logistics Netherlands), ACN (Air Cargo Netherlands) and the NVLM (Association of Logistics Management) are now also part of NDL/HIDC.

Success of this strategy is not only confirmed by its own dominance, but also in the interviews conducted for this research. This is especially true in the interviews with logistics service providers. HIDC was frequently mentioned as an important source of new customers as it is able to attract European distribution centres of foreign companies. From 1987 onward NDL/HIDC, has been an important lobby group for the creation of the Netherlands as a distribution centre for Europe. It has done so by lobbying for good infrastructural connections with the rest of Europe, but also through a network of foreign offices abroad to help firms find their way in locating their European distribution centre or sales office in the Netherlands. Lastly, NDL/HIDC has published many reports showing the attractiveness of the Netherlands with respect to labour (skills and costs), taxes, and accessibility to the rest of Europe and the world (examples of these are: Van den Broek-Serlé et al., 2005, NDL/HIDC, 2004b, NDL/HIDC, 2004a, NDL/HIDC, 2005a, NDL/HIDC, 2005b, NDL/HIDC, 2006).

4.2.3 The mainport as official policy: the development of infrastructure and efficient border procedures

In the Fourth Memorandum on Spatial Planning of 1988, for the first time it became an official policy goal to (spatially) develop the Netherlands as a *mainport* (Van Duinen 2004). Although the informational and knowledge portions of Poeth and Van Dongens' *mainport* concept got lost in the reports and policies that followed, the *mainport* concept was not entirely changed. The ideas that a *mainport* has to look beyond the port itself, into international connections (Bos 1999) and that rail links to the hinterland are also important (Jongemans 1999) have all been embraced by the *mainport* lobby and subsequent policies. This idea of the Port of Rotterdam and Schiphol being the engines of the Dutch economy and key sources of competitiveness reemerged in policy documents for years to come and pushed continuous investment in infrastructure to support this vision. In 1995 a decision was made to enlarge Schiphol airport with a fifth runway (Ministerie van Verkeer en Waterstaat, 1995). This was necessary to enable Schiphol to remain a *mainport*. Also, in a 1995 memorandum on spatial economic policy, the importance of the *mainport*s was mentioned, as well as the need for infrastructural investments. In particular, the need to link the Netherlands to European freight and high speed rail networks was key in strengthening the *mainport* strategy (Ministerie van Economische Zaken, 1995). This need for efficient connections of these *mainport*s with the rest of the Netherlands and the world was restated in the 1999 Memorandum on Spatial Economic Policy (Nota Ruimtelijk economisch beleid) (Ministerie van Economische Zaken, 1999). Also in 2004, in another memorandum on *mainports* (Nota Pieken in de Delta) their role as engines of the Dutch economy get a lot of attention (Ministerie van Economische Zaken, 2004). In the Fifth Memorandum on Spatial Planning (Nota Ruimte) of 2005 the port of Rotterdam and Schiphol airport are still framed as the two most important economic factors of the Randstad (the most industrialized and highly populated part of the Netherlands). This report argues for further strengthening, including a view that no unnecessary limits should be placed on their development. Furthermore, roadway connections to these *mainports* should be developed even more (Ministerie van VROM et al., 2005).

Some time passed before the political idea of the *mainport* was translated into infrastructural developments, but the last decade has seen a lot of construction activities including large infrastructure projects supporting the role of the Netherlands as a distribution centre. The most important of these are the construction of a fifth runway for Schiphol (start of operation in 2003); the construction of the Betuweroute, a cargo railway to connect the Port of Rotterdam with the German hinterland (construction started in 1998, start of operation in 2007); the decision in 2004 to enlarge the Port of Rotterdam with the Second Maasvlakte, a large extension of new land in the sea

(construction started in 2008); and the connection of Schiphol to the European high speed train network (start of operation in 2009). All of these projects involve better integration with countries bordering the Netherlands and the expansion of trade and distribution activities this will bring. Again, in the case studies good hinterland connections have been particularly mentioned as important by logistics service providers and companies with a European distribution centre inside the country. However, trade-network operators in the forthcoming case on clothing also view the good connectivity of Schiphol as favourable to their industry, although for other reasons: it enables them to connect easily to customers, production areas and temporary fashion clusters.

Improvement of the efficiency of Dutch customs procedures has also been part of the *mainport* strategy. Although the European Union has made customs a supranational issue, there are still differences between customs in different countries since member states can organize their customs to their own liking, as long as they comply with European legislations. Important to mention here are the systems of VAT deferment at import, and the possibility of bonded warehousing. When goods from outside the EU enter, they normally need to obtain customs clearance and VAT must be paid. However, in a bonded warehouse these payments can be postponed until the moment the goods are sold and exported. This system of VAT deferment allows firms to defer tax payment on imports until a periodic tax return. This means that when a firm re-exports the goods it imported, no VAT has to be paid, giving cash-flow advantages. Every EU country can have these bonded warehouses, yet in practice the system of bonded warehousing is not as efficiently organized and widely present as it is in the Netherlands. VAT deferment is only possible in Belgium and the Netherlands. In the case studies the advantages of bonded warehouses and especially the 'article 23 ruling' under which the deferment of VAT is allowed, have frequently been reported as a reason why the Netherlands is an attractive location for a European distribution centre.

To conclude, this section has shown the strong support the development of the *mainport* has received from all levels of state and many different business groups. Furthermore, the focus that was placed on infrastructure and port development and efficient border procedures has clearly been in favor of the development of a distribution node in the Netherlands, this will also become clear in the case studies ahead.

4.3 From *mainport* to *brainport*

As described in the previous paragraphs, economic policy has been very focused on strengthening the role as distributor. The role as a node in trade networks or as marketplace did not get any attention in the *mainport* policy. However, since the early

part of this decade the 'coordination and control' role (*regiefunctie*) of the Netherlands has started to gain more attention. This attention for a role as centre of coordination and control can be explained as attention for something that comes close to being a node in international trade networks in which a country functions as an organizer of production and of trade flows, forming a connection between markets.

4.3.1 Concern about Dutch competitiveness: attention on the brainport

Concerns began to emerge at the end of the 1990s that the Netherlands was losing competitiveness with other countries. The role as centre of coordination and control is the result of these increased concerns. The innovative capacity and amenities for business investment were perceived to be weakening and policy makers started to question the *mainport* strategy. Although good hinterland connections remained on the top of the agenda, other location factors of the Netherlands started to get more attention. Networks and innovation were to become the new buzz words and the Dutch *mainports* were framed as economic nodes in international economic networks. This means that policy makers started to see the *mainports* no longer only as nodes in transportation flows, but also as nodes in information flows. In a 1999 memorandum by the Ministry of Economic Affairs, the Netherlands is presented as a centre of command and control in international economic networks. This does not mean that the *mainports*, with their focus on physical infrastructure, are now seen as unimportant but instead they are now also framed as the backbone and essential pivots for international command and control functions. The attraction of command and control functions of international banks and multinational companies has become much more central in economic policy. To attract these economic activities highly functional *mainports* are just one asset alongside a good labor market, knowledge, and enough room for future *mainport* development (Ministerie van Economische Zaken, 1999).

In later policy documents this centre of international command and control is termed a *brainport*. Following a 2004 report of an advising committee to the Ministry of Spatial and Environmental planning (VROM Raad, 2004) globalization creates more international traffic flows, increased specialization of production, and geographical concentration of economic and political power. Control and direction of economic activities takes place in a few centers called *brainports*. The Netherlands, as a trade metropolis, needs both the *mainport* and the *brainport* to be successful, but both are threatened by the process of globalization (VROM Raad, 2004).

A year earlier, the idea that the Netherlands is also a *brainport* and that the *brainport* and the *mainport* are interrelated was also presented by the scientific council for advice to the government (WRR). In their 2003 report (WRR, 2003) the role of the Netherlands as an intermediary in international trade flows that increases efficiency of

international transactions was described for the first time and related to the high levels of re-exports in the Netherlands. Den Butter, the author of the report, points to the importance of knowledge to be able to act as an intermediary in international value chains. Also in his view the Dutch role as *mainport* is very dependent on the existing *brainport* (WRR, 2003, Den Butter, 2007)[22].

4.3.2 The brainport in trade and logistics: innovation and knowledge development to attract coordination and control functions

The Prime Minister's Cabinet also feels the need for greater attention to the *brainport* functions as a source of innovation in the Dutch economy. In 2003, the Innovation Platform (Innovatieplatform) was set up as a research and development program in which the state, the private sector and universities work together in different projects to improve the Dutch innovative capacity, knowledge economy, and competitive power. Within the Ministry of Transport, Public Works, and Water Management this resulted in the creation of the Consideration for Knowledge and Innovation (Beraad Kennis & Innovatie) in 2004. One year before, at the same department, a report had been published stating the importance of the logistics sector for the Dutch economy. The report argued that logistics innovation and policy were too fragmented between different organizations and government departments (Raad voor Verkeer en Waterstaat, 2003). Furthermore, it argued that shippers[23] were not involved enough in these innovations and policy, and that it was essential to assume the challenge to improve logistics quality and innovation in the Netherlands by developing a strategy to become a world leader in this sector (Raad voor Verkeer en Waterstaat, 2003). This challenge was taken up by three large associations of companies in the logistics sector: Netherlands Distribution Country (NDL), the Dutch Shippers Council (EVO), and Transport and Logistics Netherlands (TLN). Together they created a plan for a taskforce and methods for how the taskforce should tackle the problem. This resulted in the creation of the Van Laarhoven Committee.

[22] The WRR report explains a competitive advantage in trade by the ability to lower transaction costs. The report does not make a distinction of trade roles to types of value chains or goods, or actual companies involved in the re-export of goods and how these distinctions might result in different ways to lower transaction costs. For example, in the case of a role as distribution centre, the efficiency of redistribution and speed at borders is of great importance. For the role as international marketplace this is also important, but efficiency is definitely also created by being able to attract a complete assortment in one spot; this is, as we will see in the case of flowers, largely the result of cooperation by producers in the sector. Furthermore, the report does not take into account historical developments and institutions that might influence current trade patterns. In the case of flowers, for example, the current pattern of trade is also explained by historical developments and the institutional structure of the marketplace, i.e. the cooperatives that give concentrated power to (Dutch) growers instead of wholesalers resulting in a slow adaptation to virtual trade. Given historical contingencies it is necessary to use more than transaction costs reasoning to explain trade.

[23] Shippers are the companies that create the demand for transportation and distribution. This can be industrial companies, retailers, or wholesalers.

The Van Laarhoven Committee has published three reports on strategies to improve the competitiveness of the logistics sector of the Netherlands (2006, 2007, 2008). The first report, published in February 2006, provided for the development of one lobby group of logistics companies to be able to speak with one voice regarding policy. This was to become the Logistics Alliance (*Logistieke Alliantie*), which was created in the summer of 2006. However, at the time of its foundation, EVO, the association of shippers, representing 30,000 companies in the Netherlands needing goods transport, left the alliance. From then on only transport-related companies are part of the alliance and EVO pulls out of the Van Laarhoven Committee as well. This is interesting since the last lobby in the *mainport* coalition mostly concerned about export of home production left the group. The only shippers now involved are shippers with global production networks and markets, as the Van Laarhoven Committee gets the support of Unilever, Mexx, Hero, IBM, and a couple of large logistics service providers (ECT, DHL, TNT), KPMG, and the Logistics Alliance (*Logistieke Alliantie*). Also the Ministry of Transport, Public Works, and Water Management supports the committee, as well as three technical universities in the Netherlands. The Van Laarhoven Committee again, just like NDL/HIDC earlier, is a broadly supported committee at many levels of governance, from public to private and national to local.

The Van Laarhoven reports cited threats to Dutch dominance in logistics coming from Belgium and Germany, who are said to have successfully imitated Dutch institutional and infrastructural strategies (efficient customs, good hinterland connections) to attract trade flows. To keep up with this competition the Netherlands should take a leap forward by developing a logistics *brainport* besides the *mainport*. This means the Netherlands should also try to attract the management and coordination and even control of flows of goods, not only their physical handling. This will ensure a stronger, more durable link to these flows (NDL/HIDC, 2004a, Commissie Van Laarhoven, 2008). In this view, knowledge development and innovation in the field of supply chain management and logistics are very important assets to attract trade logistics flows. This is an interesting argument since it seems to come close to the aforementioned ideas of Poeth and Van Dongen on being a centre of information flows, although these views had not become well-known. This idea also reemerges in a policy document for the Port of Rotterdam (Kabinet 2009), which states that a 'world class port' like that of Rotterdam cannot exist without a 'world class' knowledge infrastructure.

In short, more and more attention is paid to knowledge as a new competitive advantage to attract flows of goods and control functions in value chains. Up to the present day, the 'old' *mainport* lobby translates this *brainport* strategy into one attracting logistics chains through the development of logistics knowledge and innovation in the Netherlands. A very clear example of how to stimulate this knowledge development is the creation of a top institute and campus for supply chain management in Breda. This is

part of a program spearheaded by the Ministries of Economic Affairs and that of Transport, Public Works and Water Management, that was launched in 2009. It marks a shift from a focus on large infrastructural investments present in the 1980s and 90s, to a new focus on knowledge development and the creation of conditions to support economic prosperity. The new '*mainport = brainport'* lobby then, links up very well with the new discourse on innovations, knowledge, and networks. However, in this discourse ideas on what a trade role actually means really haven't changed. In the end, it is all related to the attraction of distribution functions.

4.4 A monopoly power of place in the field of trade and distribution?

The overview of Dutch economic policies shows that trade and distribution has been stimulated as part of industrialization and spatial policies that received strong support from business and all levels of government. Particularly in the last fifteen to twenty years, business and government lobby groups have been able to enhance public investments in infrastructure to enable a role as international gateway and distribution centre for Europe. In spite of the change in policy described above, since the 1980s an idea has persisted that a trade and distribution industry detached from specific products can be a competitive one. This seems to be true for certain value chains and trade roles: a value chain with a European distribution centre or a trade role that merely comes down to distribution. At the same time, this idea misses the many other types of value chains that exist. The forthcoming case studies will cover these other types, which often include much stronger coordination and even control functions of trade and distribution. These are the roles as marketplace and as nodes in international trade networks.

The cases will show that, to attach a marketplace or node in trade networks, much more specific product and market knowledge is needed. Of course, this is something that is developed more on the level of specific industries, such as the flower industry and the clothing industry. However, within the clothing industry the trade-network node does not seem to receive much attention. On the contrary, focus is given to the advantages of distributive and supply chain efficiency (see the reports of Huele and Huigen, 2008, NDL, 2009). I haven't found any reports placing the clothing sector within a context as an international node in clothing trade networks. For flowers this is different. The sector is very aware of the changing role of the Dutch marketplace and the distributive implications for the Netherlands. As we will see in Chapter 6, Dutch flower auctions take action to strengthen their position, among other means by attracting foreign producers to the auction and opening a direct sales office. To safeguard the role as marketplace or as a trade network node, case specific policies are needed. General economic and industrial policies are and have been mainly beneficial to the role as

distribution centre in Industrial and Market World chains. They have also possibly been beneficial in more dedicated Interpersonal World[24] chains.

Following Paul Krugman's strategic trade theory (Krugman, 1991, Krugman, 1995), large infrastructural investments may give rise to economies of scale and scope resulting in a lead difficult to surmount by a competitor. In the practice of competition between ports (Rotterdam, Antwerp, Bremen, Hamburg) it is clear that such an absolute advantage based on infrastructural investment and resulting scale economies that cut out all other competitors, does not exist for any of these European ports. Furthermore, bad infrastructures do not necessarily hinder competitive power. For example road congestion around Aalsmeer has been an issue for years, but has not created a true competitive disadvantage to Aalsmeer. This is not to say that infrastructure is unimportant to trade, but relations are not always that straightforward and other aspects may be more important in explaining the strength of a hub. In short: it is not very clear that a monopoly power of place in the field of trade and distribution can be ceated only through investments in infrastructure and business climate.

Recent reports from the Commissie Van Laarhoven (2006, , 2007, , 2008), however, suggest that the Netherlands can develop a competitive advantage in logistics and a role as distribution centre. The reports of the Commissie van Laarhoven, mainly deal with knowledge in the field of distribution and supply chain management. Friction within the supply chain and at borders are indeed an important determinant of logistics costs and can reduce trade flows (Nordås et al., 2006, Lee, 2008). Therefore efficiency in this portion of the chain may create a competitive advantage. The Van Laarhoven Committee advises the development of this kind of knowledge, to improve border procedures and increase logistics efficiency.

It appears to be difficult to give clear figures showing the current international position of the Netherlands in the field of distribution and supply chain knowledge[25].

[24] The recent development of the Netherlands as an important spare-parts center could be interpreted as such. Spare parts are specific, individual orders in combination with after sales services such as repair and installation. In that sense, the dedication needed to fulfill orders and the high level of service involved, would classify a spare parts distribution centre as part of sales in the Interpersonal World.

[25] The reports of the Van Laarhoven Committee (Commissie Van Laarhoven, 2006, Commissie Van Laarhoven, 2007, Commissie Van Laarhoven, 2008) give indications that the Netherlands has an especially strong position in distributive logistics and is leading in supply chain management innovations. However, careful reading of these reports make clear that most figures are based on expert valuations; Dutch people are often head of international supply chain consultancy firms, these firms often have their knowledge center in the Netherlands, and the Netherlands has a lot of logistics education programs. However, quantitative data to support these valuations is not given. It is very hard to gather internationally comparative data on logistics knowledge and strength. The work of Wu (2007) clearly shows this. It appears to be impossible for even him to map the supply of logistics education in different countries, let alone to compare their curricula. Language is already a problem here. Following Wu, the list of the Council of Supply Chain Management Professions is *'the most comprehensive single source […] to identify colleges and universities that offer logistics-related courses'*. But in the Netherlands this list counts only three educational programs, probably the three university programs at masters level. However, the Netherlands has at least 14 educational institutes that offer logistics education at bachelors' level (www.studiekeuze123.nl, accessed 14-11-2008). So, it is impossible to compare

Yet, there are some indications that the Dutch knowledge of supply chain management is at least not regressive in an international comparison and that the Netherlands has a comparatively good starting position to develop its supply chain management knowledge further. Dutch experts are frequently asked for advice by multinationals abroad (interview Van Nunen, 18-11-2008). The 2007 IBM Faculty Award went to a Dutch university department. Other departments that got the award since 2006 were mainly from the US, Canada, the UK, Germany and Israel. Also two times (in 1999 and 2001) Dutch doctoral dissertations were awarded by the Council of Supply Chain Management Professionals. This award has existed since 1973 and has only been awarded to a dissertation from outside the US about five times. The conclusion seems to be justifiable that the Netherlands is certainly not undeveloped in supply chain and logistics knowledge, but at the same time the question might be asked whether or not the presence of this kind of knowledge can attract supply chain management and physical flows of goods to the Netherlands. This is a relationship without a linear trajectory. For example, many Dutch supply chain professionals are working abroad (Commissie Van Laarhoven, 2008). This indicates that this kind of knowledge is, to a certain extent, footloose. Also, in the case study on high-tech products we will see that knowledge of and research and development in logistics and distribution are often geographically detached from the location where actual distribution of goods takes place.

Good knowledge on the issue of border procedures and handling of information flows can then also result in the Port of Rotterdam coordinating and controlling handling of information and border procedures of flows of goods that physically enter Europe through other ports because of cost, environmental, or other considerations (Hagdorn-van der Meijden, 2007). This would be very much in line with developments in financial and legal services that have become separated economic activities that do not necessarily follow the (head)offices of multinationals they serve (Engelen and Smit, 2006) and show, when they are transparent in kind, increasing concentration in a few large financial centers because of efficiency reasons (economies of scale) and the need for sophisticated and expensive ICT infrastructures (Engelen, 2007). This concentration of services might also happen to services related to border procedures and the handling of information flows that go with the distribution and trade of goods. Border procedures in Europe become increasingly uniform and developments in ICT make it possible to handle customs procedures and flows of goods and information over long distances. The Port of Rotterdam could become one of the larger centers for these services related to import of goods into the European Custom Union, without necessarily physically handling all of these goods.

Dutch education in logistics internationally, and we can only say that the Netherlands seems to have quite a few logistics education programs.

However, we should not only focus on knowledge development in relation to logistics in general. Service providers need also to have knowledge of the goods they handle and legal requirements that go with specific products, the supply chain involved, and persistent local customs formalities (interview Van Nunen). Efficient border procedures and logistics probably cannot exist without knowledge on the issue, inter alia created through the daily handling of goods. The importance of specific knowledge of products and related value chains comes also to the fore in a couple of recent reports in which attention is given to the logistics of specific product chains such as clothing, flowers, and electronics (Huele and Huigen, 2008, NDL, 2009, Van Rijswijck et al., 2008, Zomer et al., 2008). But when this knowledge of logistics and specific supply chains is able to attract any kind of trade flows, it will most likely be flows related to a role as distribution centre and will be less likely to be effective for developing trade network nodes or marketplaces.

Adaptive capabilities are also important factors to consider as part of competitiveness. In the past the Netherlands has been able to adapt institutionally and technically to new logistics demands. Automation of customs processes that improved efficiency and decreased labour costs and the 1990[26] introduction of taxation on ship tonnage, instead of on actual shipped freight are all examples of innovations and adaptations that took place in the logistics sector. Also the port communication- and information system Port Infolink is an example of innovation. This system has been developed by the port of Rotterdam, but is so successful now that it has been exported to ports abroad (interview CBRB). This shows that the Netherlands is able to take a lead in the development of logistics systems in ports. But also the recent Commissie van Laarhoven can serve as an example. It clearly shows there is cooperative strength in the sector to take action to adapt when changes in the market and competitive environments make it necessary. If this is true, the *mainport* policy, although prone to imitation, an partly clearly focussed on capturing mobile capital and, in that sense, a weak competitive strategy in a zero-sum game – including tax regulation and a flexible labour market – is partly also a strong competitive strategy. But again: this strength is only related to the competitive position as distribution centre for specific goods, not as marketplace or trade network node.

The attractiveness of the Netherlands for international firms and especially international distribution is the result of a combination of assets that have been developed in a context of a liberal stance on trade issues, a strong international orientation of Dutch firms, and an economic crisis in the 1970s and 1980s that demanded a new recipe for economic prosperity. Although individual measures such as tax regime or infrastructural investments can be imitated elsewhere, the Netherlands seems to be at

[26] This made it possible for ship-owners to calculate taxation for ten years in advance and gives much more certainty in the business planning than taxation on shipped freight (interview Voorlichtingsbureau Short Sea).

the forefront in keeping its position with continuing institutional adaptations and innovations in the logistics sector. In this local, national, public, and private parties seem to find each other when necessary and enable new technological and juridical possibilities that strengthen the position of the Netherlands as a whole. Recently the *mainport* strategy particularly has been directed towards innovation and adjustment to new circumstances. The Commissie Van Laarhoven, Dutch customs practices, and infrastructure investments are all examples of innovation and adaptation and the result of an institutional structure enabling cooperation and innovation. But, as is the case with innovation, competitors can adopt them as best practices. This seems to have happened with the *mainport* policy of the 1980s and 90s. The question now is whether or not merely the best practice of actual innovations in ports and infrastructure has been imitated, or has the institutional structure enabling these developments also been imitated. If the latter is the case, competitors can become as innovative as the Dutch *mainport* coalition. That would be a true challenge to the Dutch role as distribution centre. In any other case, it seems possible to speak of some kind of (though still vulnerable) national monopoly power as international distribution center. However, this national policy and monopoly power seem not to be related to the other two types of trade nodes: the marketplace and the trade-network node. In these last types of trade nodes, assets are much more case-specific, meaning specific to type of goods and their corresponding value chains. We will explore this ahead. The case studies in the next three chapters will explain how trade in the three different trade nodes and in different worlds of production is attracted to the Netherlands. It will also elucidate other possibilities than ones presented here, on ways to develop and strengthen the Dutch trade node.

Chapter 5

Clothing trade

The importance of experience to connect production and consumption markets in a semi-integrated value chain

"…people, agents, doing business with the Chinese, that isn't quite the same as doing business in Europe. How to handle delays, finding other ways when problems arise (…) you need relationships for that."

In this chapter we will explore what role the Netherlands plays within the international clothing trade. The case study of clothing trade will primarily serve as an example of a trade-network node although, at the close of the chapter, also some attention will be paid to the distribution node of clothing in the Netherlands. Out of five ideal types of firms that import and re-export clothing in the Netherlands, two are most important: private label companies and European distribution centers. The first are the subject of the main text of this chapter on the trade-network node; the latter of the section on the distribution node. The main hypothesis this chapter starts with is that the embedding of trade in the two cases will be quite different and based on different assets: juridical and physical infrastructures and investments for the distribution node, and local assets such as knowledge on how to operate in the Market World of trade, of fashions and of production networks, in the trade-network node. But, in spite of these differences we will also see that Dutch trading roles in the international value chain of clothing in both cases are based on a mix of domestic historical developments in production, demand, and market characteristics, and on developments and characteristics of the global value chain. History and familiarity with large-scale production made the Dutch clothing industry an early mover into foreign outsourcing. This enabled Dutch companies (that turned into private label suppliers) to gain early experience in outsourcing and to make

a relatively smooth transition from production to coordination of production in the value chain of clothing. This helped the Dutch gain a relatively strong position in international production networks and still seems to give some advantages to the distribution node. Another important hypothesis is that coordination and eventually control functions will be present in the trade-network node of clothing in which private-label suppliers are responsible for the coordination of parts of the chain.

The chapter will be organized as follows. First I turn to the Netherlands as clothing trader in quantitative terms, followed by a discussion of the types of related firms and activities. Once I have painted the picture of the Netherlands within the international clothing trade, I will further explain this role. I will start with the argument of the early mover followed by a discussion of the implied advantages. At this point the role of learning by doing and the communities of practice and interpretation come in. I will then briefly discuss other possible explanations for the Netherlands' competitive strength in clothing trade and explain patterns of geographical concentration seen in the Dutch clothing trade. To conclude, we will go over some points on the European distribution centers for clothing present in the Netherlands.

5.1 The role of the Netherlands in international clothing trade

5.1.1 An importer and re-exporter

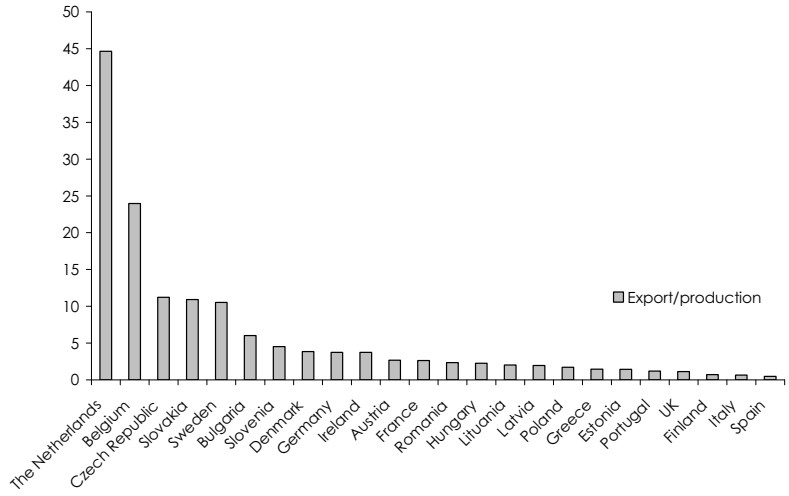
Although the Netherlands is not the largest importer and exporter of clothing in Europe (see Table 5.1), it is a relatively large exporter of clothing not domestically produced (see Figure 5.1). Table 5.1 gives an overview of import and export values of clothing for the EU15 countries. In 2004 the Netherlands rank fifth as exporter and sixth as importer of apparel and clothing. Figure 5.2 relates the exports of clothing to the value of home production in the different countries. Here the Netherlands stands out as an exporter of non-domestically produced clothes, meaning it is an important re-exporter of clothing and that the Dutch clothing sector is strongly related to foreign countries through import and export links.

Table 5.1: Total import and export of apparel and clothing in 2004 in 15 European countries

	Import		Export	
	(billion Euro's)	*% of European total*	*(billion Euro's)*	*% of European total*
Germany	19.0	22.2	9.0	17.1
United Kingdom	14.7	17.3	3.7	7.1
France	12.9	15.2	6.1	11.5
Italy	8.6	10.1	14.0	26.5
Spain	6.1	7.1	3.0	5.6
Netherlands	6.0	7.0	4.1	7.7
Belgium	5.4	6.4	4.7	9.0
Austria	3.2	3.8	0.9	1.8
Denmark	2.3	2.7	2.0	3.8
Sweden	2.1	2.5	0.7	1.3
Ireland	1.2	1.5	0.3	0.5
Portugal	1.2	1.4	2.8	5.2
Greece	1.2	1.4	1.2	2.4
Finland	1.0	1.1	0.2	0.4
Luxembourg	0.4	0.4	0.1	0.2
Total EU 15	85.4	100	52.7	100

* HS codes 61 & 62 (not including articles of apparel of leather or composition leather)
Source: Eurostat external trade statistics, available at www.pp.eurostat.ec.europa.eu, accessed November 2006

Figure 5.1: Value of exports of apparel and clothing* relative to the value of home production of these goods in 23 European countries in 2004

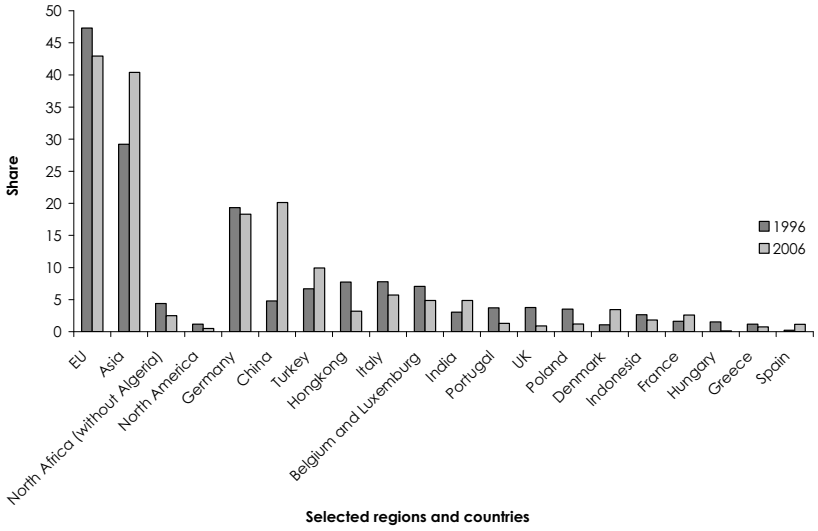


*Data include leather clothing, Luxemburg is excepted because no production is reported)
Source: calculated with Eurostat PRODCOM data[27], accessed November 2006

While imports are mainly from European and Asian countries (Figure 5.2), exports are almost exclusively Europe-bound (see Figure 5.3). While imports from Europe decline and imports from Asia increase, the Netherlands increasingly becomes a gateway to Europe for apparel from Asia.

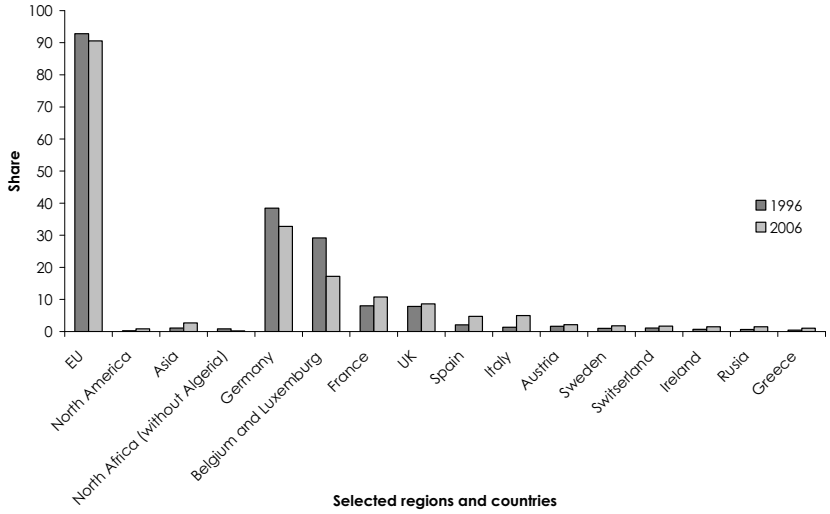
[27] Data that compare production to exports should be treated with extreme caution since external trade and production statistics are collected by different surveys using different samples (note from Eurostat PRODCOM statistics). At least, however, these data give an indication of the importance of re-exports in the Dutch exports of clothing.

Figure 5.2: Origins of Dutch imports of clothing (HS 61 and 62) in 1996 and 2006



Source: calculated with data from StatLine (Statistics Netherlands, www.cbs.nl)
Shares are calculated against the total import of 5.4 and 6.1 billions of Euros in 1996 and 2006 respectively

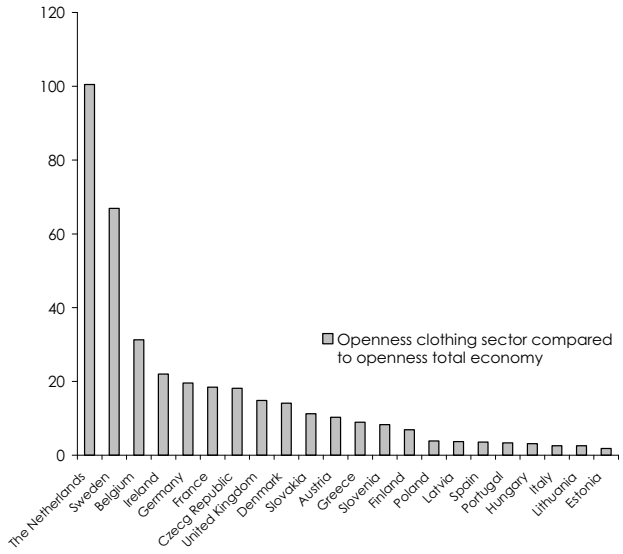
Figure 5.3: Destination of Dutch exports of clothing (HS 61 and 62) in 1996 and 2006



Source: calculated with data from StatLine (Statistics Netherlands, www.cbs.nl)
Shares are calculated against the total export of 2.6 and 4.1 billions of Euros in 1996 and 2006 respectively

Another indication of the strong relations of the Dutch clothing sector to foreign countries comes to the fore in Figure 5.4. The figure shows the degree of openness in the clothing sector for foreign countries compared to the degree of openness for the entire national economy towards foreign countries. This shows that the Dutch clothing sector is more interconnected internationally than the Dutch economy as a whole, even more connected than clothing sectors in other countries. The Dutch clothing sector then, is very well-connected through imports and exports, and, relative to other European countries, very open and internationally connected.

Figure 5.4: A European comparison of the relative openness of the clothing sector[28] in 2004



Source: Eurostat external trade statistics and PRODCOM data, accessed November 2006

[28] For this comparison we started with a measure of the openness of a national economy which can be calculated as the total value of import (It) plus export (Et) of goods divided by two and divided by the total value of home production as reflected in the GDP of a country. This same measure was taken for the clothing sector: import (Ic) + export (Ec) of clothing, divided by two, divided by home production of clothing (Dc). Then the measure of openness of the clothing sector was divided by the openness of the whole economy.

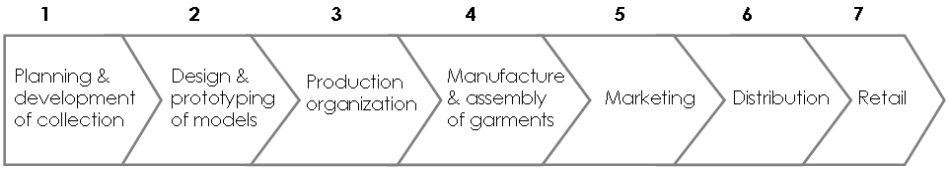
$$\frac{((Ic+Ec)/2)/Dc}{((It+Et)/2)/GDP} = \text{relative openness of clothing sector}$$

A value of 1 means the clothing sector is exactly as open as the whole economy. A value more than one means the sector is more open than the whole economy of the country and a value lower than one means a less open sector.

5.1.2 Five ideal types of importing and re-exporting clothing companies

Many different activities can be related to re-exports of clothing. To understand these activities, let us first have a look at the value chain of clothing (Figure 5.5).

Figure 5.5: Steps in the clothing value chain



Source: adapted from Lane and Probert (2006, p. 39)

These seven steps in the value chain of clothing have become disconnected geographically and organizationally in the course of time. All steps in the value chain might be outsourced. Five ideal types of companies can be identified, which create re-exports in the Netherlands. They differ with respect to the parts of the value chain activities that they outsource and the activities that they have based in the Netherlands (see also Table 5.2).

1. A manufacturer with production facilities abroad and a sales organization in the Netherlands: this is a company whose core assets are related to production, and which outsources value chain steps such as the development of a product collection, design, marketing, distribution, and retail.
2. A brand: this is a company that is focused on the design of collections and creates re-exports when outsourcing production abroad.
3. A wholesaler or private label company: the core activity of this kind of firm is bridging the gap between production areas abroad and consumer markets abroad. A private label company works for brands and retailers. Production is outsourced, and the company does not engage in retail.
4. A Retailer: retailers are focused on retail and outsource production and often also production organization and design. When a retailer imports clothing and also has shops abroad; the retailer creates re-exports.
5. A European distribution centre: this is a type of company that is generally owned by or operated for a foreign retailer or brand. Although these retailers and brands take part in retail activities and/or design activities in other parts of

their companies, the core activity in the Netherlands is to supply their European buyers.

Although the different companies in table 5.2 might seem rather distinct, in practice many hybrid forms are possible and there is continuous flexibility in activities that firms integrate and outsource. Brands sometimes have their own branded stores where they sell their clothing in a more exclusive environment than a department store. Mexx is a good example of such a company that started with only selling their products in larger department stores, but has moved towards opening more and more self-branded stores. Wholesale traders and private label companies are sometimes also involved in styling, in some cases even developing their own brand. A manufacturer in this study with its own production facility abroad also engaged in design, while a private label supplier owned a production facility abroad but was not part of the management and only used around thirty percent of the production capacity of this factory. Producers sometimes engage in materials and fabric development and can have their own stores. Retail organizations increasingly organize production without the help of an intermediary or private label company. The success stories of Zara and H&M are clear examples of how internalization of the organization of design and production can lead to big successes. Even European distribution centers might be followed by the European design centers of foreign brands. These examples clarify how varied the production and working methods of companies can be. However, in all of these five ideal types some kind of distribution activity takes place as companies import and re-export clothing.

5.1.3 The importance of European distribution centres and private labels

It is difficult to assess the importance of the different categories of exporting companies in the total export figures of clothing from the Netherlands. The company types that were distinguished in the previous paragraph do not correlate with statistical categories. Therefore, we have to look at other sources to understand the importance of different categories of companies and the shifts within. Are retailers now organizing more production themselves or are they relying more on private labels? Is design led by manufacturers becoming more important or less? These are questions that can hardly be answered (Scheffer 29-01-2007).

Table 5.2: Five ideal types of companies that generate re-exports of clothing in the Netherlands

Company type	Core activities	Core asset	Output	Movement in value chain
Manufacturer	Manufacture & assembly of garments	Knowledge of production and production management	Production	Upstream: fabric development, design and styling Downstream: own store
Brand	Planning and development of collection Design & prototyping of models Marketing	Knowledge of design and styling	Market creation through advertising and brand creation	Upstream: organization of production Downstream: retail
Wholesaler/ private-label company	Production organization and distribution	Ability to bridge the gap between demand (the market) and supply (production): in time, in space, cultural	- Increased flexibility of supply chain - Creation of trust between producer and brand or retail e.g. through quality checks and production coordination and bridging of cultural barriers - Change in distribution of assortment, quantity, time, and space of goods through the buying and selling at order and at stock	Upstream: ownership of production facilities and development of brand
Retailer	Retail	Management of retail organization	Creation of retail sales organization	Upstream: design and organization of production eventually with own production facilities
European distribution centre	Distribution	Distribution knowledge	Change in distribution of assortment, quantity, time, and space of goods	Upstream: production planning Downstream: after sales services

Source: Roso (2005), Servaas (2005), Lane& Probert (2006), interview

A survey of the database of members of the Dutch organization of fabric and clothing traders and manufacturers (Modint) 29 showed most companies that are members of Modint, are private label and branded companies. They cover respectively 31 and 37 percent of all companies. According to Mr. Barberi, a representative for Modint, exports to Germany, the highest volume trading partner of the Netherlands, mainly consists of private label clothes. Scheffer and Duineveld´s (2004, p. 344) observation of the *'the dominance of a type of firm that is neither strictly manufacturing nor wholesaler'* after the restructuring of the Dutch fashion sector since the latter half of the 1990s, points to the importance of private label producers or co-producers in the Netherlands. 17 percent of the companies in the survey of Modint members deal in private labels and their own brand. Only 15 percent of the companies fall into the category of importer or distributor of one or more brands for (a part of) the European market. Traders that did not represent specific brands and did not do any design and organization of production, were not found in the database. This finding can be explained by the importance of global standards like ISO 9000, other industry standards, and EU health and safety standards in the governance of global value chains. On one hand, using Gereffi's (2005) reasoning on the governance of global value chains, such standards codify complex information and may lower transaction costs, making market relations possible. But on the other hand, as Nadvi (2008) shows, these standards also act as an incentive for closer contact with, and inspection and control of, suppliers ensuring standards are met and brand integrity is safeguarded. This is what we see in the clothing sector: compliance has become very important. EU directives prescribing the traceability of materials, codes of conduct, and certification related to terms of production, play a role in the development of stronger control of the supply chain (Scheffer, 2003). The increased interest of consumers and industries in knowing the origin of products has made wholesale traders averse to buying batches of ready made clothing. As a retailer explains, it is very important to be reliable towards customers and to be able to take full responsibility for the things you sell:

> *"We hardly ever buy batches. Sometimes we will when they come from a well-known brand, but generally… with clothing from lots, one of the first*

[29] This database is available at Modint's website (www.modint.nl). In the survey I included all companies categorized in Modint's database as agent/importer, supplier of own collection or brand, and/or private label supplier. Retailers were not an available category. Together these were 295 companies. To find out to which category they belong and if companies really imported and exported, the websites of the companies were checked. When no website was available, other sources on internet were sought such as company finders. If company data was not available through finders, the Modint data was interpreted immediately. At the time of the research (2006) this database contained address information of companies, information about their main activities, their brands, their market countries and sometimes also their turnover. Recently the information of the database has become much more limited. However, during the research period I was able to categorize every company.

> *problems is the fit. Customers have to be able to rely on your fit. You cannot change the fit of clothing from a lot. Then you have the origin of goods. What we sell has to be 'clean'. So it should not be a design copied from someone else without permission. As a retailer you are responsible for the things you sell. That's difficult with a clothing lot, when you do not have a clear view of its origin."* (PC 35)

Thus, in practice, every trader is to some extent also an organizer of production. In this sense, EU regulations influence the mode of coordination of the clothing value chain.

Unfortunately enough, the Modint database does not cover Dutch retailers abroad or European distribution centers. This is unfortunate since these companies may be quite important in the Dutch export of clothing. Different interviewees in the research reported the importance of these companies, but none could give exact figures to support this impression.

Although it is difficult to get clear figures on the subject, the international trade in clothing in the Netherlands is probably mainly generated by the Dutch role as European distribution centre by a few large Dutch retailers operating in the European market (e.g. C&A, Vendex/KBB, We Group, See Box 5.1: The history of Dutch trade in clothing in a nutshell), and by private label suppliers or co-producers. Private labels are especially interesting from a theoretical point of view since they are a kind of middle-man firm that Gereffi et al. (2005) ignore in their typology of value chain organization (Lane and Probert, 2004). It is in this kind of firm where we can most-likely find the 'classic' trader who connects production and consumption markets. Below I will pay special attention to private label firms, as they are part of the ideal type of the trade-network node hat I like to include in this study. However, at the end of the chapter I will also make mention of European distribution centers of foreign clothing brands in the Netherlands.

5.2 Explaining the development of private label companies in the Netherlands: early movers

5.2.1 The Dutch clothing sector: from domestic production to outsourcing

Traditionally clothing was home or tailor-made, but in the second half of the nineteenth century ready-made clothing began replacing the tailor made suit: first in the UK and Germany, and in the Netherlands from the 1870s onward (Wolff-Gerzon, 1949). This occurred with particular concentration in Groningen, Amsterdam and Rotterdam (see Map 5.1), where wholesalers, importers, tailors, and traders in second hand-clothing

start to create and even export apparel (Wolff-Gerzon, 1949). Retailers who started to make apparel in their ateliers are the ancestors of the modern apparel houses. At first these retailers sourced most production work in-house, but soon also began outsourcing it to workshops and larger ateliers. Fabric was purchased from Dutch fabric producers in the region of Twente and the province of Noord-Brabant (see Map 5.1), but also from England (Wolff-Gerzon, 1949).

Map 5.1: Locations of the Dutch clothing industry: the cities of Groningen, Amsterdam, and Rotterdam, the region of Twente, and the Provinces of Noord-Holland, Zuid-Holland, Noord-Brabant, and Friesland

These fabric producers sometimes started making their own designs, turning into clothing producers (see Box 5.1). The Amsterdam city centre became the core of Dutch clothing production, with many apparel makers working for retailers that had

outsourced production. However, after the Second World War many of these apparel makers started producing in the countryside within the provinces of Noord- and Zuid-Holland, Noord-Brabant, Friesland, and the Twente region (Wolff-Gerzon, 1949, see also Map 5.1). Hence between 1950 and 1963 clothing production increased, especially in the South, East, and North of the country, whilst it decreased in the West (Jansen and De Smit, 1974). Amsterdam lost as much as 10,000 jobs during this period (Ester, 1976). Although many jobs were lost in Amsterdam-based production firms, knowledge on how to operate in the value chain of clothing seems to have survived in the Amsterdam region, as the city remained the centre of the domestic wholesale clothing trade as we will see later on.

From the post-war period until the end of the 1960s Dutch manufacturers[30] were still able to find cheap labor for the clothing industry, mainly in Twente (east) and Brabant (south) and later on in the North of the country. However, with domestic wages increasing in the nineteen sixties, the market share of clothing imports began increasing. The Netherlands was, due to EEG agreements, forced to abandon its import restrictions that protected the Dutch market from cheaper products abroad (Kornaat, 1992). In addition, the wage explosion of 1963 most likely played a role as well. Due to the high degree of Dutch organization and collective labour agreements, wages had stayed relatively low in the Netherlands after the Second World War. In 1963 this national system of wage coordination collapsed and wages increased across all industries. (Jansen and De Smit, 1974). Although between 1958 and 1966 the growth of clothing employment in the North was huge[31], in the end, competition from other countries with cheaper labor became too strong and Dutch manufacturers began moving production abroad (Jansen and De Smit, 1974, p. 121).

[30] These clothing manufacturers originated from textile and wool manufacturers in Twente and Brabant that had moved into the production of ready made clothing at the end of the nineteenth century (Wolff-Gerzon, 1949, pp. 36-37).

[31] Between 1950 and 1963 employment growth in the region of Amsterdam in the shoe and clothing industries was much less than one would have expected based on the growth of these industries at the national level (Doeland and Jansen, 1970, p. 95). At the same time employment growth in the clothing industry in the north of the Netherlands was 33 percent stronger than the average accross the entire country. Growth was especially high in the years between 1958 and 1966 when the amount of people working in the industry more than doubled (percentage calculated with data from Vergoossen and Wever, 1970, p. 209). This growth can be explained by the availability of a relatively cheap labour reservoir of women in the north and a national economic policy that tried to strengthen the economy of the northern provinces with subsidies. So in spite of the general less than average growth in the Netherlands between 1950 and 1966 of the clothing industry (calculation based on Vergoossen and Wever, 1970, p. 209), and the increase of wages in the nineteen sixties bringing an end to the post-war wage restraints, the Dutch ready-made clothing industry was still alive and kicking.

Box 5.1: The history of Dutch trade in clothing in a nutshell

Tweka underwear, Peek & Cloppenburg, and C&A
The history of Dutch trade in clothing in a nutshell

In 1916 mister De Heer opens a tricot factory in the small village of Geldrop in Noord-Brabant (see Map 5.1). He first starts with underwear, but later produces bathing suits as well. He finds success in his endeavors and the brand Tweka is created. Tweka products begin being exported to 24 countries within and outside of Europe. After the Second World War the factory not only makes clothing under its own brand name Tweka, but also produces underwear and swimsuits under private labels for large retailers. At this point Tweka's ateliers can hardly handle the workload. In the 1960s migrant laborers from Turkey are contracted to help meet demand. Shortly afterwards, decline sets in. This decline is not related to diminished demand, but rather in the production done here in the Netherlands. In 1972 Tweka opens its first atelier in Tunisia. In the second half of the 1970s 400 of its 650 employees in Geldrop are dismissed. The Tweka brand stayed successful but the firm itself became part of another underwear producer, L. Ten Cate. Although innovations on fabrics are still made in the Netherlands, production of the clothing is no longer done here and the former exporter of a product made in the Netherlands has become an importer and re-exporter of products designed at home, but made abroad.

Besides Dutch entrepreneurs, many German immigrants have been important in the history of the Dutch apparel and textiles industry. Examples of German firms starting in the Netherlands include Hollenkamp, Gerzon, Lampe, Peek & Cloppenburg, and Brenninkmeyer. Peek & Cloppenburg first began in 1869, when two German apparel merchants opened their business in Rotterdam where many *sweaters* supplied their apparel. Cloppenburg's son moved back to Germany where he founded Peek & Cloppenburg in Germany in 1901. This German Peek & Cloppenburg became one of the leading clothing retailers in Germany and opened many shops abroad as well. The Brenninkmeyer family is another German family that came to the Netherlands to set up a clothing business. This family traded linen and textiles from the 17th Century on in Germany. In 1861 the brothers Clemens and August started a textile department store in the Netherlands, where they offered ready-to-wear items of clothing in various sizes to a broad public. This was something very new at that time. Fifty years after the opening of this first store, the company opened more stores in the Netherlands, Germany (1911) and England (1922). From the nineteen sixties onward they opened more stores abroad, now covering thirteen Southern, Central, and Eastern European countries. With production no longer taking place in the Netherlands, and many stores abroad, C&A has become an important Dutch re-exporter of clothing.

Source: based on information found on the following websites: http://berthi.web-log.nl/berthi/2007/05/geschiedenis_va.html, www.tencate.org, www.c-and-a.com/, www.fundinguniverse.com/company-histories/Peek-amp;-Cloppenburg-KG-Company-History.html, http://www.peek-und-cloppenburg.de, and on Wolff-Gerzon (1949)

5.2.2 Regulation of world textiles and clothing trade: towards liberalization and import from low-cost countries

From the sixties and seventies onward, Dutch companies started to transfer their production to cheaper places abroad (Scheffer, 1988). Regulations on trade in textiles and clothing have had a great impact on the location of this outsourcing of clothing production, as well as the importation of clothing in the Netherlands. First, European market integration let to a relocation of production to Belgium and other European countries like Portugal and Spain. Compared to the UK and Belgium, the Netherlands seems to have engaged quite early in this production relocation to low-wage countries. Contrary to the Dutch and German strategies from the nineteen sixties onward, in Belgium and the UK companies kept production more integrated in the firm or contracted it out to nearby companies (Scheffer, 1988, Lane and Probert, 2004). Thus, Dutch apparel makers gained early experienced with organizing production abroad, over longer distances, while Belgian and British apparel makers were still working domestically. It is likely that this has given Dutch manufacturers an advantageous starting position as international coordinators of production.

Besides European integration, the Multifibre Arrangement (MFA) has been very important in the outsourcing of clothing production. This agreement was established when increasing levels of production were being transferred to Asian countries, creating greater competition for producers from developed countries. Under the MFA import quotas on garments from developing countries were in force to protect the developed country producers against often vastly cheaper imports. From 1974 to 1994 world trade in clothing was regulated by the MFA. Besides this arrangement, in Europe from 1982 onwards, a preferential agreement on Outward Processing Traffic (OPT) enabled the temporary export of fabric from EU-countries to another customs area for processing and subsequent re-import without paying tariffs for re-import (Lane and Probert, 2006). This became an especially strong threat to Europe-based clothing producers. However, under Article 115 of the Treaty of Rome, member states could, until 1992, block imports from third countries whose goods could otherwise circulate freely within the EU. Textile producing countries like Greece, Portugal, and Spain have frequently used this article, while the Netherlands, Germany, Denmark, and the UK, have adopted relatively non-restrictive attitudes towards the Multi Fibre Arrangements (CEGOS, 1996).

In the early 1990s a preferential agreement with Eastern and Central European countries and countries from the Mediterranean Basin was created. Trade with these countries was almost entirely liberalised in 1998 (Lane and Probert, 2006). This has made these countries major suppliers to the European Union, especially when short response

times are needed (Raes, 2000, Begg et al., 2003). As shown in Figure 5.1, Turkey is an especially important clothing supplier to the Netherlands.

From 1995 until 2004 the MFA became phased out under the Agreement on Textiles and Clothing (ATC). When the quota system was ended in 2005, China greatly increased its exports to the Euro-zone (see Figure 5.2) (High Level Group on Textiles and Clothing, 2006). However, in practice the system of quotas has still not been dismantled altogether: after liberalisation on January 1st, 2005, massive increases in Chinese imports resulted in the decision of Euro commissioner Mandelson to re-implement import quotas for ten clothing categories. This was very problematic for Dutch importers who had already placed orders in China. After much pressure from industry organizations, a temporary solution was found. The quota system for these ten categories remained in force until the end of 2007, when import limits were abandoned but remained monitored to ensure the European market would not be flooded once more by Chinese imports (Modint, 2006, Lanting, 2007).

5.2.3 Explaining the early move: different markets and demand

Clothing is produced in different qualities and varies by the degree how fashionable it is: clothes can be highly fashionable luxury items, but they can also be basic commodities. The distinction between these product characteristics leads to six major market positions in clothing that Bull et al. (1993) have described and Raes (2000) uses in his study of the Dutch fashion industry (Table 5.3). I will use these to describe the development of Dutch production and demand. These issues are of interest since Dutch private label suppliers who have customers abroad, also generally have important Dutch clientele. Dutch clientele might, as in the reasoning of the competitiveness of nations by Porter (1990), be one of the explanations for success of Dutch private label companies abroad.

Table 5.3 : Major market positions of clothing

		Quality positioning		
		High	*Medium*	*Low*
Fashion positioning	*High*	1	2	3
	Low	4	5	6

Source: Bull, Pitt, and Szarka (1993, p. 27)

The market positions of Table 5.3 can be related to the Worlds of Production discussed in Chapter 2. The most fashionable position of high quality, position 1, can be seen as part of the Intellectual World of *haute couture*. Although the Dutch Fashion Foundation and

the Amsterdam Fashion Week try to promote the Netherlands and Amsterdam as a good place for high fashion, Amsterdam and the Netherlands miss the big fashion houses, the salons, showrooms and press agents that play a major role in places like Paris, Milan, London, or New York (Sanders, 2002. pp.87-88). In regards to this, we can see the significance of an internationally successful brand like Spijkers & Spijkers not being interested in participating in the Amsterdam International Fashion Week. Dutch shows only cost money for them and the little exposure they bring is not worth the investment. Why should they give up the luxury and professionalism that they are used to in London (Koning, 2008)?

However, we should not see the lack of a Dutch cluster in high fashion as a problem, since haute-couture houses cannot flourish without their ideas trickling down to the market world of mainstream fashion. Sometimes these fashion houses create their own ready-to-wear collections to reach this broader market, but there is also a lot of interpretation and imitation by other companies (Weller, 2007). Dutch private labels plug-in to the Intellectual World of fashion, when they go on shopping trips and visit the main fashion shows and fairs based in Paris, Milan, London, and New York. Haute couture fashion trickles down to the larger Market World of clothing (fashion positions 2 and 3 of Table 5.3). Speaking in terms of Maskell et al. (2004), these fashion shows and fairs, like the most important fabric show *Premier Vision* in Paris, and the fashion weeks of Milan, Paris, New York, and London form temporary clusters where different worlds of production in fashion can meet, and ideas can jump from the Intellectual to the Market World. The role of this interpreter can be assumed by specialists working outside intellectual fashion clusters in the aforementioned fashion cities, since people within these clusters are often so focused on their own cluster that they lose sight of what *'your mother back in a village on the country-side likes to wear'* (Currid, 2009). To be able to translate haute couture into ordinary fashion, a specific kind of knowledge is needed.

The Market World of fashion then is the world of fashionable clothing segmented into a differentiated market. Since fashion cycles are short with markets continuously changing, it is important in this world to be able to add flexibility to the supply chain to react to changes in the market. Costs are naturally important as well, especially in the cheaper segment of position 3. Companies operating in position 2 and 3 must combine the ability to translate high fashion to ordinary fashion, and the ability to organize a flexible supply chain at a reasonable cost. Even discount retailers cannot exclusively sell generic and unfashionable products.

> *"Although our company is not in a very fashionable market segment [discounter retailer], if we do not follow the season's fashionable colors, we're out and won't sell. The length of shorts and skirts, things like that, have to be right."* (PC 35)

The less fashionable the products, the closer they come to basic products of the Industrial World. In the Industrial World, where clothing basics of different qualities (positions 4 to 6) are produced for more stable markets than those for fashionable clothes (positions 2 and 3), product lead times can be much longer. Here a stable supply of quality and low costs are more important.

Another category of clothing I will not pay much attention to in this research, but is important due to its size is the market, is work-related, including corporate-branded clothing. Inputs in the market for work-related clothing can be very specialized, as these garments often have to be technically adapted for safety standards. A difference between promotional or company wear and normal fashion wear is that colors are often predetermined: every lot has to be colored exactly the same. This can require much more supervision and discussion with producers.

> *"When we started in Portugal, companies really had to adapt to the need for continuity in fabric quality and coloring. With fashion, this problem is not so pressing, but with company clothes every series has to be exactly the same as the previous one."* (PC 18)

In other words: products in the company and work-related clothing markets often demand much more specialized inputs allowing categorization as part of the Interpersonal World where clothes are made to individual end-users wishes.

Raes (2000) describes how the market position of Dutch clothing companies has changed over time. In 1970 clothing companies mainly operated in the market of less fashionable, high to medium quality clothes (positions 4 and 5). The production of low quality clothes (position 6) was also important, but increased competition from low-wage countries forced Dutch producers to move up to higher-quality products in the less fashionable segment of clothing. Throughout the 1970s demand became more fashion sensitive and slowly Dutch production moved to a higher position (position 2) (Raes 2000). Dutch producers then, as a result of foreign competition and change in domestic demand, seem to have moved to a position of medium-quality producers in the Market World. However, Dutch private label firms as organizers of production abroad certainly do not only cover this medium quality market segment, but are also active in the lower quality segments.

5.2.4 Explaining the early move: A favorable industrial structure and context of demand for foreign outsourcing of production

Dutch private label suppliers gained force in a time when the market wasn't as fashion-focused as today. The history of the Dutch apparel industry with its cheap labor and production, first at home, and later in Southern Europe, North Africa, Asia, and Eastern Europe, seems to reflect the same kind of development as described by Doeringer and Crean (2006). These researchers focused on the US apparel industry, where an industrial model based on mass fashion products evolved over time. The *American working method,* in which serial and mass production dominated, and efficiency became an important key to success, had a large impact on the Dutch clothing production sector (Wolff-Gerzon 1949). This is no surprise since, until the 1970s, demand for clothing in the Netherlands was more utilitarian, and less fashion-focused (Raes 2000). This type of clothing ensures efficient, large-scale (international) production networks can develop, rather than smaller, more responsive flexible ones. This is contrasts sharply with Italy and France, where small-scale supply chains have been able to survive (Doeringer and Crean 2006). A study on the luxury fashion industries of France, Italy, and the United States (Djelic and Ainamo, 1999) shows additional differences between these markets. In Italy manufacturing is central to the fashion industry, while in France, design, creation, and craftsmanship are the core activity that makes outsourcing difficult due to the designer's desire to control production processes. There seems to be a relation here with demand as Doeringer and Crean (2006) write: *"The relative greater demand for fashion products in countries like France and Italy, along with a lag in the adoption of information technologies for managing inventories, caused large retailers in these countries to preserve at least some relationships with small-scale supply chains and also helped to sustain the small retail chains and independent retailers that are the traditional customers of small-scale suppliers"* (p. 368). Just as in the US, Dutch retail is relatively concentrated, especially compared to other European countries (see Table 5.4). Although around thirty percent of outerwear sales value is generated by independent retailers, this does not mean they generate individual demands: forty to fifty percent of these retailers are organized in central buying organizations, and to a lesser extent, franchise organizations (Servaas, 2005).

The Dutch retail landscape seems to stand out within the European context due to its combination of specialization (most clothing is sold through specialist clothing stores) and concentration of these specialists in either clothing multiples or buying groups of independent retailers. In other countries with a large market share for specialist stores – Belgium, Italy, and to a lesser degree, Spain – independent retailers are much more common and are typically not organized in larger buying associations, making these markets much less concentrated.

Table 5.4: Market shares of retail distribution of clothing in major EU countries, 2004

Retail type	NL	GE	UK	IT	F	SP	B	EU-15
Specialists	***67***	***54***	***48***	***68***	***58***	***61***	***73***	***57***
Independent retailers	29	25	14	49	21	37	40	26
of which in buying group	*40-50%*	*~40%*	*-*	*no data*	*only in sports clothing*	*only in sports clothing*	*only in sports clothing*	*no data*
Clothing multiples*	38	29	34	19	37	24	33	31
Non-specialists	***33***	***46***	***52***	***32***	***42***	***39***	***27***	***43***
Department and variety stores	10	12	28	8	7	14	7	14
Home shopping companies	5	15	9	2	9	1	3	8
Hyper- and supermarkets	2	7	5	12	15	13	5	10
Sports stores	5	3	6	4	6	5	6	4
Other	11	9	4	6	5	6	6	7
Total	***100***	***100***	***100***	***100***	***100***	***100***	***100***	***100***

*including textile discounters and value retailers
Source: Servaas (2005), extension of table on page 76

The concentration of the clothing market in the Netherlands and fewer fashion-focused consumers might explain why early large-scale outsourcing to low cost countries could take place here. This is especially true when we consider that typical Dutch taste is not as fashion-focused as it is in France, where consumers are more fashion conscious and concered with up-to-date styles (see Table 5.5). Even immediately after the Second World War in 1949 there is a clear difference between Dutch and French demand: whereas 65 percent of Dutch women bought ready to wear clothes at that time, in France this still only amounted to 10 percent (Wolff-Gerzon, 1949). The Dutch clothing sector, has adapted to a strategy of flexible, diversified mass production because of demand conditions that supported this strategy. Porter's (1990) argument on a strong and critical home market as a basis for a competitive advantage could certainly be applied here. A critical home market should not be confused with demand for high quality and fashion. A home market can also be critical to the ratio of price to quality or flexibility. The Dutch home market is sensitive to this price to quality ratio and therefore serves as a good basis for the development of clothing production through private-label suppliers in low-cost countries

Contrary to the Dutch (and American) market, in Italy and France many more local flexible production systems have been preserved as a result of higher specialized demand (Doeringer and Crean, 2006, Bull et al., 1993). However, in spite of the differences displayed in Table 5.5, the current trend shows the decreasing importance of independent retailers in all markets mentioned, especially in France. The fact that France and Italy are pursuing less specialized clothing retail can create opportunities for Dutch or German private label companies already more experienced abroad. However, over time this advantage may disappear as French and Italian companies adjust. Nevertheless, until now, part of the explanation for the Dutch position in regards to private labels might be the context in which they have developed and have been able to take a lead in overseas production networks.

Table 5.5: A typology of clothing consumers, values by country, 2002

	Germany	UK	France	Spain
Discerning	42.4	70.4	58.9	62.7
Label seeking	18.2	10.7	13.9	21.1
Stylish	39.1	42.8	57.0	51.6
Fashion conscious	28.5	22.7	38.5	28.8
Well dressed	54.1	55.2	61.9	47.3
Bargain hunters	24.0	25.2	49.5	15.7
Shopaholics	34.7	35.7	29.8	31.0
Practical	46.8	49.3	50.7	47.4
Sporty	37.1	45.6	43.3	34.3
Individualists	25.1	14.3	23.8	17.5

Source: Servaas (2005, p. 38)

5.3 Explaining the advantage of an early move: experience as an asset

5.3.1 A competence based view of the firm

To explain the advantage of early movers in international trade in private label clothing, a competence-based view of firms is needed (Hodgson, 1998, Hodgson, 1999). This view has been developed largely by the evolutionary approach of Nelson and Winter. Firms focused less on profit-maximization, and more on adapting quickly to an ever-changing environment will survive. Firm efficiency becomes less important than adaptive capacities and learning capabilities. In the competence-based approach, a firm is viewed as a knowledge processor and a place where knowledge is created, selected, and utilized (Amin and Cohendet, 2000). This makes cognitive mechanisms within the firm important, as well as routines in which tacit knowledge (as described by Polanyi (1967)

plays an important role. To understand the advantage of early movers in the international trade of private label clothing, we have to look at the cognitive mechanisms within firms and the routines created by experience. As we will see in this section, these are crucial to any private label firm; therefore, more experienced companies and individuals have an advantage vis-à-vis less experienced competitors.

The asset of tacit knowledge is usually not restricted to an individual but rather, is collective as Lam (Lam, 2000) shows in her typology of knowledge. She distinguishes between embodied tacit knowledge, which is part of the individual, and embedded tacit knowledge, which is part of collective tacit knowledge embedded in the firm or the firm's community of practice (2000). This community includes more than just firm employees. Customers and service providers within the value chain can also be part of the community of practice (Brown and Duguid, 1991, p. 49). In addition, spatial proximity is less important than institutional proximity for sharing tacit knowledge (Gertler, 2003, P. 91). Both forms of tacit knowledge are very important in the clothing value chain. Since knowledge-based resources are socially complex and embedded, they are difficult to imitate and can create long-term sustainable competitive advantages as long as a firm is able to use this tacit knowledge for identifying new business opportunities and creating and exploiting new knowledge to adapt to changing environments (Alavi and Leidner, 2001, p. 108, Carlsson & Eliasson 1994 cited in Malecki, 2000, p. 107). This is certainly the case in the clothing trade, where tacit knowledge gained through a method of learning-by-doing, plays an essential role.

To trade successfully within the Market World the following competences are important: (1) adding flexibility and certainty to the value chain for assortment and response times; (2) bridging cultural, knowledge, and physical barriers between production markets and retail markets; (3) bridging gaps between the ideas of haute couture and the retail market serving more standard consumers. All lead to reductions in uncertainty, and thus lower risks and costs in the value chain. To include these competences in the value chain, different modes of governance are possible; all competences can be integrated into one firm, but firms can also outsource part of these competences. Companies can gain experience organizing specific types of the value chain, becoming successful in these specialized chains. Different types of organizations can exist at the same time, for the same kind of product and market (Hodgson, 1999). This is why we can see chains with private label firms alongside chains with retailers that have internally integrated the work of these private label firms. I will now focus more fully on the competences of Dutch private label suppliers in the clothing sector. I will describe the organization and governance of these competences and will discuss how they are attached to the Netherlands. As we will see, many of these competences are related to embodied and embedded forms of tacit knowledge.

5.3.2 Experience in facilitating flexibility and certainty in delivery

Flexibility and punctuality is essential in the Market World of clothing, especially since the frequency of multiple fashion collections per year has increased. A delay of only one week can easily result in missing a sales peak. When an item is sold quickly, it is important that a repeat order can be fulfilled. This is not as easy as it sounds since it can take more than a year to go from initial design ideas to final delivery to a retailer. Even the production of an already available model can easily take six weeks to deliver. Therefore it's important to place the right orders long before the retail season starts. Many retailers try to do that without the help of an intermediary, but in many cases the use of private label suppliers seems to be necessary to supplement collections and increase the flexibility of the supply chain. In cheaper clothing markets particularly, this is done to be able to use off-season production capacities to lower prices.

> *"In principle we create our own collection without the help of private labels. We do this in November for the winter season of a year later. However, only by January and February the fairs and shows for that winter season take place. That's too late for us to react for the next season. So what we do is already talk to private labels in November to see what they have to offer. Then, in January and February at these fairs, when we find out we missed something important, we contact the private labels again to supplement the collection because our organization isn't able to develop and produce fashion articles in that short a term."* (PC 35)

The flexibility that large retailers ask from private labels places great risks on their shoulders.

> *"In fashion margins are very low, and risks are large. Retailers like C&A and V&D [two large Dutch clothing retailers, m.l.] […], cancel orders easily. Then you're in trouble as a supplier because you are left over with a lot of fabric that you've already purchased and cannot sell anymore. That means big losses."* (PC 21)

To solve the problems described above it is important for private labels to know markets well: to know what prices are reasonable, to know what you can expect from your trade partners and to get the best deal possible.

> *"We know how fast we can deliver. We also know what our subcontractors can do or should be able to do, so they cannot fool us. If someone tells us that*

> *coloring takes one and a half weeks, then we will say: 'That's nonsense, that must be possible in one day."* (PC 9)

This only represents the production side. To be able to flexibly react to fashion cycles it is also important to understand the demand side: what does demand expect and how can you offer what they want? The ability to combine both to flexibly come to a solution is what is important here.

> *"When linen is the fashion, every retailer wants to have linen trousers. But a hundred percent linen trouser is often too expensive, so we may then propose to use a mixed fabric of cotton and linen. Often they are not happy because this mix doesn't look like linen. It is my job to find a solution in situations like that: how to make something fashionable and cheap at the same time. Maybe the fabric can be made differently, maybe it can be made more raw so that the fabric comes closer to a linen-look, although it is not hundred percent linen."*(PC 14)

What is also important here is trust in the ability of the private label company to solve problems arising in the supply chain to ensure no delays in delivery will occur. Trust can be created through good reputation and deep knowledge of the situation abroad enabling a supplier to solve problems. Only by experience, can people in the business get a feeling for what a reasonable price is and the rules of business in different countries: what does it mean if someone says 'yes' in a country? How can you be sure that your trade partner will deliver what you have agreed upon? How well-protected are you by legal structures in a particular country?

> *"Agents know that doing business with a Chinese supplier isn't quite the same as doing business here in Europe. One needs deep relationships when handling delays, by for example finding other means when problems arise by sending a clothing lot by air instead of by container ship. If you have a good relationship with a producer, he will pay a part of the extra costs of sending the lot by air. But if you're new in the business or you don't order big volumes all the time, you will have to pay these extra costs yourself, making production organization a costly and sobering affair [as a retailer m.l.]."* (PC 14)

This citation also shows that, besides good personal relations, a large volume of orders creates flexibility and reliability. Being a large player gives you a good position vis-à-vis other customers. If you are small, you are often last in line with the chance of a larger

customer getting your part of production capacity. This is why some players take a share in production: put simply it ensures their production needs are met. This also explains why it's advantageous for independent retailers to combine their demand in purchase organizations. Since private labels combine orders of many retailers and brands, their orders are often much larger than those of individual brands and retailers. This lowers their risks and gives them an advantage over these companies. It is no surprise that concentration continues to take place in the clothing sector. One interviewee puts it as follows: "*You have to be a big guy if you want to survive.*" (PC 14)

The need for large volumes means that, in a way, clothing production is about mass production. But at the same time it is also diversified and flexible. In the typology of Hollingsworth and Boyer (1997) this would be diversified (flexible) mass production, including competition by price and quality as Lane (2008) shows. Whereas German firms often have product strategies of diversified quality for mass production, American firms often opt for a strategy of flexible mass production in basic fashion. But in every chain some mass is necessary for survival, meaning small- scale flexible specialization is usually not an option. As I will show later on, the institutional structure – the industrial structure of clothing production and retail, labour market developments, and the structure of clothing demand – in which Dutch clothing firms have developed has been very favourable for the early development of firms with a strategy of diversified (flexible) mass production.

To conclude, in order to increase flexibility and speed in the value chain without reducing reliability, in-depth knowledge of production options abroad and good network and supplier relationships are essential. This is why the governance of transactions between private labels, their producers, and service providers are relational: great trust and mutual understanding is involved. Logistics facilities can be important as well for flexible and reliable delivery of goods, but they were seldom mentioned by the private labels interviewed for this research. However, when discussed, the Netherlands was generally cited as an attractive location for a flexible and reliable delivery due to efficient customs (PC 14, PC 29), reliable logistic service providers (PC 34), and the proximity of the Netherlands to large customer markets (PC 33).

5.3.3 Bridging the gap between production and demand: connecting different communities of practice

Translating tacit knowledge and transfer of technical knowledge through communities of practice or interpretative communities

The distance between a clothing design and its punctual production and distribution to the shop floor is a long one, with many complex jobs along the way. The translation of designs into patterns that can be used by manufacturers for precise specifications in

production (which thread should be used for stitching, what strain should it have, what stitch should be used etc.) is a very complex job needing a lot of personal contact and supervision. This has to do with the difficulty of codification of transactions in the production of clothing, as Charlie Hilm, an apparel maker explains:

> *"Many of the words and verbal expressions commonly used in the apparel product development process cannot be clearly translated between languages, or are "vaguely translatable." Verbal interpretations of design concepts and direction (i.e., lighter, looser, etc.) can be especially subjective, and difficult to communicate between design and production personnel."* (DesMarteau, 2000)

Lane and Probert (2006) also report the long time (five years) it takes for suppliers in overseas production areas to understand the wishes of western markets.

Between private labels and their customers, lots of information has to be discussed. Samples, pieces of clothing, and mood boards are all part of the discussion before production can take place. Once a sample model is made, it is clear to the brand or retailer what product will be delivered. When it is clear to the private label supplier what piece of clothing is demanded, they must ensure the manufacturer also knows. This is a labor intensive task for which frequent personal contact is needed.

> *"Besides the people of our Far East office that inspect quality, our purchasers frequently go there, when all documents are made, to go through these documents with the manufacturers and make sure that everything is well understood. And after that, they go there to see if everything that was discussed, is implemented in production."* (PC 32, brand)

We see close control of suppliers by Dutch companies. There is even a development that designers themselves are talking directly to manufacturers and making visits to the plants for that. As a teacher of supply chain management of the Amsterdam Fashion Institute explained to me (Avond aan de Amstel 22-11-2007).

> *"A purchaser that comes to a production plant cannot ask for specific skills the way a designer can. In fact, a manufacturer can only explain to a purchaser what he can do in general with his equipment, and when that seems to be enough, a purchaser may choose to work with him. But a designer, he comes with a sample piece to the producer to show what he wishes the piece of clothing to look like. He shows how he wants to have it stitched and asks the production unit if they are able to do it exactly that way. That's much more direct."*

Also, when it comes to technology there is much supervision and aid by private label firms. Production plants, for example, have to be able to work with computer aided design (CAD) and computer aided manufacturing (CAM). This means that they have to be able to use the computerized designs made in the Netherlands in their computer programs that steer manufacturing. To make production facilities dedicated in this way, investments in equipment and long-term relationships are often needed. Long-term relationships not only enable investments in equipment, but also enable producers to learn how to work with technology and to implement working procedures following a private label supplier's wishes. The capabilities in the supply base are clearly low in cases of technological transfer. At the same time technological transfer and transfer of working procedures by the private label supplier enables them to trust suppliers through quality checks and capabilities of their producers.

In the model of Gereffi et al. (2005), the difficulty of codification of transactions will result in relational, captive, or hierarchical governance. In the case of fashion and clothing, relations come close to the latter two since capabilities to understand designs at the supply side are often limited: they need the help of the private label suppliers to make clothing correctly. Private label producers often visit their suppliers to go through the production, samples are sent back and forth, and final products are often inspected at both the production plant and in the Netherlands. All the input on designs comes from the private label supplier. Producers are obligated to follow these ideas.

Creating communities of practice

It is no surprise that we see so much interaction and supervision between private label supplier and producer when we view the tasks of the private label supplier through the lens of literature on knowledge and learning. The work of the private label firm in the value chain can than be understood as creating and connecting specific *interpretative communities* or *communities of practice.* This concept refers to a community or group of people that share an understanding of how to interpret knowledge and use it in practice (Duguid, 2005). The knowledge of a community of practice is tacit in type and resides not in the individual, but collectively as part of an organization (Lam, 2000). Within the relation with producers private label suppliers invest in the capability of producers to make the right interpretation of codified knowledge in order to produce clothing to specification and design. In this sense the embedded knowledge in these communities of practice is mostly technical. In the taxonomy of knowledge of Alavi and Leidner (2001), it is about knowing how to interpret and use designs. As *'knowledge runs on rails laid by practice'* (Seely Brown and Duguid, 2001), private labels invest in a common language and practice with their suppliers to enable or ease future information exchange in the form of designs and samples. This is why private label suppliers try to develop good relationships with manufacturers. Private label companies cherish the investment they

make in the capabilities of manufacturers to understand each other and the whishes of the Western market.

> *"When I started, of course I had to invest in finding good manufacturers. I went to different plants. Now I benefit from that investment. I only have to go to China two or three times a year now. I do not agree to any proposals including new manufacturers. I keep the manufacturers I work with."* (PC 11)

In this relation private label suppliers, to a certain extent, become dependent on the producers they have invested in.

> *"In a way, you are dependent on each other. And it takes time before you can move to another company. Above that, we like to be able to fill entire plants, to get the best deals."* (PC 8)

The interdependence created makes the relation between a private label supplier and manufacturer also a kind of a hate and love affair, as Michiel Scheffer explains:

> *"Most companies have one to three preferential suppliers but apart from that a large amount of smaller ones. That way, they can handle price pressure. But at the same time, the relations are often long-term. There is a large gap between the words you hear from subcontractors and the real behavior you see. You often hear suppliers complaining, saying they are being squeezed out, but at the same time they want to keep that order."*

Just like in the UK and Germany (Lane and Probert, 2004, Lane and Probert, 2006), generally speaking, Dutch private label suppliers report long-term relationships with their customers. However, the more they face a cutthroat market, the looser relations with suppliers become (Lane and Probert, 2006). The governance of transactions then comes closer to market governance as described in the Gereffi (2005) typology. Of course, this kind of governance is only possible when the demanded piece of clothing is easy to produce and there is no tacit knowledge involved in the transaction that can only be properly interpreted by a very specific community of practice. Furthermore, the fact that private label suppliers prefer long lasting relationships with producers does not mean that they only work with one producer. Private label suppliers need to be able to react to new fashion trends. If a more classically Indian look is the fashion, a supplier is required that is able to work with the techniques and fabrics needed for that look. Therefore, private label suppliers might work with a range of producers, each with different capabilities, depending on the skills required for a specific fashion trend.

Bringing quality at the right level

Quality is a problem to many retailers and manufacturers: how do you make sure you get your products at the right quality? What do you do if you are not happy with the quality delivered? Private label companies almost always organize quality control, both in the production unit where the producer is responsible for the control, and in the Netherlands. This way they can supervise quality and on-time delivery, which are part of the risks and hassles their customers like to avoid. It also becomes understandable why private label suppliers generally first import clothing to the Netherlands before they export it to their customers abroad. Of course this also has to do with the fact that often they have many Dutch customers anyway.

Part of the final control can be outsourced to logistics service providers who have begun assuming greater resposibility over inspection and warehouse functions, as mentioned by one of the interviewees (PC 12). However, the inspections that logistics service providers are willing to perform are limited since inspection assumes a guarantee on quality these providers are often reluctant or not willing to give.

> *"Quality of packaging, documentation, quality checks we do on clothing are all at a basic level. We do not specialize in things like fabric quality. We do more basic checks, well-described specifications of our customers: it should be a button-down shirt, two buttons on the cuff, double stitched. We do these kinds of easy checks. (…) We have logistical knowledge, and although we do know a lot about fabrics, we do not want to become a specialist. There are risks related to that, since then we will be held responsible for the quality of the clothing we checked."* (PC 34)

This citation shows that when it comes to quality, risks are great and it is the private label companies that are willing to take these risks. They can do so because they have invested in their relationship with producers. This is the main capital of their company: knowing where to go, how to order and supervise, and what to expect.

A final role of private label companies is the true middleman, able to overcome trade barriers such as the need for international banking and money transfers, the need to transact under unknown legal procedures and safeguards, or language barriers. Because the middleman is familiar with operating in both markets, he can bridge the gap between the two and enable a transaction, as an importer from China explains:

> *"When a product is finished, it can be delivered directly from the factory [in China, m.l.] to our customer [in Europe, m.l.]. This implies that a customer has to do a transaction in China. Not every customer wants to do that. Lower-*

volume customers particularly prefer getting deliveries from the Netherlands. Distribution then takes place through our [Dutch m.l.] company." (PC 17)

To bridge the gap between supply and demand it is important to minimize risk and surprises regarding price and terms of delivery. This is virtually essential when doing business overseas. Organizational capacities, e.g. handling of delays in production, logistics regarding fabric supplies, and quality control are all needed to diminish risks like missing sales opportunity and can only be obtained by experience. Scouting overseas markets for fabric and producers is quite specialized and risky: if orders are delivered too late purchase peaks can be missed. Fabrics can also appear very different once delivered with unexpected traits like faded colors (Sanders, 2002, p.84 & PC 12). When brands or retailers organize production, problems with producers are their full responsibility. This is not the case when a private label supplier organizes production. Generally speaking, private label suppliers have the impression that retailers and brands are far less embedded in overseas trade networks and therefore cannot solve problems like they can. The deep understanding and long-lasting relations of private label suppliers with producers are an advantage they try to maintain over brands and retailers as long as these organizations do not generate as much demand as they do.

In conclusion, strong relations in which mutual understandings or *conventions* have been developed are needed to translate designs and patterns into desired clothing. These conventions and mutual understandings must particularly be developed in the relationship between private label and producer. In the relationship between private label and retailer or manufacturer these conventions are above all, part of a shared cultural and educational background. It minimizes the problem of understanding each other, although of course, companies do have their own specific design autographs. Their relationship can be described as modular. Therefore in the translation from design to pattern and ready made clothing, it is the private label supplier who becomes strongly attached to specific producers, more so than retailers or brands getting attached to specific private label suppliers.

5.3.4 Translation of 'high fashion' to 'my mom's fashion': the role of interpretative communities

To be able to play a role in the creation and completion of collections, private labels have to be good designers with an eye for fashion. This comes to the fore when interviewees mention the important qualities of their firms.

> *"You have to make sure that you make good selling models. That is the first thing a purchaser will ask you: what do you make, and what sells?[…] It is impossible to see everything as a retailer. They use private label suppliers to make sure they do not miss anything."* (PC 8)

> *"A private label has to be experienced at the same level as a brand. We have been a brand, so we can give a retailer the knowledge needed to create a private label collection."* (PC 33)

If a design or image does not stand out, it will be difficult to be successful abroad, as the stories of G-star and Mexx in the US have shown. Although G-Star was able to create a clear image, finding a market for their clothing, Mexx was not. Successful in the Netherlands, Mexx was unable to attract people in the US because of its unclear market position: Mexx clothes were seen as too ordinary and too expensive at the same time (Staps, 2007, Nieuwenhuijsen, 2007b, Nieuwenhuijsen, 2007a).

Private labels then, have to understand the wishes of clients and to 'read' the market, translating 'high fashion' into 'my mom's fashion'. Private label firms have to be able to synthesize knowledge from fashion shows, shopping trips to aforementioned major fashion capitals, or from glossies and trend books of specialized offices for the styling of new collections. These sources emerged in not only literature on the industry (Portes, 2006), but also interviews conducted for this research. They also have to be able to use knowledge gained from their customers. Since private label suppliers work with many different retailers and brands at the same time, this gives them a good view of market developments.

> *"You have to see it like this: we have clients of [high segment brand m.l.] in our assortment as well as [low budget retailer m.l.] as a customer. Therefore, our view is much broader than that of our customers. We know what is happening somewhere else [in other market segments m.l.]. We take that knowledge to our customers. Sometimes customers are too focused on their own brand."* (PC 9)

Although the knowledge described above seems to be ubiquitous, as it can be picked up from glossies available worldwide, MTV, and trips to fashionable cities, it is definitely not ready to use for everyone and for every market. The successful interpretation of this ubiquitous knowledge demands a lot of tacit knowledge. Lam (2000) has made a distinction between tacit knowledge that resides at the level of the individual (embodied knowledge) and tacit knowledge that is shared among members of an organization (embedded knowledge). We can see tacit knowledge required to translate high fashion

into more popular fashion as a combination of both types of knowledge. On the one hand knowledge an individual has, enables him to engage in a task and solve problems. On the other hand, tacit knowledge in fashion also seems to be largely collective where *'the accumulated knowledge of the organization stored in its rules, procedures, routine and shared norms guide the problem-solving activities and patterns of interaction among its members'* (Lam, 2000, p.491). In the case of fashion, we can understand the tastes and implicit rules of how men and women should be clothed as embedded knowledge: knowledge that is of a tacit nature and can only be read by members of the same organization, in this case, the prospective clothing market. In contrast to the more technical tacit knowledge in the community of practice of producers and private label companies, the community of practice at stake here shares a more *cognitive* kind of tacit knowledge involving mental models where interpretations of cause and effect are made (see Alavi and Leidner, 2001 for a discussion of knowledge taxonomies). It is about the interpretation of knowledge in glossies, fashion shows, and trend books. This knowledge is widely available but is useful only to those who are part of a specific *interpretative community* (Duguid, 2005). Interpretive communities share tacit knowledge on how to interpret high fashion for a specific market. This tacit knowledge is generally not learned through formal education, but through practice by engaging fully in a task, job or profession (Brown and Duguid, 2001, p. 203). Within this community the knowledge might be leaky, that is, easily transferable. However, for those who are not part of that community the interpretative knowledge might seem very sticky to specific persons and organizations (Brown and Duguid, 2001).

With this view on knowledge involved in designing, we can interpret the assets of professionals working for private label firms as follows: an ability to combine two types of tacit knowledge. Professionals within private label companies and fashion companies as a whole combine an understanding of the interpretative community of a specific fashion market segment, with personal or embodied tacit knowledge of how to produce a design by proposing viable solutions within the constraints of time, money, and supplier capability.

The existence of specific communities of practice or interpretative communities might explain why it is very difficult for manufacturers, who also work for many different firms, to have the same business as private label firms, creating complete and fashionable collections. To expound on this, since the manufacturing of clothing is generally specialized to fabric (woven fabrics, knitted, denim) manufacturers are only part of that specific community of practice. Private label suppliers more often try to combine these specializations. Furthermore, making clothing that fits well is a specialized job that can be difficult for manufacturers operating far from consumer markets. Sizes and fits differ from country to country and need to be adapted to the changes that take place in populations. This is all embedded knowledge on markets.

People outside specific geographic markets for ordinary clothing miss access to this embedded knowledge of the specific markets as a private label supplier explains:

> *"Fit is very specific from place to place. It is a specialism. You have to keep in touch with the fit of the market: do women become taller or smaller, what do they like? You need to know the market for that, and you need to be able to talk about fit and colors with people in the market. Therefore we have a staff that speaks Bulgarian, Italian, French, German, and English."* (PC 7)

In short: knowledge on fits and tastes and on how to use this knowledge in designs is part of a market-specific community of practice which is more difficult to be part of further away from that market. Due to this, some private label companies restrict their markets to only one part of Europe, where sizes and tastes are more or less the same (e.g. Northern Europe or Southern Europe). For manufacturers abroad who are not educated and socialized within these regionalized western communities of practice, it is difficult to translate knowledge into know-how. To be able to do this experience is needed within a specific community of practice which, in the case of clothing, often only covers one or a few countries since distinctive national style and sizing still survive (Lane, 2008).

5.3.5 Knowledge monopoly

In short, private label firms need to have a kind of knowledge and relational advantage over retailers, brands, and producers to be able to add flexibility and certainty to the value chain in terms of assortment and response time. Furthermore they need to be able to bridge cultural, knowledge, and physical barriers between production and the retail market, and to bridge gaps between the Intellectual and Market Worlds of clothing. Their strength is based on their combination of these capabilities. Without this, brands and retailers would just as easily do this outsourcing directly without help from an intermediate company. As one interviewee puts it:

> *"We know the road to production and the road to the customer, and we know it better than our customers know the road to production and better than our producers know the way to our customers"* (PC 15)

Knowing the best way and location to produce and being more flexible in the process is what makes private label companies attractive to brands and retailers. Private label companies assume a lot of the risks and administrative responsibilities, devolving them from brands and retailers.

This makes the position of the private retailer difficult. They coordinate production abroad while feeling the pressure of retailers and brands that use them to avoid risks and hassles inherent with organizing production abroad. At the same time retailers must depend on private label suppliers if they want to ensure they do not miss any major fashion trends. Private labels can strengthen their market position by adding more flexibility in the chain. They can only deliver this flexibility when they have good relations with producers and logistic service providers that enable them to be flexible. The more differentiated and flexible the demand, the more private label suppliers will be used. On the other hand, the lower trade barriers are, the more their position might come under pressure, as this would make it easier for brands and retailers to organize the outsourcing without help. Trade barriers might become lower when producers become technologically more advanced and improve their language, cultural, and management skills.

5.4 Other sources of knowledge or advantage

The last paragraph has shown how important experience and learning by doing are to operate in the clothing trade. However, we should not exclude the possibility that other assets of Dutch private label firms play a role as well, such as local and national institutions and legislation. With respect to the latter, the trade openness of the Netherlands has already been shown as one of the explanations for the early move into foreign production by Dutch firms. Industry associations and schooling may have been important as well.

5.4.1 Industry organizations

Private label firms often mention industry associations as sources of business information. These associations operate nation-wide and are joined by companies from all over the country. Besides the industry association Modint (fashion, clothing, fabrics) the NVKT (Dutch association of importers of textiles and clothing), the VIVO (association of importers from the Far-East), and the Chambers of Commerce are important for knowledge dissemination. These associations are used to stay abreast on industry buzz and on issues relevant to the industry like quotas, international trade issues, and legal developments. Industry associations are also important in delivering market information like the trustworthiness of clients and basic knowledge of market sizes. Besides a lot of free information, industry organizations often also deliver specialized, fee-based consultancy services for their members. These industry organizations do not appear to be much more developed than in other European

countries. I did not find any indication during my research that these institutes explain the dominant role the Netherlands plays in private label production.

5.4.2 Education

Although relations and experience are essential for bridging the gap between supply and demand, most personnel in the clothing business have had vocational training at one of the specialized fashion or art schools in the Netherlands. This came up during my interviews as an important educational basis, and most people working in the business have been trained at one of the specialized fashion schools in the Netherlands. Over time, education for the fashion and clothing industry has mirrored the industry itself. It has gone from teaching mainly technical skills for producing actual clothing, to knowledge on the industry in general (Kornaat, 1992, p. 58-62) and now towards management and marketing skills (see Table 5.6). Although in the current curricula fashion design still gets the most attention, it reflects other knowledge needs of suppliers and brands as well: fashion management, concept development, marketing, and promotion. There is also a great deal of attention paid to the analysis of sales and purchasing data in order to become a good intermediary and international purchaser.

The situation in the Netherlands seems to be comparable to that in Germany, where there is much more knowledge in clothing companies than in the UK. British designers are said to lack technical and commercial knowledge (Lane and Probert, 2006) whereas it is clear this commercial knowledge is something very present in Dutch fashion schools. Technical knowledge, on the other hand, is something that is also difficult to find in the Netherlands in the opinion of some companies but isn't seen as most critical: more important is knowledge of fashion, trends, production organization and management, and logistics.

This research suggests that most of the knowledge for design and international operation that is present in companies is obtained on a daily basis by employees when they travel to cities and visit trade fairs for fabric, accessories and export products or when they synthesize knowledge from glossies and television. Entrepreneurs get a lot of basic knowledge to run their operations from their professional experience and personal network, which is certainly not limited to the Netherlands. Although part of the entrepreneurial spirit may be developed already during their education where attention is paid to the management side of the clothing sector, learning by doing is usually most important for a successful career in the sector.

Table 5.6: An overview of education in the clothing sector in the Netherlands

Town	Institute	Curriculum
Amsterdam	Amsterdam Fashion Institute	- Concepts and brands - Design and styling - Fashion management
	Gerrit Rietveld academie	- Fashion design
	Artemis	- Styling - Fashion design
Arnhem	Fashion Institute Arnhem	- Fashion design (post-graduate)
	Artez	- Fashion design
Breda/Den Bosch	St Joost	- Art academy (general)
Den Haag	KABK	- Concept development fashion
Doorn	TMO, Higher vocational training for fashion management	- Fashion - Finance - Marketing and research - Communication - Product and branch knowledge - Languages - Management
Maastricht	Artemis	- Styling - Fashion design
	Academie beeldende kunsten Maastricht	- Fashion design
Rotterdam	Academie beeldende kunst Willem de Kooning	- Fashion design
Utrecht	HKU	- Fashion design - Promotion and publicity

Source: Roso (2005) and own survey of websites of these educational institutes for the academic year 2006-2007

5.5 The role of place in competitive strength

5.5.1 Concentration in Amsterdam, Rotterdam, Brabant, and the East

The current location of firms in the clothing industry in the Netherlands reflects the historical developments in the industry. Clothing trade and trade intermediation has

succeded production in cities like Rotterdam and Amsterdam and regions like North Brabant. Maps 5.2 to 5.4 show that Amsterdam is still the centre for Dutch wholesale trade, with many intermediaries, wholesalers, and private-label companies[32].

The location and concentration of clothing firms around Amsterdam and Rotterdam, in Brabant and in the East of the country also reflects the need for clothing firms to be located within reach of production and consumption markets. In my research, the good accessibility to and of Schiphol was frequently mentioned as a favourable condition by nearby companies. Schiphol is practical for shopping trips, visits to production locations and for foreign clients visiting the Netherlands on business. Good accessibility is even more frequently mentioned as important when a company has a showroom that clients visit. The regions around Utrecht, Amsterdam, and Rotterdam, as well as the south of the country (regions prominently featured on Maps 5.2, 5.3, and 5.4) are mentioned as most favorable for this.

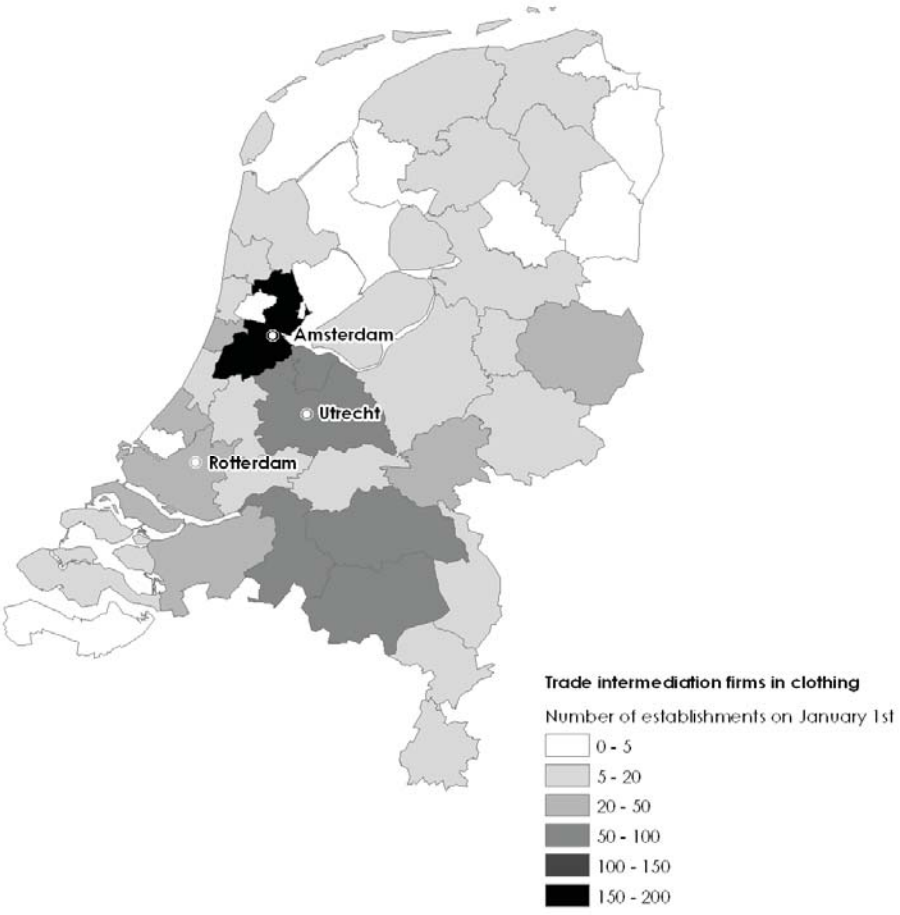
> *"We've chosen Amsterdam because it's the center of textiles in the Netherlands and most of our customers come from Amsterdam. V&D is located in Amsterdam, and C&A has been located here. Plus you have the apparel center in Amsterdam."* (PC 8)

> *"A central location in the Netherlands is important to us, and a location close to where the founder of this company lives. But a central location is important since our customers come to our office. Nevertheless, foreign customers do not come here, we visit them."* (PC 6)

> *"Our location had to be in the Randstad, because that makes short lines for samples, packages, and post. And above that, it makes customers at the national and international level easy to reach. We do not have to be easily accessible for our customers, since we mostly visit them."* (PC 15)

[32] The concentration of traders in and around Amsterdam is also related to the existence of the World Fashion Centre there. However, most of the companies in the World Fashion Centre (importers, wholesalers, distributors, and agents of foreign brands) serve the Dutch retail market only. This explains why the website of the World Fashion Centre Amsterdam (www.worldfashioncentre.nl, accessed 22-01-2009) is only available in Dutch. Interviewees explained that the international trade function of the World Fashion Centre is restricted to some wholesalers of Eastern European countries and Iceland where a facility like the World Fashion Centre Amsterdam does not exist. For them, the World Fashion Centre Amsterdam is easy to reach, since it is located near Schiphol airport. Also some Dutch traders are said to do purchases here for UK retailers and traders. However, all of these trade transactions do not necessarily result in re-export flows of goods through the Netherlands before they enter these foreign countries: the World Fashion Centre Amsterdam might only be used to view and choose collections and arrange deals with representatives of companies that physically organize their distribution otherwise.

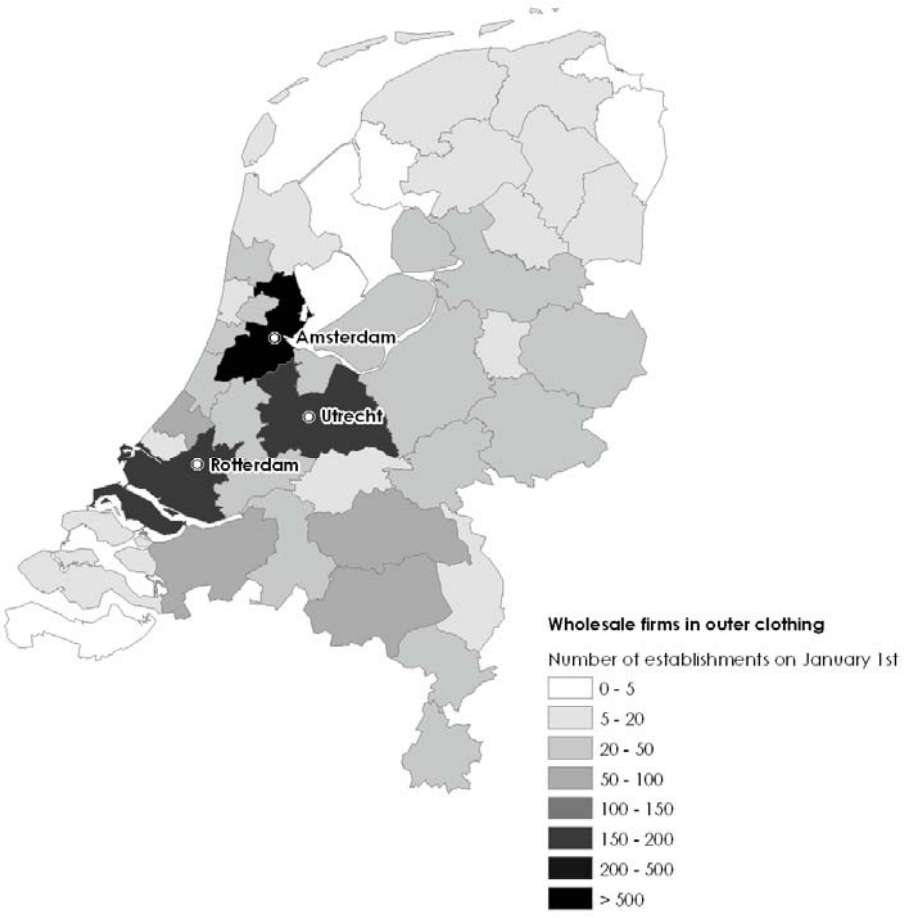
Map 5.2: Trade intermediation companies in clothing (SBI-code 5116) by corop-region[1] in the Netherlands in 2008



Source: map created with data from StatLine (Statistics Netherlands, www.cbs.nl)

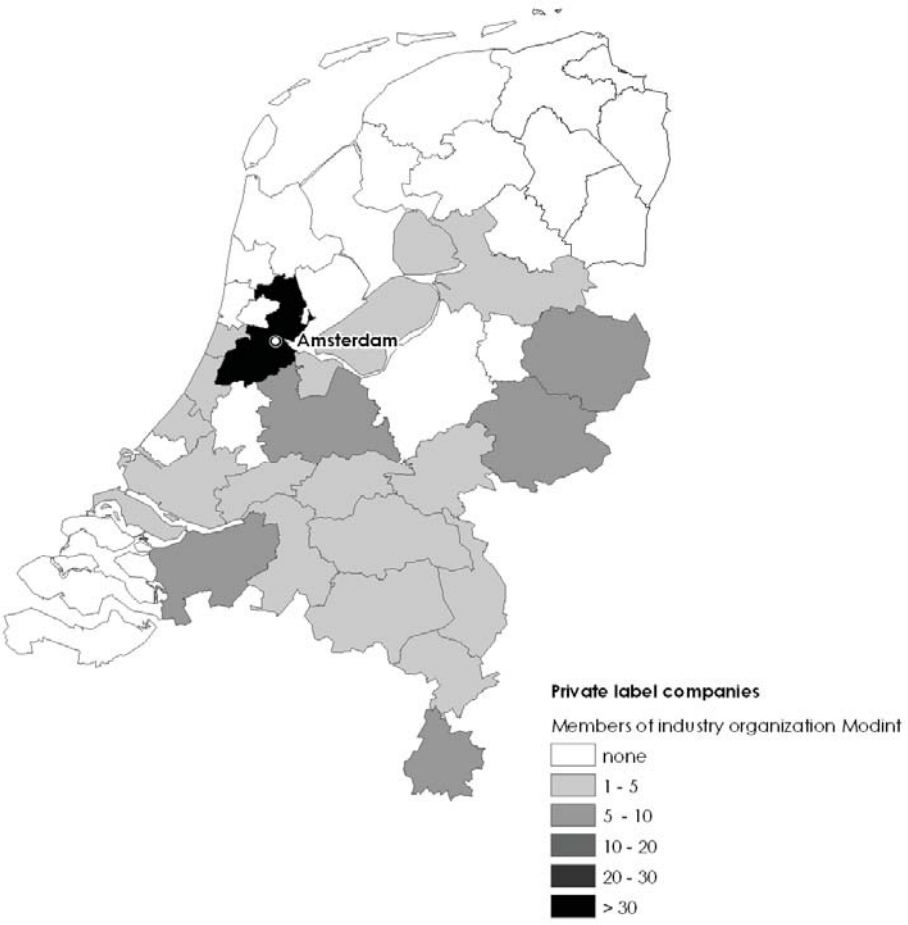
[1] The Netherlands is divided in forty corop-regions. These regions have been created by the *Coordinatie Commissie Regionale Onderzoeksprogrammering* (Coordination committee for regional research). The division of the Netherlands in forty crorop-regions is frequently used in economic research in the Netherlands.

Map 5.3: Wholesale trade companies in outer clothing (SBI–code 51421) by corop-region in the Netherlands in 2008



Source: map created with data from StatLine (Statistics Netherlands, www.cbs.nl)

Map 5.4 : The location of private label companies in the Netherlands by corop-region in 2006



Source: map based on information in database of members of Modint, website Modint 2006

In the end, the importance of location to reach markets should not be overestimated, as one interviewee of a company located outside the Randstad in a small town in Brabant explains:

> *"Maybe our location is a bit difficult to find staff, but it is a very good place to welcome customers and to go out to visit them. Some people travel to China for one piece of clothing. This market is so international. People then certainly also are willing to come to Uden for their clothing."* (PC 9)

5.5.2 The unimportance of input-output relations

This concentration of clothing trade and trade intermediation, especially around Amsterdam, might also indicate that the clothing trade functions as a cluster of input-output relations and/or local knowledge exchange for the communities of practice described above. Also the role of Amsterdam as the cultural centre of the Netherlands might play a role. However, this hasn't been verified by the research.

Although respondents sometimes say they have chosen a location around Amsterdam because it is 'the centre of the industry' when asked more about what that means to the firm, it becomes clear that most firms in fact operate like isles without many local input-output relations. Although the communities of practice in clothing trade are in a way restricted to specific market areas, in the case of private label firms they are not geographically-bounded through a specific place by locally-bound processes of knowledge development or input-output relations. Local relations to specialized service providers like sample makers, trend bureaus, reconditioning firms, logistic service providers, or legal services were almost never reported by private label firms in the research. Service providers were more often found within a non-local professional network and much contact takes place via e-mail, phone or fax.

> *"Depending on the problem, I use external services. They can come from anywhere. Why my legal advisor is located in Alkmaar [at a distance of fifty kilometres, m.l.]? I really don't know. It has developed in this way. We started working with him and he's doing fine."* (PC 7)

Furthermore, the non-existence of strong local, cluster-like input-output relations is illustrated by the cry for more connectivity in the sector during one of the Modint seminars (Avonden aan de Amstel 090205). Different entrepreneurs in the clothing sector stated they had trouble finding the right suppliers to print fabric or to make sample pieces. People really didn't seem to know where to go and it could take more than half a year to find the right person to work with. If the Dutch clothing sector would have been a densely interconnected cluster, finding the right person would not have been such an endeavor. Starters in the sector would easily find suppliers through a local network. This anecdote then again indicates the importance of knowledge that is gained by experience and passed over generations within companies.

5.5.3 Concentration through local spin-offs

The discussion above suggests that local connections do not really play a role when it comes to competitive strength. And yet, there is clear regional concentration of private

label firms when we look at Map 5.4. To explain this regional concentration we have to turn back to the earlier discussed processes of knowledge dissemination and learning by doing. At the level of the company, the experience of employees and entrepreneurs becomes passed on to next generations. Although frequent job hopping doesn't seem to take place – many interviewees report that their staff has worked for them for quite some time (more than 10 years is no exception (PC 6, PC 7, PC 14, PC 32, PC 33)), experience in different companies or at different parts of a larger company seems to be necessary before someone enters a better-paid function where he or she stays for a longer period or is able to start a new company. Founders of companies often have had previous experience as purchasers for another company (PC 8, PC 9, PC 11, and PC 19). Previous working experience as a success factor has also been reported for fashion designers in the Netherlands (Wenting et al., 2006). When new generations start new companies they tend to locate near their place of living. Since this place is often near the former employer, this can explain why private label companies are not dispersed all over the country.

> *"Our location in the Netherlands has been chosen close to where the manager lives. Apart from that, it really doesn't matter were we locate. At the micro level the location has to be accessible of course, but we do not need room for a large warehouse since what comes in is picked up as quickly as possible by the buyer. We do not keep stock."* (PC 17)

The network of international production continues to have a Dutch anchor point. This seems to be confirmed by the location pattern of private label and other clothing companies on Maps 5.2 to 5.3. They are mainly located around the old centers of the fashion and clothing industry: the cities of Amsterdam and Rotterdam, the industrial areas of the east and south of the country and around the Fashion School of Arnhem. Also the work of Wenting (2008) points in this direction. Wenting (2008, pp. 134-135) has shown that mechanisms of routine replication in the fashion design industry have a geographic dimension that favors clustering since spin-offs tend to locate near their parents, labor mobility is localized, and the formation of cooperation networks is influenced by spatial proximity to peers. As we have seen in this chapter the latter factor doesn't seem to have great importance for the more trade-related functions in the value chain. The former two mechanisms, however, seem to be very relevant in explaining the location of many companies included in this research.

5.6 Explaining the role of the Netherlands in the international private- label clothing trade and distribution

As we have seen the role of the Netherlands in the international trade of clothing, in the case of private labels, is one that adds flexibility, speed, and certainty to the value chain. As expected, private label companies have the responsibility for the coordination of parts of the chain, namely, those parts connected to production. Private-label companies use relational or captive mode of governance towards producers. This means vis-à-vis the theory of Gereffi et al. (2005) that there is power asymmetry and strong coordination of the transaction by the private label company. However, in their relations with brands and retail, private labels have less power. This relationship is modular since demand can depend on capabilities at the private-label suppliers. Because of the higher capabilities of private-label suppliers, it is easier for retailers and brands to use a different private-label supplier than for private-label suppliers to switch to a new producer. A long-term, stable, and strong relation with producers and well-developed work routines are the most important assets for private-label firms, enabling them to take risks and organize production in a way retailers and brands do not wish or are unable to do.

Private labels use a lot of non-territorialized knowledge to fulfill demands from retailers and brands. The strength and viability of private labels comes mainly from learning by doing within their personal network with apparel, garments, and fabric producers abroad. It is experienced knowledge, much so than even knowledge of fashion disseminated through fairs, shows, magazines and the street. Of course private labels need to have knowledge of fashion as well, but it does not seem to be their primary knowledge. Left without it and only possessing superior knowledge of production possibilities, retailers and brands would still be interested in utilizing their services since private labels would lower transactions risks with producers in foreign markets. Knowledge on production possibilities passing from one generation to the next within companies results in a kind of localized knowledge. However, this knowledge is not completely geographically bound. If an employee moves to another location and continues working there, this knowledge can still be used and extended.

In the semi-integrated clothing production chain the role of private label suppliers and the strength of the Netherlands should be explained as the result of a favourable context of demand conditions (demand for mass apparel), economic conditions (aforementioned early need for outsourcing abroad) resulting in a strong position in international production networks, and early learning by doing. It is only in combination that these factors can possibly create an advantage that holds into the future.

Since processes of local knowledge development or input-output relations are unimportant for private labels, the attachment of trade created by these firms seems to

be very vulnerable. Changes in value chain organization, barriers to trade, or decline in the specificity of conventions needed for transactions with production areas, can weaken or strengthen the role of private label suppliers. For example, as we have seen in this chapter, EU legislation, with respect to traceability of products, has made control and supervision of the value chain much more important. This strengthens the role of private label companies as supervisors of production. Another change in the value chain at the demand side is the increased demand for fashionable clothing and ever shorter circulation times of collections. It makes the ability to add flexibility and speed to the value chain even more important than before. Different strategies are possible for fulfilling these requirements. One strategy is to bring production closer to consumer markets, which makes time to market shorter. This strategy has made eastern European countries more popular as production areas. Improvement of logistic management is another, through integration in the network that makes closer planning and supervision of transactions possible. This is what many brands and retail organizations do when they bypass private-label firms. It has become much easier for them to do so since, as production areas in Asia develop and adapt to – in the vocabulary of the communities-of-practice-literature – Western communities of practice and working routines, they become much more accessible. Doing business directly with manufacturers abroad has become a real option for western brands and retail organizations. The generation of Chinese that do not speak English soon will be replaced by a younger generation of English speaking entrepreneurs, explained a representative of a Chinese manufacturer in the Netherlands. This will make it even easier for Europeans to trade directly with Asia without the help of European intermediaries. Dutch private labels have already felt this development strongly through integration of production organization by brands and retailers. Customers have been lost, many firms have had to close down and only larger private labels have been able to stay in the game (Scheffer and Duineveld, 2004). That being said, private labels in business at the time of the research were quite positive about the future since they expected many companies would use private label suppliers in the future.

> *"With internet everything is out on the street, prices in any case. But now, that's the important point: how do you get the goods here? That's often too risky, but that also depends on your desired volume."* (PC 11)

Doing business abroad might have become easier in some places, but prices often also increase as places became better known, so there are always new places to discover and develop.

> *"I work a lot with producers in a province far away in mainland China. Over there they can make a Tenson jacket for only 7.50 Euros. My clients do not know that. They only know the prices of the Chinese coast provinces where you would pay like 10 Euros for the same piece of clothing. So when I tell them, I can make it for 13 Euros, and, to please, even a bit less, my clients are very eager to place an order."* (PC 11)

Dutch companies try adapting to the situation by making even better designs, increasing investment in foreign markets, and starting new types of clothing lines (e.g. start to do tricot besides woven fabrics) (PC 8). Other companies start managing company wear instead of fashion and sports (PC 21), or they start their own brand (PC 19). Operating in high quality segments and increasing flexibility in production are also strategies for avoiding loss of work when retailers consider integration of private label production in their own company (PC 7, PC 33).

Italy and Spain are now in a transition from producing country to organizer of production. Italy and Spain seem to be in a favourable position to take a lead as private label suppliers since they have much more knowledge of clothing production and are often seen as superior designers. In the market for highly fashionable clothing in which design counts, this could be an advantage. However, knowledge of trading and operating in different countries is also very important. For this, experience counts and that is something Dutch suppliers already have and Italians and Spanish suppliers still have to develop. Besides this, much depends on the ability of Spain and Italy to increase flexibility of the chain regarding logistics and distribution. In Italy this is not something that is very well developed (Doeringer and Crean 2006). On the contrary, in the Netherlands logistics gets a lot of attention. One example is the recent research on the possibilities of improving logistics and supply chain management in the fashion supply chain (Huele and Huigen, 2008). Efficient distribution and logistics are also very important to the attractiveness of the Netherlands for European distribution centres of clothing as we will see in the last section.

Therefore, the development of trade in clothing and its attachment to specific places is the result of multi-scalar processes of supra-national (trade) regulations, national (trade) policies, demand conditions, developments (e.g. the 1963 wage and subsequent outsourcing), and in-company processes of learning by doing. Until now, the Netherlands has remained an important private label supplier through these path-dependent processes. Changes in industry context like new production centers and increased demand for design sophistication could create opportunities for brands and retailers or foreign private labels to assume the role of Dutch private labels in linking overseas production areas to European demand. Time will tell whether or not and to

what extent these foreign competitors will be able to take advantage of these opportunities.

5.7 European distribution centres

This chapter has mentioned the role of the Netherlands in the international private label clothing trade. However, European distribution centres are also important Dutch clothing re-exporters. To finish this chapter, I will now turn shortly to them.

5.7.1 Logistic services

A role as distribution centre includes more than only transhipment, storages, and re-packaging. When clothing enters Europe from a container, it often gets *reconditioned* to make the clothing ready to sell. This means that clothing is transferred from boxes to a clothes hanger and further transported as hanging clothing. For that, European distribution centers for clothing need the service of specialized reconditioning firms. However, the presence of these services does not seem to be a decisive factor in the process of location choice. When a player is big enough these services will be developed anyway. A clear example of this is with M&S fashion, which wanted to stay in Amsterdam where the roots of the company lie. M&S outsourced logistics to TNT-fashion, who developed a logistics centre and reconditioning facility in Amsterdam, though TNT-fashion already has many operations in the east near Oldenzaal. Besides reconditioning, logistic service providers often provide inspection functions, as one of the interviewees mentioned (PC 12). However, as has been discussed earlier, the inspections logistic service providers are willing to provide are limited since inspection can imply guarantees on quality they may not be willing to give.

5.7.2 Location decisions of European distribution centres

For European distribution centres, explaining their location in the Netherlands would lead us to the 'classic' story of good accessibility to European markets and the large port of Rotterdam, where large amounts of clothing from Asia enters Europe.

> *"It is well known that the Netherlands is the logistics country in Europe," asserts Henk Miltenburg, Director of Timberland's EDC. "In Enschede, we have access to outstanding infrastructure in terms of telecommunications, airports, roadways and harbors. You name it, we have it here."*(www.nfia.nl, accessed 25-4-2008)

> *"Ireland is a good example. They have experienced enormous development. But now that wages have increased, people have begun realizing that lower wages are being outweighed by the poor geographical location of Ireland."* (PC 34)

National legislation is another issue important for the location of European distribution centres in the Netherlands. Perhaps legislation alone is not what really makes the difference, since in many respects European legislation has been harmonized. It is often mentioned that what really counts is the way in which customs officers work. This seems to be especially important for logistic service providers and the location of European distribution centers. An important issue here is how custom-friendly customs operate.

> *"You know, you can locate in Italy or France, or any other country, but, the further south you go, the more difficult it becomes in terms of working. Take Italy. The whole month of August not much work gets done. That is precisely at the height of a season!"* (PC 34)

> *"The Netherlands has an attractive logistic climate. Customs are very cooperative, we have very good infrastructure with a large seaport and airport, so, that plays a role. […] But France? France is too bad. They have an old-fashioned system of civil servants. Customs in France really do not help. Lucky enough for the Netherlands Le Havre is a disaster. Paris is a disaster as an airport."* (PC 14)

Also the efficiency of paperwork at customs plays a role.

> *"Look, you need good logistics facilities, but good logistics are possible anywhere. At this point paperwork becomes most important. The moment that my goods arrive at the port I have to organize transportation and bring those goods to my customers. It is then important that the paperwork at the border quickly gets settled."* (PC 17)

Besides the paperwork and efficiency of customs, tax regulation is also important.

> *"'(…) the regulations that customs has in the Netherlands are very friendly to foreign companies. Although it's one Europe now, certain rules get observed differently in different member states. Dutch customs observe these regulations in a way that is not very unfavourable to transaction values and*

> *those sorts of things. That's in fact the principal motive (for the location of this firm in the Netherlands, m.l.)."* (PC 29)

Lastly, when it comes to the location of European distribution centers, government collaboration plays an important role for decisions regarding a European distribution center of two companies, one in the Netherlands, and one in Belgium.

> *"In fact, the City of Amsterdam deserves our compliments; we received all the cooperation from the authorities we needed when applying for permits and they helped us by speeding up procedures."* (www.ez.amsterdam.nl, accessed 22-09-2009)

> *"We got a lot of cooperation from the Belgian government. There was quite a lot of unemployment at that time (10-12 years ago, m.l.), so they really wanted us to locate there."* (PC 47)

5.7.3 Relations in the value chain and attachment to the Netherlands

Although distribution of clothing seems to be a straightforward task easily organized through market transactions, in practice foreign brands organizing European distribution in the Netherlands seem to have a relationship with their logistic service provider that can best described as modular with relational tendencies: brands can shift to new service providers, but in most cases there are long-term partnerships and investments in relations with their customers they prefer to call partners (PC 20, PC 34). This stands in sharp contrast to our expectations on the governance of distribution functions in highly integrated value chains. However, trust is important in the relations between clothing firm and logistic service providers, as a large specialized logistic service provider in fashion in the Netherlands explains:

> *"In the textiles and fashion businesses personal relations are most important, and trust as well. Recently I recieved the trust of a company I never did business with before, I haven't even met them face to face. I only explained how we think we can work for them. And, well, apparently this conversation created enough trust that they decided to give me the job. We will see. This is not just a one-time job."* (PC 34)

> *"We do have agreements on price for longer or shorter periods, but we do not work with contracts. Look, a contract, whether made after a tender or not… you can always get rid of each other, whether you have a contract or not. So*

> *we prefer to just do our utmost, and a bit more. Then you keep on working with each other, not really as provider and customer, but rather in partnership. We may also advise our customer to work with one of our competitors if we think that would be better for them. I know, this sounds like an advertisement, but there is a big difference with the high-tech world. This is an incestuous circuit."* (PC 34)

With personal relations and trust being so important in the provision of logistic services, reputation seems to play an important role. The early outsourcing of clothing production by Dutch clothing firms might have given the Dutch a good reputation as logistic service provider for fashion and clothing firms and might explain why the Netherlands has become a large clothing distributor. For example, TNT-Fashion, a large European player in fashion logistics, is located in Oldenzaal where its predecessor was located. This predecessor started as a logistics service provider to local firms that outsourced their production and needed help organizing production. From this point onward the firm developed into a European, even worldwide logistics provider for clothing firms. Nowadays TNT-Fashion offers logistics services to many global fashion brands that have chosen the Netherlands for the location of their European distribution centre. The early development of fashion logistics services in the Netherlands, the strong relations companies often have with their logistics service provider, and the general attractiveness of the Netherlands for European distribution centres seem to be important factors explaining the Dutch role as a European distributor of clothing. To conclude, although, as expected, logistics facilities, physical, and juridical infrastructures are important assets attracting fashion distribution to the Netherlands, contrary to our expectations also relational assets seem to be of great relevance in this case.

Chapter 6

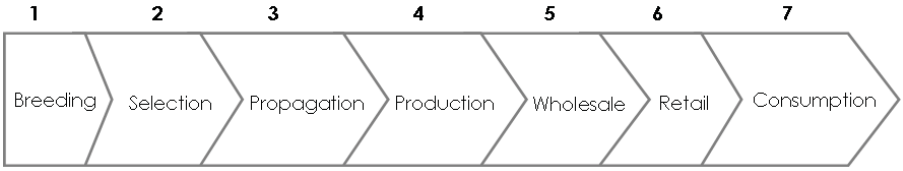
Cut flowers

The advantage of clustering for the trade and distribution of perishables in a value chain with differentiated production and demand

'The Netherlands has a lot of knowledge in the field of flower production. Trade's in our veins, we speak foreign languages, we set out, we're enterprising. But half of our business is logistics. […]What is important is the knowledge of flower production and logistics. It's the combination that makes us strong. […] And it is, of course much easier to share that knowledge when you're close to each other. They've tried to bring production to the East of the country, but that isn't always easy. It's nothing, a one hour drive; however, you're out of the cluster which makes it much more difficult to keep your knowledge up to date.' (PF 51)

When someone buys a bunch of flowers at the local flower shop or supermarket, the cut flowers in the bunch have already had a long journey in the value chain (see Figure 6.1). The journey starts with the breeding of new kinds of flowers, their selection and propagation. It can take breeders years to come up with a new flower that can meet the demands of producers, wholesalers and consumers. A breeder sells his flower plants as cuttings to growers, who sell their cut flowers directly or through an auction to wholesale traders or large retailers. After that, the cut flowers arrive at the consumer.

Figure 6.1: The value chain of cut flowers



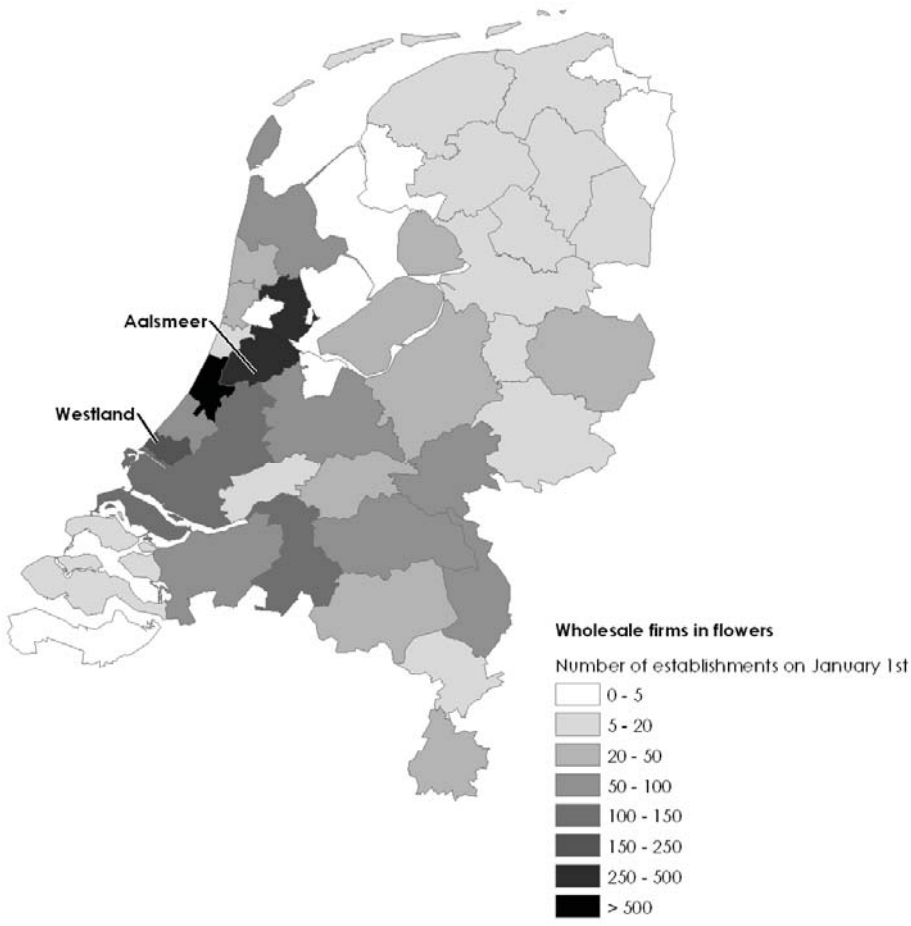
For a long period, the Netherlands has been leading in all stages in the value chain of cut flowers. Breeding, selection, propagation, production, and trade, were concentrated in the Netherlands. However, in the past decade many changes have taken place in the chain. The value chain of cut flowers has changed from a very concentrated cluster into a chain with worldwide links. Whereas historically the Netherlands has mainly been an exporter of domestically produced flowers, recently more and more flowers produced abroad (often by Dutch emigrants) are sold through the Netherlands, turning the country into a global floral marketplace node. An important expectation this chapter starts with, is that trade in this marketplace very much depends on and profits from the cluster of the flower industry that is present in the Netherlands. Within this node many types of flowers are traded, as we will see in this chapter. Also many different types of value chain organizations make use of traders from this node. However, it is expected that the role of this node is different for different types of flowers, for example enabling buying at stock in the Industrial World and at order in the Market World. Also the knowledge that traders need for successful operation is expected to be different in each world of production. With respect to coordination and control of the chain, control is expected to be mainly related to the marketplace and not so much to the traders in the node as the value chain of flowers is expected to be largely disintegrated, consisting of independent players when the auction is used.

As we will see in this chapter, the role as marketplace node attracting flowers from all over the world is under pressure due to the increasing importance of large retail organizations who directly buy flowers from growers, bypassing Dutch auctions and Dutch traders. However, as we will see ahead, .scale economies in flower logistics and local knowledge clusters of flower product development make up strong territorialized assets that keep flower trade and distribution attached to the Netherlands.

6.1 The cluster of flower growing, breeding, and trading in the Netherlands

The Netherlands is the largest producer of flowers in the world and also the most important creator of new varieties. Most of the wholesale companies are located in the production cluster of the west: Westland and around Aalsmeer (see Map 6.1).

Map 6.1: The number of wholesale traders in flowers (SBI-code 5122) by corop-region in 2008



Source: map created with data from StatLine (Statistics Netherlands, www.cbs.nl)

The Dutch flower cluster consists of companies in every link of the value chain (see Figure 6.1), as well as supporting organizations. Here Dutch cooperative flower auctions play an important role. These auctions were set up by the growers almost a century ago

in order to strengthen their position vis-à-vis traders. Almost all Dutch growers participate in these auctions and as a member have the obligation to sell one hundred percent of their production through the auction organization. The largest auction, Flora Holland, has 5200 member-companies of which less than five percent are from outside the Netherlands. This auction was created in 2009 as the result of a merger between the two largest Dutch auction organizations: Flora Holland and the Aalsmeer Flower Auction (Verenigde Bloemenveiling Aalsmeer)[34]. The locations of the new Flora Holland auctions are shown in Map 6.2.

The concentration of supply at the auctions has made Dutch auctions important trade centers. The auctions are however, just one example of strong organization in the Dutch floral industry. In the fields of research and development as well as promotion of Dutch flowers there is much joint action at the national and local levels.

The national government stimulates the sector with the DLO (Service for Agricultural Research), financed to a large extent by the Ministry of Agriculture, Nature, and Food Quality and is engaged in fundamental and application-based research as part of the Wageningen University. This institution is a very important source of knowledge in the sector, as are the regional test-stations and research centers financed by the private sector, the Ministry of Agriculture, Nature, and Food Quality, and the *Productschap Tuinbouw* (Alles, 1998). The *Productschap Tuinbouw* is a statutory industrial organization for the horticultural industry. It offers all kinds of services to the sector: information on markets, labor laws and rules, schooling, but also the possibility to support research projects in the sector, often with Wageningen University. The results of such research are freely available on the internet (www.tuinbouw.nl/), but often in Dutch, making them widely available to the Dutch cluster, but more difficult to use for foreign growers. Another important national organization is LTO – the Dutch Federation of Agriculture and Horticulture, an entrepreneurs' and employers' organisation. The organization lobbies for their interests at a national (The Hague) and international (Brussels) level. They also give their members individual support and advice on issues such as commerce, real estate, insurance, and management. Also PlantumNL operates at the

[34] In 2007 the two largest auctions of the Netherlands, FloraHolland and Bloemenveiling Aalsmeer, decided that a merger would be the best way to strengthen the position of the auctions as the central market place for flowers and potted plants in Europe. The increase in foreign production and sales of flowers bypassing the Netherlands has been felt as an important threat to the position of the Dutch auctions. The auctions thought they could better counterattack these trends by joint action and strategy. The auction, for example, will enable auctioning of flowers of all branches at the same time before one clock, the use of just one auction system, and standardization of operations. Enlarging of the marketplace also enables producers with very large volumes to bring products to just one marketplace, without creating an excessive supply at just one smaller site. The concentration of purchasing power created by the merger also enables very specialized growers to reach the largest possible potential of buyers from just one site. Furthermore, the merger marks an end to the competition between the direct sales offices of the different auctions. As of January 2008 this merger became effective. The new FloraHolland auction has three export branches: Aalsmeer, Naaldwijk, and Rijnsburg, as well as three regional branches: Bleiswijk, Venlo, and Eelde (Stuurgroep Fusie, 2007).

national level. This is the Dutch association for breeding, tissue culture, production and trade of seeds and young plants. Issues important for PlantumNL are the protection of intellectual property rights for breeders of new varieties, regulations for the use of pesticides, biotechnology, organic farming, international trade, phytosanitary issues, research to improve varieties and breeding and ennobling techniques.

Map 6.2: The locations of the auctions of Flora Holland

Besides all these national organizations, there are many smaller scale product-based excursion and study-groups. These are created through informal contacts through the LTO. Growers exchange information on growing specific varieties, problems they may encounter, and solutions they have found. Growers visit each others greenhouses in these groups. Sometimes study-groups use the LTO services for research on issues they

encounter (Alles, 1998). Although this research exchange is very common in the Netherlands, Dutch producers in Africa do not share knowledge and are true rivals to each other (PF 68, Grower with production in Africa). Also, knowledge in the field of ennobling exchange is much more an exception: *"the closer one comes to product knowledge, the less openness is present"* (Alles, 1998, p. 49). However, growers are now moving towards collaboration, as the *Dutch Creations* group of breeders shows. They collaborate particularly on the marketing side.

> *"We go directly to supermarkets and put them in direct contact with growers who supply these kinds of flowers. The idea is to enlarge the demand for our varieties, in the end creating a Dutch bouquet. We do marketing together, have commercial meetings of sales managers and help each other in different markets. We use our networks to introduce our sales people to each other and we do some promotion together. The Hortifair35 is still important for that."* (PF 59)

Knowledge is also transferred from growers to breeders, and from breeders to wholesalers in the Dutch cluster. Breeders can use information gained from Dutch growers to give advice to their clients abroad.

> *"We visit our clients in the Netherlands once a year and sometimes even every four weeks. Abroad you can score with knowing how to solve problems. In the Netherlands the know-how of growers is generally higher than that of our sales people. So we learn from the growers in the Netherlands and use that abroad."* (PF 75)

Breeders also use the auction to inform wholesale traders. They set products in the showcases at the auction to promote a new variety while sales personel of breeders go to the auction and have a chat with growers and traders. Breeders have a look at what is happening at the auction. If a variety gets high prices at the auction, breeders receive higher demand for that variety.

All in all the Dutch cut-flower industry clearly operates as a cluster with all kinds of formal and informal, horizontal and vertical knowledge exchanges in the chain and vertical local input-output relations between ennoblers, growers, wholesale traders and many supporting organizations.

[35] The Hortifair is the main exhibition for the world flower industry. The whole flower industry is present here, from companies that sell soil and fertilizers, to ennoblers, breeders, growers, and traders. Also flower packaging firms are present, as well as specialized logistics service providers. Besides that, some countries and production regions have stands at the fair. It is an annual event in the RAI exhibition and convention centre in Amsterdam.

6.2 The position of the Netherlands in the international trade of cut flowers

6.2.1 A world hub in flower trade

In the 1990s one out of every five flowers in the world was produced in the Netherlands while three of every five flowers had a Dutch passport, meaning they were traded through a Dutch citizen (Maharaj and Dorren, 1995, p. 4). Table 6.1 shows that in 2005 the Netherlands had almost sixty percent of the share of total non-European flower imports of fifteen European countries together.

Table 6.1: The import of flowers into the EU-15 countries from countries outside Europe (EU25) in 2005

	Import value of flowers[36]	**Share in EU15 imports of flowers from outside Europe**
	(millions of Euro's)	***%***
Netherlands	404.9	57,8
United Kingdom	142.6	20.4
Germany	53.2	7.6
Spain	27.5	3.9
Italy	23.1	3.5
Belgium	16.9	2.4
France	12.2	1.7
Sweden	9.7	1.4
Austria	4.4	0.6
Greece	3.6	0,5
Portugal	1.6	0,2
Ireland	0.5	0,1
Luxembourg	0.1	0,0
Denmark	0.1	0,0
Finland	0.1	0,0
Total EU15	700.6	100

Source: Eurostat external trade statistics, available at www.pp.eurostat.ec.europa.eu

Many of these imports went through the Netherlands to other European countries, as can be seen from data on intra-EU flower trade. Table 6.2 shows that most European countries, when purchasing flowers within the EU, buy flowers from the Netherlands. For example, 97 percent of the flowers from other European countries on the German market are bought in the Netherlands. Not only do neighboring countries import most flowers from the Netherlands. Even countries like Finland, Italy, and Spain

[36] For this data HS code 0603 is used. This heading includes cut flowers and flower buds suitable for bouquets or for ornamental purposes: fresh, dried, dyed, bleached, impregnated or otherwise prepared.

import more than 90 percent of their intra-European flowers from the Netherlands. This data shows the dominance of the Netherlands as the European marketplace for cut flowers.

Table 6.2: The importance of import of flowers from the Netherlands in intra EU-25 trade in 2005

	Import of flowers from EU25 countries	Import of flowers from the Netherlands	Share of Dutch imports in EU25 imports
		(millions of Euro's)	%
Germany	728	704	97
Italy	147	142	96
Finland	17	16	95
United Kingdom	621	589	95
Belgium	90	86	94
Denmark	81	76	94
France	415	382	92
Spain	36	33	91
Sweden	49	44	91
Greece	19	17	90
Austria	83	71	86
Portugal	14	12	86
Luxembourg	7	5	73
Ireland	35	25	73

Source: Eurostat external trade statistics, available at www.pp.eurostat.ec.europa.eu

With respect to imports of flowers to the Netherlands, Africa, Latin America and Israel are the most important exporters of flowers to the Netherlands. European countries only play a marginal role in the Dutch imports (see Table 6.3).

In export flows of flowers, the hub function of the Netherlands is clear. When we look at exports to countries outside Europe (EU25), more than 90 percent comes from the Netherlands (Table 6.4). Of course, this figure partly reflects the large amount of exports domestically produced in the Netherlands, but it also shows the amount of re-exports of previously imported goods.

The list of destination countries to which the Netherlands exports flowers, is very different from the list of sourcing countries. Table 6.5 shows the importance of European countries in Dutch floral exports. Germany, the United Kingdom, France and to a lesser extent, Italy, are the main destinations of Dutch flower exports. Still non-EU countries also play a role. Russia and the United States each receive about three percent of Dutch exports. All this data shows that the Netherlands is a clear hub in flower trade between Europe and the rest of the world.

Table 6.3: Import of flowers to the Netherlands in 2005

	Import in the Netherlands *(millions of Euro's)*	Share in Dutch imports %
Total	464.0	100
Kenya	168.0	36.3
Israel	59.3	12.8
Ecuador	51.8	11.2
Zimbabwe	29.5	6.4
Colombia	25.7	5.6
Uganda	21.8	4.7
Spain	13.4	2.9
Zambia	13.1	2.8
United Kingdom	9.5	2.0
Italy	8.9	1.9
Germany	7.7	1.7
South Africa	7.4	1.6
Belgium	6.6	1.4
Ethiopia (incl. Eritrea)	6.1	1.3

Source: Eurostat external trade statistics, available at www.pp.eurostat.ec.europa.eu

Table 6.4: The export of flowers from EU-15 countries to countries outside Europe (EU25) in 2005

	Export value of flowers *(millions of Euro's)*	Share in total EU15 exports to outside EU 15 %
Netherlands	336.7	89.3
Italy	16.0	4.3
Germany	15.0	4.0
France	6.1	1.6
United Kingdom	0.6	0.2
Spain	0.6	0.2
Denmark	0.4	0.1
Ireland	0.4	0.1
Greece	0.3	0.1
Austria	0.3	0.1
Finland	0.2	0.1
Sweden	0.1	0.0
Belgium	0.1	0.0
Portugal	0.01	0.0
Luxembourg	0.01	0.0
EU15	376.9	100

Source: Eurostat external trade statistics, available at www.pp.eurostat.ec.europa.eu

Table 6.5: The most important export areas for cut flowers of the Netherlands in 2005

Destination of Dutch export	Export value of flowers *(millions of Euro's)*	Share in Dutch exports %
All countries	2538.4	100
Germany	715.7	28.2
United Kingdom	512.5	20.2
France	342.3	13.5
Italy	144.7	5.7
Russia	83.9	3.3
United States	76.1	3.0
Switzerland (incl. LI)	74.3	2.9
Sweden	73.0	2.9
Belgium	70.7	2.8
Denmark	65.7	2.6
Austria	64.5	2.5
Spain	37.3	1.5
Ireland	32.6	1.3
Poland	28.49	1.1
Norway	25.8	1.0

Source: Eurostat external trade statistics, available at www.pp.eurostat.ec.europa.eu

6.2.2 Changes in the flows that go through the Netherlands

Africa and South America are upcoming production areas for cut flowers (see Table 6.6). Although Israel is still a very important exporter to the Netherlands, it is clear that a country like Ecuador, which increased its share of exports to the Netherlands six times between 1995 and 2005, will probably bypass Israel in importance. The growth of sales from these new producing countries is partially realized outside of Dutch auctions. This poses a threat to Dutch dominance. For example, already nearly half of Kenyan flower production is sold without the intermediation of Dutch auction systems (Stuurgroep Fusie, 2007).

Table 6.6: The largest non-EU flower exporters to the Netherlands

Country	1995 *(volume, x 1000 Kg)*	2005 *(volume, x 1000 Kg)*	Growth 1995-2005 %
Kenya	17 224	51 914	200
Israel	17 642	19 192	10
Ecuador	1 712	12 055	600
Zimbabwe	7 167	11 956	70
Colombia	2 553	5 535	120
Other	5 919	14 596	150

Source: HBAG (2007)

The turn-over of imported cut flowers at Dutch auctions is around twenty percent of the total turn-over of cut flowers (VBN, 2007), and shows slightly higher growth in the past few years than total turn-over (see Table 6.7). In volume terms, thirty percent of all flowers sold through Dutch auctions comes from imported sources (Stuurgroep Fusie, 2007). This difference between turn-over share and volume share indicates that imported flowers have relatively lower prices than domestically-produced flowers at auction.

Table 6.7: Turnover of cut flowers at the Dutch auctions

	2004	2005	2006	Growth 2004-2005	Growth 2005-2006
		(thousands of Euro's)			%
Turnover imported cut flowers	481 335	498 753	530 898	3.7	6.5
Turnover cut flowers	2 329 575	2 400 582	2 500 442	3.0	4,1
		(share of imports in turnover)			
Share of import in turnover	20.7	20.8	21.2	+0.1%	+0.4%

Source: calculated with data from VBN (2006)

The growth of African and Latin American countries in flower production has mainly been stimulated by international policies. One very important policy has been the first Lomé Convention of 1975. This convention eliminated import duties for agricultural and mineral products from 71 African, Caribbean, and Pacific Rim countries. This stimulated floral exports to the European Union. Fifteen years later some South American countries important for Dutch flower imports like Colombia and Ecuador became part of the treaty. Also, structural adjustment policies stimulated the development of export-oriented horticulture. The development of flower exportation is seen as a good source for generating foreign exchange to pay international debts many African countries have (Maharaj and Dorren, 1995, pp. 45-46). The flower growing industry in these countries has been pursued by many foreign investors and Dutch and other foreign growers play an important role (Maharaj and Dorren, 1995, interview notes).

Changes have also taken place in the consumer market. New market areas have opened up, especially in Eastern Europe (see Tables 6.8 and 6.9). All the while, the market as a whole has become more differentiated. On one hand, demand for more bulky kinds of products has grown as flowers are increasingly sold at non-specialized retail outlets like supermarkets and petrol stations. On the other hand, demand has become more diverse since tastes differ in each geographic market area. In Eastern Europe, consumers generally like to buy flowers with larger buds than in the

Netherlands. In the Netherlands people tend to buy flowers with buds that haven't opened. In the US generally offering your host/hostess a bunch of buds instead of open flowers is frowned upon.

Table 6.8: Strongest growing export areas for cut flowers traded in the Netherlands in 2005-2006

Country	Value 2005	Value 2006 *(millions of Euro's)*	Growth 2005-2006 %
Belarus	3.3	4.7	42.6
United Arab Emirates	3.7	4.9	33.4
Russia	78.5	98.9	25.9
Ukraine	15.2	18.8	23.1
Romania	12.8	15.6	22.6
Poland	49.2	59.7	21.5

Source: HBAG (2007)

Table 6.9: Strongest growing export areas for cut flowers traded in the Netherlands in 2006-2007

Country	Value 2006	Value 2007 *(millions of Euro's)*	Growth %
Moldavia	0.7	4.3	525.9
Romania	15.6	27.9	78.1
Lituania	6.2	8.9	42.4
Latvia	7.9	9.9	25.7
Croatia	5.0	6.2	25.0
Finland	16.8	20.3	20.3

Source: HBAG (2008)

To summarize, the most important trends in the Dutch flower trade are as follows: (1) increasing trade in flowers grown abroad, mainly from Africa and Latin-America (2) increasing diversity in consumption resulting from more geographically diverse markets and sales channels (3) more and more direct sales from growers to wholesalers and retailers without the use of Dutch auctions.

6.3 The worlds of production of flowers and the role of Dutch traders

Before I enter into a discussion of the Dutch in the flower trade, it is important to know more about different kinds of flowers produced, as well as the worlds of production in which the flower trade operates. This will help illucidate the embeddedness of the Dutch

trade role in the three different kinds of value chains of cut flowers that I will discus ahead.

6.3.1 The Intellectual World of flower trade

The Intellectual World of the flower business is one in which new flowers are bred and propagated. In this world the Netherlands is very important as a creator and producer of new varieties. Increasingly, however, the breeding and propagation of new varieties is being relocated to African and Latin American countries. An important reason for this is that it enables Dutch propagators to select varieties that grow well under climate conditions present in these countries, rather than in Dutch greenhouse conditions that can be quite different. African and South American markets have become large enough to make creating special climate-suited varieties financially viable. Furthermore, propagation and the creation of cuttings is a labor-intensive activity that can be done at lower costs abroad. In the Intellectual World ennoblers try to come up with interesting new varieties for the market. The process of ennobling takes a long time: seven years is no exception for developing a strong new variety, up to fifteen for a tulip or lily.

Figure 6.1: A showroom for new varieties of carnations: bridging the gap between the Intellectual and the Market World

Naturally, ennoblers try to commercialize their new varieties for return on investment. In this process they must ensure growers will pay royalties to use their varieties and will not simply propagate these varieties without paying the appropriate fees. Through royalties and special contracts ennoblers try to control distribution of the new product. Sometimes they first try organizing trade in a more closed system where they work with preferred suppliers (growers) for specific markets with limited supply of the variety and thus, high return. This way prices will stay higher and the ennobler will ensure the grower will pay royalties for the use of his breed. Although the trade in this world mainly revolves around new varieties to growers in the form of cuttings or bulbs (see Figure 6.1), it is important for other worlds since new varieties trickle down into the Market World and eventually the Industrial World. Since the Netherlands is the epicenter of new varieties, with many ennoblers and breeding groups, it is also the place where the most knowledge of new trends and developments in flower varieties is available.

6.3.2 The Market World in floral trade

The Market World is where flowers are grown and sold that "simply" follow trends. Not only flowers are important here, trends in flower decoration and arranging also play a role. It is a world where new flower fashions are created by a mix of new floral varieties, packaging, and arranging techniques (see Figure 6.2).

Figure 6.2: The Market World of flowers: fashionable flowers and trends in arrangement at the Flora Holland trade fair

Figure 6.3: Dutch Creations at the Hortifair 2008: branding Dutch flowers as a highly fashionable product

Marketing and advertising are not very well-developed in the flower sector as budgeting for these activities is usually quite low. Whereas marketing budgets between ten and thirty percent of turnover is normal for many branded products, in the flower sector a marketing budget of only two percent of turnover is standard (Ziegler, 2007, Groot Handelsblad, 2007h). It is not surprising that floral marketing is still in its infancy when we take into account that the international producers' organization AIPH did not allow advertising at trade fairs up until the beginning of the 1980s. Until then only showing flowers and giving technical information on the breed was permitted (Groot Handelsblad, 2008f). Marketing and branding are now becoming increasingly important, although sales margins remain low. In 2008 Dutch top model Frederique van der Wal introduced the world's first flower brand, *Frederique's Choice*. Ennobler cooperation has taken place since 2006 under the name *Dutch Creations.* Participants position their flowers as highly fashionable products, as shown in Figure 6.3, the Dutch Creations stand at Hortifair 2008. Increased attention given to marketing also comes to the fore in the launching of a new magazine in 2008 *SierteeltMarketing* (Floriculture Marketing), a glossy sales and marketing magazine for all companies operating in the floriculture chain.

Box 6.1: The Flower Council of Holland

The Flower Council of Holland

Cooperation in the promotion of flowers

The Flower Council of Holland (FCH) is a statutory industrial organization for the marketing and promotion of flower products from the Netherlands. Growers and wholesalers pay mandatory support fees to a special fund: *Fonds Algemene Vakdoeleinden Bloemkwekerijproducten* (the Fund for general trade purposes – floriculture products). This is a national fund collected by the statutory industrial organization *Productschap Tuinbouw*, a national organization for the horticulture industry. This kind of statutory industrial organization also exists for other industries and is part of the Dutch corporatist economic structure. Membership to these industry organizations is obligatory for companies, but they are only created (and ended) by the initiative of a representative portion of employers and workers organizations in the sector itself (www.ser.nl, accessed 16-04-2009).

The Flower Council of Holland creates general promotional material that wholesale traders can use when trading abroad. They also organize presentations at trade shows and support overall trade. The *Holland Flower Magazine* of the council is printed four times a year for florists abroad in order to inform and inspire them with information on flowers and plants from Holland. Furthermore, the Council has a general international website, and special versions for Germany, Spain, France, Russia, the UK, Ireland, and the US. Information and news on the Dutch flower sector with accompanying photographs of flowers and flower arrangements, packaging, and gift ideas promote the Dutch floral sector and flower sales (www.flowercouncil.org, accessed 16-04-1009).

Although there are still portals for different countries at the Flower Council of Holland website, recently they have shifted their strategy from country-based approach to one based on trade channels (wholesale and specialized retailers; large retailers; chain stores and do-it-yourself shops). The idea behind this shift is that it enables concentration, centralization and greater efficiency in international marketing activities. Also, since retailers are operating in increasingly international ways, they will find the same approach from Dutch wholesalers in each country (Groot Handelsblad, 2008c).

Besides generic flower information and promotion, the flower council, together with wholesale traders, organizes dedicated workshops for foreign florists and wholesale traders. Such workshops have subjects like shop layout, flower arranging, improving flower care and quality, and sales training. An example of this is the Danish Blomster Fest (Flower fest). A Dutch trader worked with the Flower Council of Holland to help a large Danish retail customer to develop sales and promotion activities around this holiday. *"The Flower council advised on shop-layout, decoration, and staff dressing. They also delivered input for the lifestyle magazine which linked the promotional activities in the shops"* (Groot Handelsblad, 2007e). This not only stimulated sales of the Dutch wholesaler, but also reinforced the relationship between the Dutch trader and Danish customer (Groot Handelsblad, 2007e).

Not only do wholesalers act as bridges between producers and retailers for new flower trends and varieties. Organizations like the Flower Council of Holland play a role as well (see Box 6.1: The Flower Council of Holland). This council organizes all kinds of flower-related activities abroad together with traders. This includes sales trainings to retailers, offering promotional material, and giving advice on store layout. Also through its international website, the Flower Council of Holland gives inspiration to traders and retailers abroad with ideas on arranging, packaging, and gifts.

The auction plays a role in marketing flowers by stimulating the sales of member growers. The auction can for example, visit foreign wholesalers to show the qualities of a specific flower species or talk to exporters and retailers. Teun van Turnhout, a product manager at the Aalsmeer Flower Auction, explains how the auction tries to show the trendy possibilities of forced shrubs (snow balls, lilacs, forsythia):

> *"We have asked a leading florist to create some nice bouquets with forced shrubs. We've put pictures of these bouquets on flyers that we distribute amongst florists and wholesalers. Thus florists and purchasing agents can get ideas on how lilacs and snowballs can be presented in an eye-catching way."* (Bladeren, 2007)

The Market World of flowers also has clear links with the value chains of furniture and home decoration: flowers are part of the display and fashions in these chains. It is mainly through home decoration and lifestyle magazines that flower fashions are communicated to the broader public (Ziegler, 2007). The Flower Council of Holland, for example, supports publications on flower trends in many Dutch lifestyle, home decoration, and gardening magazines (www.flowercouncil.org, accessed 16-04-2009).

6.3.3 The Industrial World in flower trade

The Industrial World of flowers is the world of large production volumes not fashionable by themselves. This is the world of cut daffodil bunches you will find every spring laying in the corner shop. It is the world of simple red roses sold at the supermarket. Volumes are high and sales don't follow floral trends. In this world it is important that trade enables redistribution of flowers from large monoculture growers into smaller batches ready for retailers. We see varieties here that have already been on the market for a while and therefore, are less expensive to breed (lower royalties). These kinds of flowers are more frequently grown by growers abroad who cannot easily obtain the newest varieties. However, cut flowers from bulb species like tulips and narcissus

mainly come from the Netherlands, the UK, and France, as they need specific physical conditions for their growth[37].

6.3.4. Flower trade in the Interpersonal World

The Interpersonal World for flowers is a bit more difficult to define. It supposes that there is a specialized input to serve a dedicated market. The problem is that in the production process of flower varieties and flower growing it is impossible to dedicate efforts to individual or dedicated categories. The breeding process is much too complicated for that. Breeders can only really focus on creating varieties through cross-breeding for traits like larger blooms, taller stems or more longevity. However, at the very end of the value chain, dedication becomes possible, as the arranging of flowers can take place for special events like weddings and other festivities. Then very specialized inputs like special flower varieties, creative knowledge on arranging flowers and the characteristics of varieties are used to serve a very dedicated market. Wholesalers can play an important role here, as they often have a much broader view of the market, including varieties available that individual florists have. An example of dedication and specialization in the interpersonal world is given by wholesaler Metz, who has very strong relationships with its customers.

> *"Recently we received a piece of apparel from the wedding dress of one of our customers asking if we could find a nice flower to go with the dress. That's how our customers do business with us."* (Groot Handelsblad, 2007g, p. 9)

Thus, this is a very dedicated and specialized type of flower trade: dedicated because a flower is bought and sold for an individual final consumer, specialized since the knowledge needed to find such a flower is focused and only present at the Dutch wholesale trader operating within the flower cluster of the Netherlands, and apparently not present at the retailer to whom he sells.

6.4 Three types of flower value chains: the producer-driven chain

Three different types of firms can lead the value chain of cut flowers, resulting in three ideal types of value chains: producer-driven, consumer-driven, and wholesale-driven.

[37] Although the original conditions these species need (e.g. the original tulip comes from Turkey) are not natural conditions you will find in the Netherlands, through the ennobling process over time these species have been suited to Dutch conditions just behind sand dunes in an area called the *Bollenstreek*: cold nights and cold winters, sandy soil, and more hours of sunshine per year than in inland areas with sandy soils. The same conditions in Europe are only met in a few areas of England and France (PF 69).

Of course in reality these ideal types are not found in their pure forms and firms can operate different types of value chains at the same time. But as an analytical tool they help explain the embedding of Dutch trade in the value chain of cut flowers. Historically the producer-driven value chain has been dominant because of the great power of the cooperative auctions owned by producers. Recently however, the consumers (retailers) have gained steering power, as well as wholesale traders, each in different types of chains. In this section (6.4) and the following (6.5 and 6.6) these three ideal types of chains will be discussed, including their characteristics and the links in these chains that lead to the Netherlands.

6.4.1 The producer-driven chain: a mix of market and relational modes of governance

Power to the growers

The producer-driven chain is one in which the territorialized cluster of flower breeding and growing in the Netherlands generates (new) supply that is sold on a centralized physical market place. Very specific to this chain is the fact that the market is largely controlled by growers through the cooperative flower auctions they own. Since member growers are obligated to sell one hundred percent of their supply through the auction organization, and most Dutch growers are members, the auction is by far the best marketplace with respect to broadness (availability of different varieties) and depth (availability of different qualities) of its assortment. Wholesale traders largely depend on these auctions, including any decisions taken by them. For example, in the case of the 2008 merger of the two largest auctions in the Netherlands, there was an increase in direct sales contracts between growers and retailers through the auction's direct sales office. Wholesalers felt this service is paid for by money they spend at the auction, yet it is a service against their interests: with direct sales, wholesalers are completely phased out. Below, a flower and potted plant wholesaler complains in a wholesalers' publication:

> *"Large auctions and large growers can manipulate the market. I think it is a nasty business that at peak days large clusters of growers do not send their flowers to the auction or only dump their dead stock [the flowers they didn't sell in advance through direct sales contracts closed with the direct sales office of the auction, m.l.] when prices are low, and buy-back their own flowers. In this way supply and demand is influenced artificially."* (Groot Handelsblad, 2008e, p. 9)

To prevent these kinds of things from happening, wholesalers would have appreciated a say in the auction policy, especially post-merger, due to the increase of power held by growers (Groot Handelsblad, 2007d). However, this did not take place and the growers' association *'Vereniging van Groothandelaren in Bloemkwekerijproducten'* (VGB, Association of Wholesaler Traders in Floricultural Products) only lobbies for the auction to support the interests of growers.

Another example of wholesaler dependence on the auctions that continues to spur discussion is the introduction of auctioning by picture. This is something that has already been introduced for some flowers like gerberas and roses and the auction wishes to introduce for other varieties. In this type of auctioning flowers no longer physically enter the auctioning room, but are sold from a standard picture (or a real one, that's part of the discussion) of the flower together with information on the quality, the name of the grower, and bloom stage (rijpheidsfase)[38]. It makes the logistics process at the auction much more efficient since flowers can go directly from the cool cell of the producer at the auction to the buyers' cool cell and do not have to pass through the auctioning hall. However, not all traders are happy with this development. They claim they have less oversight of the flowers auctioned since the pictures are not trustworthy enough, much more time has to be spent on inspecting flowers before the auction, and it has become more difficult to do an impulsive trade (Groot Handelsblad, 2007a, Groot Handelsblad, 2008i, Groot Handelsblad, 2008b). In spite of this opposition, it is the auction that decides how products will be sold, and they seem to be right in their decision to develop trade-by-picture since the share of electronic sales as total sales is growing. In electronic sales purchasers can login to the auction system from wherever they are and buy by picture and product information. There are many more issues at the auction in which wholesalers try to have a say, such as the degree of quality-checks for flowers, tariffs for the use of storage capacity and flower carts at the auction. Sometimes their lobby work leads to success, but in the end the auction has the power to decide what will happen.

A final example of the power of growers at the cooperative auctions is the case of Tele Flower Auction set up in 1995 by the East African Flower Company (EAF), a Dutch import organization. Up until 1994, this organization was able to sell the flowers they imported at the Dutch cooperative auctions. However, Dutch growers felt that imports, especially roses from Africa, lowered prices at the cooperative auctions. In 1994 the Dutch Rose Growers of the Aalsmeer Flower Auction and Flower Auction Holland decided to restrict imports during the summer season and to introduce import restrictions for the rest of the year (Van Heck et al., 1997, Cunden and Van Heck, 2004). This was a real problem for foreign rose growers and the East African Flower Company who wanted to sell their products in the Netherlands. In response the East African

[38] The bloom stage for which a standard classification exists – describes how close a flower, or its buds, is to the stage of flowering and subsequent fading.

Flower Company set up its own auction near the Aalsmeer auction house especially for flowers from Africa. This clearly shows the strength of growers to steer floral assortment at the Dutch cooperative auctions. Naturally, it also shows the limits to their power as traders can circumvent their actions.

Governance of producer-driven chains: a mix of market and relational modes

In spite of the power in the hands of growers, the chain is not hierarchically governed; transactions take place in an open market. Classification systems of flowers, information from growers, and quality checks at the auction codify transactions and ensure a standardized method for the flower trade. However, the information growers give and the quality checks at auction do not always satisfy wholesalers: information on the quality of flowers is often not trustworthy since many mistakes in quality codes are reported (Groot Handelsblad, 2007i, Groot Handelsblad, 2008a, Groot Handelsblad, 2008g, Groot Handelsblad, 2009c). For more accurate floral quality measures and to know *"which growers you should be more attentive to,"* recently wholesalers have set up a website where they report reliability of information given about the floral lots they purchase (Groot Handelsblad, 2008j)[39]. Reputation and personal relations are also important in this chain, as they give more certainty on qualities to be expected from specific growers.

> *"In the end, what is important is the reputation of your company. The buyers know your products and quality. When these are good, you get a fair price. Roses aren't physically brought in front of the clock anymore. Buyers only see the name of the company, the type of rose and the quality"* (PF 18, Dutch grower)

> *"Quality has several dimensions. Flowers should be free from plagues and diseases and they should be undamaged. These elements can be judged upon visual inspection. Other quality aspects, however, are more difficult to judge. For instance, it is hard to see whether flowers have been correctly handled once cut. Yet this is an important determinant of vase life and whether or not the bud will open. It is the reason why reputation is so important and why growers who have consistently delivered high-quality produce fetch higher prices than little-known or irregular suppliers. Exporters [foreign growers that want to sell at the Dutch auctions] thus have an interest in building up a good reputation."* (Van Liemt, 2000, par. 2.3)

[39] This is, next to the example of the Tele Flower Auction, an instance of how traders try to organize some counterforce in the producer-driven chain.

At the auction a good reputation can be gained when a grower offers a continuous flow of flowers of the same quality. This can also help later on for entering direct sales contracts with wholesale traders. It can take from one week up to a month of stable supply before a new supplier at the auction gets a good place at the clock and people willing to buy from him (PF 53). Although this might not seem like much time, it is quite an investment considering the transportation and production costs that can be lost in one month.

In this chain personal relations play a role when growers like to sell new varieties exclusively on a specific market. This is especially important for new varieties entering the Market World or the still more exclusive Interpersonal World. Good relations are a guarantee that a trader will keep the market exclusive and will not sell to every kind of retailer.

Buying at stock, but increasingly at order

In the producer-driven chain, wholesalers traditionally buy flowers at stock and then sell them to their customers. Scheduled service wholesalers, who drive lorries with full assortments of flowers and pass different flower shops in a scheduled service route, buy their flowers at stock and sell them at these different shops along the route. They also buy them at order. For smaller scheduled service wholesalers particularly, buying at auction is important. It enables them to share the purchase of a lot with another buyer present at the same buying tribune at the auction when the lot is too big for one of them (Groot Handelsblad, 2009a).

The producer-driven chain has shifted slightly in the direction of wholesale-driven chains, as modern communication techniques have enabled wholesalers to contact their buyers during the auction to give them information on interesting purchase opportunities.

> *"Also our salesmen are at the auction daily and can make phone-calls to our customers on lots and see what needs to be purchased."* (PF 50, wholesaler)

This way wholesaler risks in the chain diminish while producer risks increase. The chance that a product remains unsold at the producer instead of the wholesale trader increases. Once direct contact with buyers has become possible, wholesalers can operate more as turn-key suppliers for buyers, only buying what they are really able to sell. Relations with their buyers also change. Buyers know prices better, making good personal relationships even more important: only when wholesalers have a good relationship with them, buyers will be willing to purchase when prices are high as well as when they are low.

> *"With the internet you can compare prices easier and make better and quicker decisions. You get lower prices. […] Also customers know prices better now so there is more price pressure. Therefore you need to have a good relationship with your customers so they are willing to pay both at low and at high prices since auction prices fluctuate."* (PF 49, a Dutch wholesaler)

6.4.2 Territorialzed assets of the Netherlands in the producer-driven chain

Economies of scale in distribution

In the producer-driven chain, the Netherlands has naturally become the centre of international trade and distribution. The large home production of flowers that is almost exclusively traded through the auction has created a huge advantage and economies of scale for the redistribution of flowers. Large amounts of flowers from monoculture farms come together at the auction where wholesalers buy smaller amounts of many different flowers. Even simple daffodils grown in the UK go first to the Netherlands before they find their way to retailers and consumers in the UK, as this is still the cheapest, fastest way for UK wholesale distribution (Van Rijswijck et al., 2008). This makes it efficient to buy at Dutch auctions.

> *"Many wholesalers interested in purchasing our flowers tell us to go through a Dutch trader. Many European wholesalers do not like receiving shipments from all over the world. This causes more work for them. They want to receive their flowers in one shipment; they are happy with the existing trading lines between the Netherlands and the rest of the world."* (Van Liemt, 2000, par. 3.1)

In the producer-driven chain economies of scale are an important reason for concentration of trade and distribution in the Netherlands. The auction organizes transportation of flowers from different Dutch growers in the country. That is much more efficient than if individual wholesalers would have to pick up flowers at many different growers. The economies of scale gained by collecting and redistributing flowers in one place is such an important advantage, from a wholesalers' perspective as well, that it might explain the failure of Dubai as a floral trade and distribution hub.

> *"It is still cheaper for Moscow to have a flight from Nairobi to Amsterdam than a flight from Dubai with highway transit from there to Moscow. They already have their cars here to pick up flowers from the auction house, making it cheaper for them to go to Schiphol, than from Dubai to pick up their flowers from Nairobi."* (PF 51)

The fact that so many wholesalers are located near the auction enables exporters to find a complete assortment at one place. Although in general exporting traders do not specialize in specific types of flowers (it is the broadness of their assortment that makes them and the Netherlands competitive) it is impossible for an exporter to be first rate in every kind of flower. Therefore, some buyers go to different wholesalers to purchase the top-class assortment they want. The greater the co-location of wholesalers and exporters, the easier it is for wholesalers to outsource transportation with specialized logistics service providers. In the last five to ten years many wholesalers have sold their trucks and have started working with transportation service providers to reduce fixed costs.

Better knowledge on products and prices

It is also attractive to buy at Dutch auctions because the world price of flowers is set there. Having a feeling for these prices is something you can pick-up when being present in the auction room.

> *"Buyers are here to hear the buzz because when the room is quiet, prices are high, everyone is paying attention, they are ordering. When the market is slow and prices are low, they don't want to pay too much and start to read the newspaper. Their orders are filled, they take some of this, they take some of that."* (PF 66, VBA representative)

A location within the cluster of growers and traders enables traders to get a better knowledge of prices and make them attractive to their customers.

> *"Tonight I will make a phone call to my customers to discuss the volumes and the moment to buy. That is always a bit of a gamble. Last weekend I talked to some growers on the prices they expected for supply. I kept my fingers crossed they didn't tell me ridiculous prices."* (A wholesaler preparing on buying at the auction for Valentine's Day, Groot Handelsblad, 2007c, p.25)

Being able to talk to other players in the cluster, such as growers, is of great value since it enables a trader to buy flowers for an important day like Valentine's Day at the right time – not too early since flowers then will be less fresh than a competitors', and not too late when prices are skyrocketing and profit margins for customers (retailers) become too low. Also, knowledge of products seems to be something that is easier to get when present at the auction.

> *"Purchase from distance has been introduced. It depends on the segment whether or not we use it. But we distinguish ourselves by being at the auction. In this way, we really know the flowers and plants we sell."* (PF 50, wholesaler)

In short, economies of scale and localization bind trade in the producer-driven chain to the Netherlands. Localization economies are not only at play in the wholesale part of this chain, but also in the production part, which is tightly connected to wholesale. Relations between wholesale and retail are modular to relational, long-term relationships are no exception. The relationship between producers and wholesalers is market–based, to the extent that trade takes place at the auction. As we have seen, this auction trade is definitely no spot market. Reputations and direct relations with growers are important for correctly interpreting information given at the auction. This is summarized in Figure 6.4. It illucidates the link between production and wholesale and wholesale and retail, showing rather strong embedding in the Netherlands.

Figure 6.4: Territorialization in the producer-driven chain of cut flowers

6.4.3 Dutch position in the producer-driven chain threatened

In spite of all the advantages of the Netherlands as a trade centre, the producer-driven chain is threatened by growing production abroad. Foreign growers have set up direct sales relations with retail and often prefer to circumvent the selling of their flowers at Dutch auctions. This threatens the position of the auction since auctioneers need foreign flowers to be able to offer year-round stable supplies of a full assortment of flowers. Therefore, the auctions are active in attracting foreign growers, as the manager of Flora Holland in Aalsmeer explains.

> *"It is crucial for us to bind international supply. […]The share of imports in flowers auctioned is growing and approaching thirty percent. The binding of international growers is different. It increases, but relatively slowly. Some*

> *foreign growers don't like becoming members; they prefer to keep their hands free to sell through different channels. As an auction we put a large effort in the development of facilities for foreign growers, like logistics facilities at Schiphol, the development of sea transportation for flowers and the construction of a climate-cooled chain to preserve flowers. We also help them with sales and commercial contacts to get to know the trade companies here, and give them market information."*

The relationships desired by the auctioneers not only serve themselves. For Colombian growers services added by Dutch auctions are also very attractive. When Colombian growers trade with the US, they have to send boxes with flowers to clients at different places. That can be very expensive. The auction allows them to send it all to one place to get the best market price. This facilitates more certain payments for their goods; the auction requires wholesalers to pay same day. This is different for Colombian and Ecuadorian growers operating in the US. These growers send their flowers in consignment to the market in Miami where deals are made mostly by telephone and e-mail in a closed process of bidding with little transparency. It is often not clear to growers why flowers did not fetch the expected price on the US market: is it a delay in transportation or have the flowers been handled imprudently? (Ziegler, 2007) At the Dutch auctions quality checks will be reported to the producer so that he or she is able to monitor the quality of their flowers and make sure they arrive in the best condition possible. For Colombian growers it's a rather large step to start transporting flowers to Dutch auctions. Therefore, Dutch auctions give advice to these foreign growers on issues like how to present their flowers at the auction and quality standards. In this way the auctions not only maintain and strengthen the producer-driven chain, but also the role of the Netherlands as the centre in the international trade and distribution of flowers.

Another way for growers to safeguard their position is to become active in wholesaling. The European leader in this strategy is the Italian Ciccolella Group that was originally a producer and distributor of roses, anthuriums, and greenery in southern Italy. With the acquisition of the Dutch Zurel Group in 1996, Ciccolella has started to develop into an integrated group of producers and wholesalers of flowers and plants with better access to the world market and more secure sales. In 2007 the group took over two other large Dutch wholesale groups: the Leliveld Group and Flower Plant Partners. These acquisitions make Ciccolella an important player in the supply to large retailers and cash & carry companies[40]. The group has the aim of integrating parts of the chain that are still rather fragmented: growing, trade, and logistics (Groot Handelsblad, 2008d, www.ciccolella.eu, accessed 21-04-2009).

[40] These are wholesale shops where smaller florists do the purchases for their retail outlets.

6.5 The consumer-driven chain of cut flowers: retailers dictate and limit embedding of trade

6.5.1 Characteristics of the consumer-driven chain

Of course the most important characteristic of the ideal type of the consumer-driven chain is that power lies in retailers. In the case of flowers these are mainly large retailers who, as lead firms, generate demand for a uniform product. In northwestern Europe around thirty percent of all flowers are traded through supermarkets. The growth of this retail channel not only comes from decline in other channels, but is also based on the growth in consumption of flowers (Van Rijswick, 2006). Particularly in the United Kingdom, retail has taken up a role in the consumer-driven chain (Hughes, 2000). In the UK the market share of supermarkets was approaching 40 percent in 2000, but in Switzerland this was already even 60 to 70 percent in 1996 (Van Liemt, 2000). In other countries supermarkets and convenience stores at petrol stations increasingly sell flowers. These large buyers have extensive guidelines describing when they want to have each kind of flower, the bud size, color, stem length, and ripeness they expect, and how many they need. To be able to offer these flowers in all of their shops at the same time they can either make contracts with large growers, or they can contract the supply of these flowers out to wholesale traders. Although both are in a dependent relationship for the demand of retailers, producers are in the weakest position.

Captive relations between demand and producers

To import flowers from large foreign farms, retailers mainly use import-wholesalers since this gives them the opportunity to pass on risks related to flower growing and buying on to other players (Barrett et al., 1999). These are risks like a chance that flowers of a particular farm do not meet pre-determined specifications such as quality, traceability, and use of pesticides. Another risk is that flowers lose quality during transportation. That being said, Hughes (2000) has identified four reasons retailers bypass wholesale trade and fully integrate their supply of flowers by buying directly from growers: (1) reduction of time to market; (2) cutting costs of commercial agents in the distribution system; (3) getting a better grip on the flowers produced in order to become less dependent on *'varieties that just happen to hit the market'*, and (4) an increase of traceability that has become important as part of the 1990 Food Safety Act in the UK. In such a consumer-driven chain production is captive to retailers; the former is part of a fully integrated supply chain of large retailers (Hughes, 2000). Also in the chain with wholesalers and importers, flower producers are captive to demand since there are just a few buyers and many sellers. This creates a monopsony-like situation in which the monopsonist can dictate terms to its sellers. For the floral trade, dictation includes rather

strict specifications of retailers that are directly passed on to the producers by a few large wholesale trade organizations. Barret et al. (1999) report that there are no contracts in the relationship between growers and exporters on one hand, and importers on the other hand. Relations are largely steered by trust and the risk that a wholesaler-importer will switch to another producer when that producer fails to fulfill obligations agreed upon by a handshake, just like in the case of a the monopsic market.

Modular governance of transaction, market relations between wholesale and retail

The relation of wholesaler-importers to supermarkets is different to that of growers to retailers or growers to wholesalers-importers. The dominance of supermarkets is slightly smaller in this part of the chain. This is because supermarkets are dependent on the knowledge and capabilities of wholesale traders to obtain flowers to the specifications they desire. In a sense the mode of governance of transactions between wholesalers and retailers comes close to the ideal type of modular governance: wholesalers work with different retailers at the same time and their knowledge of products and growers enables them to fulfill the requirements of the retailers. Because of the importance of the capabilities of wholesalers to fulfill retailers' specifications, the transaction governance with retailers does not become captive.

In spite of often strict specifications (stem length, bud size, or vase life) imposed by supermarkets and other retailers that in a way codify transactions, sales do not become spot-market transactions. This is because retailers often like to plan their flower demand in advance to ensure they will get enough flowers of a specific kind, at a specific time of the year. For this they work with 'programs'. These programs are not set contracts, but a kind of planning for six months or a year in advance, that will be filled in with more detail on a monthly, weekly, and daily basis (Barrett et al., 1999). This has also been reported in my own fieldwork. It suggests that there is not a spot-market relationship between wholesalers and retailers, but stronger relations of joint planning. However, most of this planning clearly comes from the retailers. This can sometimes be quite frustrating for wholesale traders and growers who feel retailers do not really understand what it means to work with living products like flowers with blooms that can be slightly larger or smaller, depending on the weather.

> *"Supermarkets are not growers; they do not understand the product very well. Sometimes, when the season is bad, it can be hard to get buds of 7 centimetres, they will only get 6.5. But supermarkets still want 7, they have almost unrealistic expectations."* (PF 64, representative of wholesaler and bouquet maker for supermarkets)

Nevertheless, for retailers it is important to adhere to their specifications since these are driven by customer research on which they spent quite a lot of time, as a horticulture merchandiser/up market high street retailer in the UK explains (Hughes, 2000, p. 285). Delivering large quantities of flowers that have to fulfill precise specifications, is a quite specialized job not every wholesale trader is able or willing to take.

Still, the governance of transactions between retailers and their suppliers also has some market characteristics, as a Dutch wholesaler-exporter explains.

> *"Large retailers such as Marks & Spencer have a different relationship with supply: they often switch their trades people to avoid bribery so relationships can be unstable. They only look at price. They have jumbo jets full of bouquets from Africa."* (PF 49)

Barrett et al. (1999) also report that retailers use more than one supplier *"to ensure flexibility with respect to sources, quality and timing of deliveries, and competitive prices"* (idem, p. 170). So, although the governance mode of transactions between retailers and suppliers is modular in this chain, it also has some characteristics of a market mode. This is especially true because of the codified product specifications retailers use and the impersonal, spot-market like relationship some retailers try to keep with wholesalers.

6.5.2 The embeddedness of trade in the consumer-driven chain in the Netherlands

In the consumer-driven chain trade seems less tightly bounded to Netherlands as in the producer-driven chain. The most important reason for this is that here the role of Dutch auctions is less important since more direct trade takes place and relations between supply and demand for wholesale are less strong. Wholesale traders are much more interchangeable for retailers in this chain. Furthermore, Dutch wholesalers can even be bypassed when, for example, German retailers purchase their flowers from growers in Africa. Particularly when there is demand for industrial types of flowers, wholesale knowledge is not nearly as important and wholesalers can be bypassed relatively easily. This is all shown in Figure 6.6.

The rise of the consumer-driven chain undermines the natural role of the Netherlands as the center of flower trade and distribution, although wholesalers might use territorialized scale economies of the Dutch auctions to fulfill orders.

Figure 6.6: Territorialization in the consumer-driven chain of cut flowers

Embedding of trade in the consumer-driven chain through the auction as a facilitator of flexibility

Although much direct buying from growers takes place in this chain, the auctions still play a role, as they enable flexibility in reacting to weekly or daily orders. This explains why even in this more direct chain, the Netherlands still has a key-function. Only with auction sales and purchases it is possible to flexibly fulfill orders. Wholesalers can buy more flowers at the auction on demand when a retailer orders more flowers than was agreed upon in an earlier created program. These programs set the basis on which the wholesaler has set direct contracts with producers. A wholesaler can also sell portions of the flowers ordered through direct sales contracts with producers when a retailer reduces short-term demand. For the case of retailers who plan their sales promotions only several weeks in advance, the auction is the most efficient way to purchase large amounts of flowers of a uniform quality.

> *"Our retail customers need the auction to be flexible together with their suppliers… so for shortages and remainders. For example, we're a big player in the UK, where Tesco might ask us to deliver 100 million chrysanthemum stems per year. We will then come together with our producers and make appointments. But Tesco doesn't exactly know in advance which week they will need how many chrysanthemums. So you will always have shortages or remainders. These growers and we need to be able to buy extra chrysanthemums at the auction, or sell them there when we have too many."*
> (PF 51, a large Dutch group of import and export firms in floriculture)

These flowers may come from different producers, but there is enough sales information available at the auction to make sure the quality of the flowers is uniform. In this way, the auction diminishes risks and acts as a buffer against fluctuations in demand for the wholesaler-importers in this chain.

Embeddedness of trade through demand for quality in the consumer-driven chain

As the demand of supermarkets has become more sophisticated with more emphasis on quality instead of merely price (Van Liemt, 2000), the role of territorialized assets in the Netherlands might increase. Quality can be assured by direct relations with producers, but the knowledge of wholesalers can also be used for this. In the business of bouquet making it also appears more difficult to bypass the Netherlands. Bouquets need a wider assortment of flowers and tastes differ for different markets. As a Dutch supplier of bouquets explains:

> *"The bouquets business is difficult because of different tastes people in different countries have. In the Netherlands, however, you can find every flower, making it easier to make bouquets here."* (PF 73)

However, when specialized knowledge of new varieties and flower trends of wholesalers get used to create and fulfill orders retailers are otherwise unable to fulfill, the chain structure shifts in the direction of wholesale-driven chains. This will be discussed in the next section. That chain has a clear link to the Netherlands.

In short, although the East African cut-flower industry is still tied to the Dutch flower cluster and flowers are often traded through Dutch wholesale centers (Wijnands, 2003), the retail-driven chain explained in this section does not necessarily have very strong ties to the Netherlands. This is especially true for retailers who plan their sales several months or a year in advance and directly source their demand from foreign producers or importers. However, as previously described, for additional short-term supply or remains of large orders that were directly sourced, Dutch auctions are very important. In that sense the consumer-driven chain undermining the role of the Netherlands as central marketplace for cut flowers, is still very dependent on Dutch auctions.

6.6 The wholesale-driven chain of cut flowers: the Dutch cut-flower cluster at the centre of flower fashion and specialized supply

6.6.1 Wholesalers in the lead with the introduction of flower fashions in the Market World

The ideal type of the wholesale-driven chain is dominated by wholesalers who have knowledge of production and retail markets and are able to link the two. It is also the chain where the wholesaler plays a role as developer and introducer of new flower trends.

Wholesalers can take a mass-produced, industrial product and transform it into a product from the Market World through styling and fashioning. Of course retailers can also play this role, but in the flower chain this fashioning of the product is clearly related to the wholesale and production cluster. Wholesaling, flower packaging, pottery, and décor firms together create fashions in the flower chain that are picked up or introduced to retailers.

> *"To generate attention for a product, we organize designer shows and workshops. We show the floral trend and in a sense, the fashion in flowers. We are the ones that market flowers. The Netherlands has a lot of creative flower arrangers. Workshops, trade fairs, trade journals, and advertising material… for example such a leaflet from the Flower Council… we send it to our customers."* (P50, wholesaler)

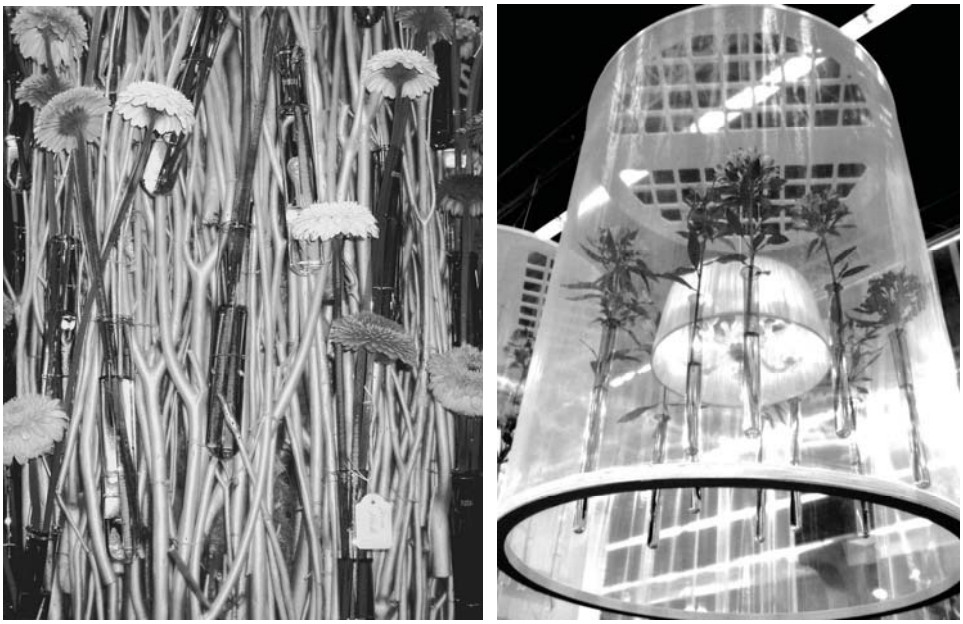
A large wholesaler like Zurel delivers full service information to retailers like market information, workshops, ready-to-use retail concepts, packaging, pottery, and flower-care products. Wholesalers have partners in the chain such as packaging and decoration firms, and bouquet makers for this. Collective institutions in the trade and production cluster like the *Bloemenbureau Holland* (Holland Flower Council), are also active in dissemination of flower fashions and trends (see Box 6.1: The flower council of Holland). Flowers are generally traded without the grower's name, but the addition of 'flowers from Holland' is used as a way to frame flowers as a specialty or of superior quality (Ziegler, 2007). The circulating knowledge of and access to, new flower varieties as well as brand reputation make the Netherlands an important centre of flower fashion. Even very common flowers like Gerberas and Alstroemeria can become rather fashionable design objects by arranging them in a new way (see Figure 6.8).

The way a trader has to work in this chain is different from the traditional day trade where marketing is not as important. The new role of the trader is the logical outcome of the increasing importance of retail, as a sales-trainee at Zurel Flowers explains:

> *"The retail channel is becoming increasingly important. Another strategy then becomes suitable; more planning of orders and less competition on price."* (Groot Handelsblad, 2007b, p.16)

This refers to a strategy where wholesale traders use market information for product development. In such a chain retailers do not dictate, but depend on the knowledge and ideas of the wholesaler. It is here where wholesalers can buy at stock and give retailers advice on which flowers to buy.

Figure 6.8: Ordinary Gerbera's (left) and Alstroemeria (right) turned into fashionable flowers by arranging them in test tubes at the Flora Holland Trade Fair and Hortifair



6.6.2 The Tele Flower Auction: a wholesalers' auction challenging the cooperative auctions of growers

One of the players in this chain is the Tele Flower Auction in Aalsmeer that has been mentioned before. Since the auction is operated by an independent third party that connects buyers to growers, it is part of the buyer-driven chain. In contrast to the cooperative auctions of the producer-driven chain, this auction is in the hands of a wholesale organization: it is operated by an importer of flowers. It started in 1995. The auction has proven to be able to operate extremely efficiently. Flowers are no longer sold in an auction room with buyers present, but at distance through a virtual clock on their computer screen. This makes the logistics of flows at the Tele Flower Auction much easier than at Flora Holland or the Aalsmeer Auction. After several months of success, the East African Flower Company that had started this auction decided growers from other countries could sell their flowers through the Tele Flower Auction as well (Van Heck et al., 1997). The success of the auction is probably due to its ability to serve buyer demands better than the cooperative auctions do. The quality of information given on flowers at the Tele Flower Auction is said to be very good, more reliable than the

cooperative auctions (Van Heck et al., 1997, PF 51) since they work with real-time pictures of every lot (Groot Handelsblad, 2007a, Groot Handelsblad, 2007j). The delivery time is very fast, and the technology works well (Van Heck et al., 1997). The big success of this auction has influenced the cooperative auctions, forcing them to pay more attention to importers and buyers. Nowadays distance sales (*KOA, kopen op afstand*) has also been introduced at the cooperative auctions. Also, non-EU growers can become members of the cooperative auctions, and non-members can sell flowers through the auction.

The Tele Flower Auction uses strong quality controls and certification through preferred grower status to ensure high quality flowers at the auction. There are no formal agreements on delivery of flowers to the auction, such as in the case of the cooperative auctions but, as the analysis of Cunden and Van Heck shows, quality control can become an instrument of contractual agreement in the absence of formal agreements. The Tele Flower Auction is making an effort to foster stable and strong relationships, as they value *"good and loyal relations with their growers"* (website TFA, www.tfa.nl, accessed 21-04-2009). However, this market-defined quality control makes African growers more dependent.

> *"Tightening quality control requirements rather than threatening to turn to a cheaper grower, allows market makers to dominate the African growers. This is because quality control assumes that the growers' entire production process must be continuously monitored to maintain high levels of quality."* (Cunden and Van Heck, 2004, p. 582)

Furthermore, Tele Flower Auction organizes the distribution and transportation of flowers from Africa to the auction in Aalsmeer by its sister company Airflow, which also probably makes growers that trade through TFA dependent on this market maker: when they stop using TFA they also lose the transportation of their flowers to the market.

6.6.3 Territorialized knowledge of wholesalers attach the chain to the Netherlands

Wholesale trader as lead firms and turn-key suppliers

The role the Netherlands plays within the wholesale-driven market is one of a well-informed supplier to retailers and wholesalers and a kind of coordinator between supply and demand. Sturgeon (2003) has called these kinds of highly qualified suppliers *turn-key suppliers*. This is a kind of supplier with a lot of knowledge on which lead firms depend for product development. For Silicon Valley and the global production network of the high tech industry that is governed from there, these turn-key suppliers are very important (Sturgeon, 2003). The turn-key suppliers in floral trade use the large amount

of floral knowledge present in the Netherlands: quality, newest breeds, and newest trends in floral decoration. In the flower cluster of traders, growers, and breeders, knowledge about products, demands and trends circulate more frequently and earlier than other places. This is a highly territorialized asset. Sturgeon (2003) describes these turn-key suppliers as part of a chain led by the main computer brands. In the value chain of cut flowers we could hold that wholesale traders assume the same kind of role as turn-key supplier. Although ennoblers and producers come up with new varieties, wholesale traders as turn-key suppliers link them to the market and to a large extent create the market for those products with fairs, fashions, and designs. In this manner they are turn-key suppliers that lead the chain, which is different from the turn-key suppliers Sturgeon (2003) describes. A turn-key supplier in the wholesale-driven chain has a much stronger relationship with retailers than a turn-key supplier in the retail-driven chain who is frequently turned-off by retailers.

Superior knowledge as the Dutch competitive advantage in this chain

The embedding of trade in the Netherlands is mainly related to the superior knowledge available to traders when located within the cluster of production and commerce. An early type of knowledge they are able to pick up within the production cluster is knowledge on new product variety and quality.

> *"We make use of the innovations we see around us. We're at the centre of the flower trade; therefore there is relatively a lot of information available."* (website Oudendijk Group, a large Dutch wholesaler)

Wholesale traders also visit growers to look at the products themselves. Knowledge is also deliberately shared through an organization like the Association of Wholesaler Traders in Floricultural Products (VGB). They have their own magazine but also, for example, their own Young Network Group made up of young managers who make visits to other companies, sharing their business experiences with breeders and growers in the cluster.

Knowledge of retail markets is also important here. Information like whether or not a market likes large buds, strong colours, gerberas, roses, or carnations all determine success or failure. In the end, you also have to know where to obtain these flower types. Within the cluster that knowledge is easier to get. A buyer and wholesaler of anthurium explains on the Flower Council Holland website:

> *"Our specialisation means that we are able to know all there is to know about this market and have been able to build up a comprehensive network of growers. Our most important customers are in Germany, Italy, France and*

> *England. Italy and Germany like their flowers big, whereas smaller flowers go to countries such as Spain and Portugal. [Right now] distinctive colours are in greatest demand… clear red, hot pink and green shades are all popular. In my opinion the variety 'Morano' is a promising newcomer."* (www.flowercouncil.org, accessed 21-04-2009)

It is not only knowledge of flowers and trends that circulates in the wholesale and production cluster. Since wholesalers have relations with many different growers and other wholesalers, they also gain knowledge on financial and commercial issues. Sharing this with customers can be a strategy to gain a stronger and more equal relationship with them.

> *"We see a lot of things, experiences with how things get done somewhere else… financially, business-related, organizationally. At times we give our customers, when they are open to it, consulting on how to manage things. But they need to be open to it. We see it as a role to be taken by our company. We try as much as we can to be a partner to our customers, resulting in long-term relationships with them."* (PF 50)

Relations between wholesalers and retailers are generally long term in this chain. Once a retailer is happy witch a wholesaler – who generally provides a full assortment of flowers to a retailer – he or she will not easily change to a new supplier. Maybe not so much because it is very difficult to get to know each other but because of the trust that has been built up in their relationship: trust of the retailer in the ability of the wholesaler to buy the right flowers – quality, assortment, quantity – at the auction and at other places and to deliver in time.

> *"The relationships we have with our customers are of such kind that a customer will trust us when we say that the variety he normally prefers, for once is not a good choice and that he should take a different variety this time. […] In the relationship with our customers quality is more important than price."* (PF 57, Dutch wholesaler operating in the upper segment of flower trade, with customers that are with him for more than ten years)

Wholesalers in this chain have market relations to production when they buy at the auction, but they also have more direct sales relations that are modular or relational in kind.

> *"We do not grow, and we don't want to. But what we do increasingly, that has been a change found in the last ten years, is we help certain farms financially, through marketing, or through consulting on what to grow."* (PF 51, Dutch group of flower traders)

In this chain we also see large wholesalers that take a role in production and try to get hold of the entire chain. Large buying groups such as the Zurel Group, and the Dutch Flower Group are umbrella companies of growers, importing firms and exporting firms. Also large trade firms such as Sulmac, which is owned by Brooke Bond Kenya (taken over first by Unilever and in 1998 by the UK government owned fund of funds, the Commonwealth Development Corporation), Del Monte (from the US) and Dutch, German and Swiss investors (Maharaj and Dorren, 1995, p. 69) are part of this chain. They have invested in flower production in the global South, where people were not able to develop the flower business without foreign help. In such cases the relationship to production is more like a hierarchy. However, an umbrella company like the Dutch Flower Group does not try to be hierarchical, but rather more like a network of independent companies that share expertise and experience with each other, while not necessarily working with each other (i.e. wholesalers do not have to import from other companies under the umbrella, but can also use the auction or other companies). The holding can be seen as a facilitator of collaboration between these companies, making them stronger and better able to react to possibilities in the market.

The more dedicated the product becomes and the more specialized inputs are needed to fulfil the wishes of retailers (i.e. the closer it comes to the Interpersonal World) the more transactions in this chain need some kind of relational or modular governance. This is because more knowledge is included in the transaction and this knowledge becomes increasingly difficult to codify. The wholesale trade in the Interpersonal World for flowers shows resemblance to the creation and dissemination of *prêt-à-porter* collections of clothing. It is different from the aforementioned Intellectual World of flowers in which new *generic* breeds are created. It is also different from the Market World where there is a very broad market and inputs are more specialized. It is the Interpersonal World where specialty arrangements are created that are ready for use at special occasions. From there these arrangements might trickle down to the fashions of the Market World. Arrangers who operate in this world create floral designs for special events and participate in international flower arrangement competitions.

Very strong embeddedness in the Netherlands

The wholesale-driven chain is very strongly attached to the Netherlands, as it is dependent on the localized knowledge of retailers closely connected to the territorialized production cluster of the Netherlands. The attachment of this chain to Dutch wholesalers

is the result of the modular-with-relational-characteristics governance of transactions with foreign retailers and wholesalers in this chain. It ensures long-lasting relationships. Figure 6.7 summarizes the key characteristics of this chain.

Figure 6.7: Territorialization in the wholesale-driven chain of cut flowers

6.7 Changes in the chain and the embedding of flower trade and distribution in the Netherlands

The description of the flower trade has shown that the marketplace node functions, as expected, very much as a cluster. It also shows the many different worlds of production and value chain organizations this node can serve. Contrary to our expectations this node even has a role in very much integrated, consumer-driven chains. As we have seen in previous sections of this chapter, different developments have changed the role of the Netherlands in the flower trade. The most important developments mentioned are: (1) increased production abroad; (2) concentration at the side of production and buying; (3) increase of direct sales relations bypassing the auction; (4) integration between different links in the value chain; (5) delinking of logistics processes and sales processes.

The increase in production abroad has resulted in the Netherlands becoming a larger importer and re-exporter of flowers produced abroad. Growers have reacted to this. Dutch growers have started to concentrate more on exclusive varieties or varieties that are difficult to transport (Van Rijswick, 2006). This probably results in more differentiation between imported and domestically produced flowers with respect to their quality, novelty, and other product attributes. An example of this specialization is given by a Dutch rose grower with facilities in Kenya:

> *"In Kenya, you can grow all types of colors except red and white because white is easily damaged, and red roses are hard to grow because they are sensitive to light and prone to developing black spots [because of the intense sunshine in Kenya, m.l.]. So, these two colors, heavy varieties and exclusive varieties with long large heads are grown here in the Netherlands."* (PF 68)

Although the assortment of flowers produced abroad first was limited to less-exclusive bulk-like flowers, we now see a broadening of the assortment. This assortment produced abroad has become increasingly important for Dutch auctions to be able to deliver a complete assortment of flowers year-round (Stuurgroep Fusie, 2007).

Concentration on the side of production has made many different auction organizations too small for a large part of the producers. Therefore, the merger of the largest Dutch auctions is very important to them, as well as the possibility that is created for direct sales contracts through the direct sales office of the auction. Concentration on the buying side has made them very strong players who try to bypass the auction and wholesalers. This has been a major threat to the role of the Netherlands, especially in the bulk-chain.

The increase of direct sales relations bypassing the auction does not necessarily make flower trade less bounded to the Netherlands. As we have seen, for efficiency reasons many directly traded flowers from Africa still come to the Netherlands on their way to final consumers. However, the Netherlands then is used as a distribution node for flowers. For this infrastructure and quality of logistics are more important. These are more difficult to territorialize assets as the distribution of flowers is not a very specialized job. But as not all retailers are willing to buy directly from growers, there is still work for Dutch traders and auctions in direct-sales chains. Depending on the type of flower demanded, the role of Dutch wholesalers will be more or less important. The more dedicated and short-term demand is, the more specialist wholesale traders are probably needed.

Another important trend over the last five years or so has been the integration of producers into trade, traders into marketing, and retailers into wholesale and production. The Association of Wholesaler Traders in Floricultural Products in the Netherlands (VGB) is very critical about the creation of a direct sales organization by the auctions. In their opinion, with a direct sales organization, auctions start to act as a wholesale trader. The organization of wholesale traders sees this as a threat to their position as wholesalers and unfair competition. At the same time, the auction cannot exist without giving the growers this extra sales possibility since their members have to sell all their production through the auction. Lifting this regulation could pose a threat to stable supply at the auction. Therefore, integrating the auction into wholesale trade is a threat and a blessing to wholesale traders who at times also like to work under direct contracts with auction member growers. The question is whether or not the developments of integration in the value chain have fundamentally changed the role of the Netherlands. An integrated flower production and wholesale trade group such as Ciccolella or the Dutch Flower Group still consists of rather independent companies operating from places they operated before. Organizational changes then do not

automatically change the dependence of wholesale functions in the chain on the Dutch auction or the efficiency of logistics flows through the Netherlands.

Delinking the logistics and sales processes in flower trade could in theory be a greater threat to the Dutch role in floral trade. In theory technical innovations such as buying at a distance and from a picture make traders less dependent on locations in the Netherlands. However, although it enables flowers to be bought from everywhere in the world, the flower trade is still concentrated in the Netherlands. This is because auctions still need their localized inspection apparatus to be able to give correct information on the flowers sold, creating trust in the virtual trade. Without such inspections, virtual trade would probably be much less accepted by the buyers. Yet in the future this delinking might proceed as inspections get shifted, for example, to the airport in Nairobi where flowers produced in Kenya could come together for Kenyan distribution to the European market. Particularly for bulk flowers, this might result in trade bypassing the Netherlands and going directly to markets like the UK or Russia. But in more specialized and/or buyer-driven chains, trade and logistics will probably stay attached to the Netherlands for efficiency reasons. It is the place where the full assortment of a specialized wholesaler comes together and gets re-exported to customers worldwide. Furthermore, physical presence is still very appreciated by many buyers. The quality demanded from purchasers increases whilst the quality of information given by Flora Holland is still perceived as poor, making it important for purchasers to have a look at the flowers before they get auctioned (Groot Handelsblad, 2009b). Given that the quality checks taking place at the Dutch auctions are often not to the satisfaction of buyers, it could be imagined that overseas quality checks would, for the time being, be trusted even less by buyers. Without trust, there are no sales.

Another important aspect of the territorialization of flower trade is logistics and transportation efficiency. Flower transportation is not a very specialized job and transporters from Eastern Europe have easily assumed transportation to these new markets. New techniques like vacuum cooling have even made it possible to send flowers as an express shipment by an express package provider. However, the efficiency of gathering a complete assortment of flowers in the Netherlands and subsequently redistributing them is still very high. It is simply more expensive to send small packages of flowers crisscrossing around the world from producer to buyer. The important domestic production of flowers in the Netherlands serves as the basis for this, more than the excellent cooling and storage facilities present. Of course these facilities are needed, but other places can do the same thing (e.g. Dubai Flower Center). The facilities then, are in themselves not territorialized assets. So, although technology has made the delinking of logistics and sales processes possible and other places have developed the logistic facilities to handle flowers, in practice logistics and trade largely remain together in the Netherlands for efficiency reasons.

What is important in logistics is the efficiency of redistribution that attaches physical flower trade flows to the Netherlands, irrespective of the quality of transport infrastructure. There are many growers producing just a few types and varieties of flowers, whilst there are also many buyers that like to have a complete assortment of the many different flowers that exist. Concentration of the market place and distribution is efficient in such a chain. At the same time the Netherlands and its specialized service providers within the flower cluster as well as service providers of logistics processes like luggage handling at Schiphol are able to create innovations that greatly improve efficiency in small-scale logistics processes needed for the redistribution of flowers from the auction to individual orders from importers and retailers (Groot Handelsblad, 2007f, Groot Handelsblad, 2008h). This certainly adds to the territorialization of these functions in the Netherlands, since the processes and equipment involved in this kind of logistics are very complex and can only be created in close collaboration between service providers and end-users (wholesalers).

The analysis of developments in the value chain shows the territorialized power of the Netherlands through the ability of the auctions to add flexibility to bulky chains and economies of scale in transportation and trade in the producer-driven chains. However, the strongest embedding of trade seems to exist in the more specialized production, trade and distribution of flowers within a wholesale-driven chain. In this chain the dominant mode of governance in transactions between trade, production, and retail are much more relational in character. However, wholesalers can also operate as turn-key suppliers of retailers. But contrary to our expectations, these turn-key supplying wholesalers lead the chain since they have knowledge retailers do not have and might even prompt demand to retailers. This is a much stronger position than that of wholesalers in a retail driven chain where they operate as independent turn-key suppliers to retailers. Here wholesalers have much less control over demand and can be dropped for a new supplier. The strong position of Dutch international flower trade is, to conclude, and as expected, connected to the Dutch national and local organized flower cluster. Formal and informal relations of knowledge exchange play an important role here, as well as many input-output relations and scale economies. This creates a strong embedding of flower trade that can only be bypassed in specific value chains and for specific market segments. Yet contrary to our expectations, even in more integrated chains this marketplace node plays an important role.

Chapter 7

High-tech consumer products

The importance of efficient logistics and an attractive business climate for a distribution node in a largely integrated value chain

"Logistically, we feel the Netherlands is the distribution leader of Europe with its central location, excellent distribution networks and state-of-the-art infrastructure. Secondly, the highly educated Dutch workforce, with their strong multilingual skills and a multinational approach to business was an important factor. Finally, the economics of operating in the Netherlands are very attractive."[41]

Since the 1970s, when the first microprocessor based on a semiconductor was created, a whole new industry has developed. Semiconductors now have penetrated our offices and private lives as data processing technologies have entered the world of personal computers, laptops, mobile phones, digital cameras, mobile music players, and memory sticks. Nowadays we all carry such high-tech consumer products around with us. The application of semiconductors has become part of our daily lives. In 2006 nineteen percent of the market for semiconductors was used by mobile phones, another nineteen percent by consumer electronics, and around forty percent by computer manufacturers (Van Ammelrooy, 2007). With the birth of high-tech products, new trade flows have started to cross the world. Many of these flows enter and leave the Netherlands on their way from production plants to consumer markets. The role and reasons for the Netherlands in the value chain of high-tech (consumer) products such as laptops, mobile phones, and digital cameras is the subject of this chapter.

An important expectation this chapter starts with is that physical and juridical infrastructures and a general attractive business climate are the most important assets of

[41] James Richardson, Cisco's vice president for Europe (http://newsroom.cisco.com, accessed February 3rd, 2009).

the Netherlands for distribution nodes. Especially for products of the Industrial World these assets are thought to be important. In case of Market World products also localized knowledge of logistics is expected to be possibly important in attracting trade-logistic activities. In the highly integrated value chain of high-tech products, control of the chain is expected to be at the headquarters of large corporations located outside of the Netherlands.

7.1 High-tech consumer products: the rise and development of a new industry

7.1.1 The semiconductor industry and the high-tech value chain

The development of semiconductor technologies has been very rapid since its beginning in the 1970s. It all started in the US, in Silicon Valley and Japan, but by the year 2000 Singapore, Korea, and Taiwan had also become very important semiconductor producing countries with Korean Samsung being the second largest semiconductor producer after Intel from America (Dicken, 2007, p. 333). Semiconductors are an important input to many consumer products. The logic of the semiconductor industry has huge impacts on the organization of value chains of these consumer products, including trade and distribution. Figure 7.1 shows some basic value chains for creating a consumer product with a semiconductor inside. It is based on a classification of semiconductor firms that Dicken (2007, p. 336-337) gives. We can discern three different types of value chain organizations and lead firms for high-tech consumer products: (1) Value chains that are governed by lead firms, Dicken (2007) calls them vertically integrated captive producers, that have integrated both semi conductor production, consumer products design and possibly also production. The semiconductors produced are entirely used by the company itself; (2) Value chains governed by lead firms (vertically captive-merchant producers) that do the same as the first but also sell their semiconductors to other firms; (3) Value chains that are governed by lead firms that do not produce semiconductors but only invent and market consumer products. The production of consumer products might be integrated in the firm, but also outsourced. These firms might either (a) buy their semiconductors directly from a semiconductor producer (merchant producer who produces only for sale, or from a vertically captive-merchant producer), or from (b) a 'fables' semiconductor firm that only designs semiconductors but commissions a foundry to make the semiconductor to customer specifications.

The integration of the production of semiconductors gives the advantage that delivery of semiconductors is secure when there is high demand. However, in an economic crisis this can be a disadvantage since semiconductor plants are very costly to build. When their production capacity is only partly used, this is a large burden to a firm

due to high capital losses. The demand for chips fluctuates greatly and more quickly than new production capacity can be installed. It takes six to twelve months to install new production capacity, whereas an increase in demand as high as eighty percent above average sales might take place within three months (Wu et al., 2005). When there is overcapacity, price declines of thirty to forty percent are often observed in the sector (Het Financieel Dagblad, 2007). In economic hard times, particularly smaller firms have to work together and find partners for take-overs to be able to continue to invest in new generation production equipment (Hijink, 2008). It is the expectation that only the largest chip manufacturers such as Intel and IBM will be able to build their own factories for chip production in the future. Other high-tech firms will use the capacity of foundries such as Chartered, TSMC and UMC or will have to work together with other firms to build chip factories (Het Financieel Dagblad, 2004). Following Wu et al. (2005, p. 126), the ability to manage capacity is the most critical factor for long-term success in high-tech industries such as semiconductors, consumer electronics, and telecommunications. As a result, tight control over supply, distribution, and stock is very important, as we will see later on in this chapter.

7.1.2 Product characteristics

One of the most important ways the semiconductor industry influences the consumer products industry is its blazing technological progress; technologies are becoming obsolete faster and faster (Oakley, 1996). Processors gain speed as memory storage increases every year. A 256 megabyte memory stick was the standard five years ago, but today most memory sticks start at 1 gigabyte of storage. Because of these fast technological changes, products must be marketed as quickly as possible: if you don't sell it today, you won't sell it anymore. Therefore, High-tech products are sometimes even classified as perishables (Wu et al., 2005).

In general, the product life cycle of high-tech products is short and shows a bell-shaped curve meaning after an initially slow start, demand increases exponentially and then declines (Wu et al., 2005). In every stage, demand for production capacity is different. There are different strategies of capacity management:

(1) subcontracting of production;
(2) relational or incomplete contract making; in which case parties specify informal agreements about how they will behave (since capacity investment must take place before a new product is fully defined)
(3) capacity reservation;
(4) building up inventory before product release as a substitute for production capacity (Wu et al., 2005).

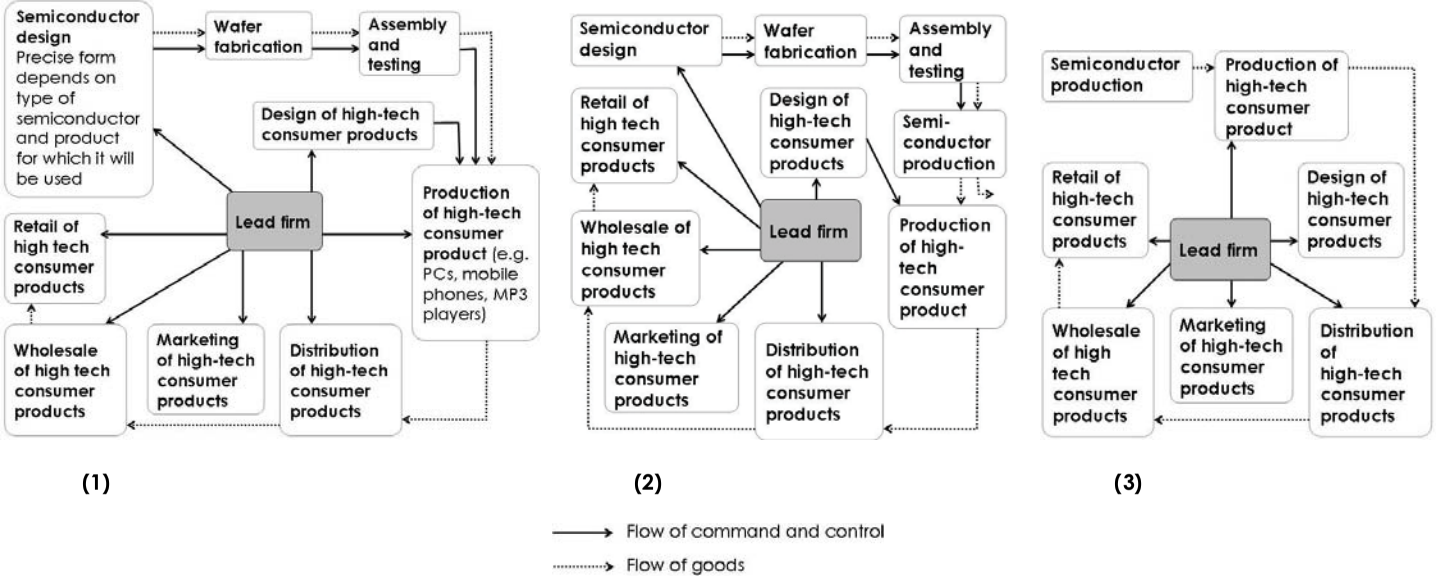


Figure 7.1 Three basic organizations of the value chain of high-tech consumer products (extension of Dicken, 2007, p. 318).

It is clear that the strategy chosen influences distribution. For example, when inventory is taken as a substitute for production capacity, this means more warehouse space is needed, especially before a product is launched.

Although the volatility and leading-edge aspects of high-tech products certainly influence the distribution, marketing, and sales activities in this sector, other characteristics play a role as well, and might even be more relevant for marketing and distribution of high-tech products (Meldrum, 1995). These include product-related uncertainties for producers, retailers, and consumers. As long as a technology is not very well-known, there are perceived risks in buying the product. The product still has to prove its utility, usefulness or ability to solve a problem. Also important is the fact that new products sometimes still lack an adequate external infrastructure of sales and post-sales services to help customers and retailers (Meldrum, 1995). In a case like this, trust and credibility become important issues: *'the credibility of the technology forming the focus for product evaluation, and the credibility of the supplying organization'* (Meldrum, 1995, p.52). Here distributors may play a role, as they mostly work with products of many different suppliers and can thus evaluate all of these products, offering better advice. But this is most-likely an issue for ground-breaking new technologies. When proven technologies are further developed, for example the data storage capacities of memory cards or sticks, issues of trust and credibility seem to be less important. It is then more important to be able to quickly deliver these new technologies without being left with large stocks of old models. The aforementioned marketing strategies probably have repercussions for the distribution and logistics strategy of a firm, as Bruce et al. (2007) mention. However, literature on this issue is very scarce, if present at all. Even a special issue on the marketing of high-technology products, services and innovations[42] did not address the question of wholesale trade, distribution and logistics requirements as it relates to marketing high-tech products (Sarin and Mohr, 2008).

Another important characteristic of the semiconductor and high-tech consumer products industry that I haven't seen mentioned in marketing and distribution-related literature is that these products are becoming smaller and smaller. High-tech consumer products therefore have an increasing value to weight ratio. This makes transportation over long distances easier and even the use of costly air transportation very common. Particularly at the start of their life cycle, high-tech consumer products enter Europe by air. Subsequently, they are transported by truck throughout Europe. Later on in the product life cycle, goods may come by ship to refill stock sold in earlier sales waves. Less fashionable items such as computer monitors often also come by container ship.

[42] Industrial Marketing Management, volume 37, issue 6, 2008

7.1.3 Outsourcing and control of the value chain

Electronics firms that bring consumer products to the market nowadays are generally not the producers of their products: they let firms like Flextronics, Foxconn, Quanta, and Invec make their consumer products for them (value chain model 3 in Figure 7.1). These producers are better able to flexibly fill production capacity since they work for different brand name companies at the same time. They are also able to make better deals when they purchase production materials (Schouten, 2008). Sometimes even design takes place at these producers, but the most advanced products are still designed by the consumer electronics brands (Schouten, 2008). The need to quickly respond to technological innovations and to be able to get products quickly to consumers makes control of the entire value chain important, including product marketing and distribution (Beard and Easingwood, 1996, Bruce et al., 2007). Particularly when it comes to bringing products to market, lead firms need to have a strong control on distribution activities and sales. Incentives for distributors and retailers are often needed to let them invest in consumer attention for a product (Bruce et al., 2007, Hultink et al., 2000). This is most likely the case with new products that do not yet have a very strong market position.

There are many channels to reach the market and many ways to organize sales. In the PC market firms continue to adapt the channels they use to new circumstances. Firms may use direct sales through the internet, sales by selected retailers, their own shops, or other distributors for specific markets (Chu et al., 2007, p.31). Chu et al. (idem) distinguish six distribution channels: direct outbound, direct inbound, dealer/value added reseller (VAR)/system integrators (SI), retail, the Internet, and others.

> *"Direct outbound represents sales by a manufacturer's sales force, agents, or representatives. Direct inbound captures a manufacturer's telemarketing and catalog sales. Dealer/VAR/SI, such as corporate account resellers and computer specialty dealers, focus on sales to large-volume buyers. The retail channel refers to storefront companies that sell to a large number of unrelated customers, Internet direct sales refer to sales through the manufacturers' Web sites."* (Chu et al., 2007, p. 31)

From the channels mentioned above, the most important are dealer/VAR/SI, with thirty-five percent of PC sales, and retail with 31 percent of sales (Chu et al., 2007). Value added retailers and system integrators are resellers that sell packages or total ICT solutions to their (business) customers instead of retailers, who sell individual products to private consumers. Moreover, these firms offer a range of other services like training, seminars, technical and financial assistance, and installation, as their websites show. To serve the European market, many high-tech production firms work with large European

distribution centres that deliver directly to large retailers or to dealers or distributors who in turn serve the market of (smaller) retailers or corporate end-users. In consumer products, as opposed to industrial products, channel choice does not seem to be very decisive for product success (Hultink et al., 2000). However, Chu et al. (2007) have shown that shifts in channel strategy can have large impacts since it has repercussions for downstream firms that might stand to lose a large part of their sales. I have also found this in my research where a lead firm was very cautious about going directly to a large retailer, since it could disturb relations with its distributor who first served this retailer. In general I found that customer size is a very important determinant of sales organization in high-tech consumer products: with larger customers bypassing distributors is attempted, although even then distribution to individual shops might be a problem. As a distributor explains:

> *"Retailers are just not specialized enough in distribution to individual retail outlets. Their organization is just not adjusted to that work. Even with a large retailer like Mediamarkt there are twenty outlets to serve. On the contrary, a distributor is specialized in this."* (PH 28)

However, some companies like Dell have deliberately chosen a direct sales strategy to end-consumers, no matter how small their purchases are.

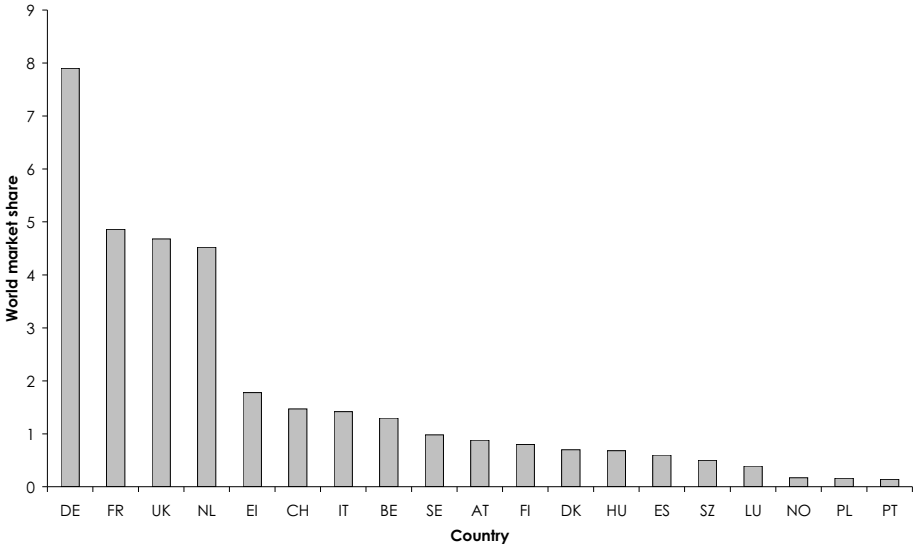
7.2 Concentration of distribution in the Netherlands

7.2.1 A relatively large importer and exporter of high-tech products

Although there is no data available specifically describing trade in products containing microprocessors or semiconductors, data suggests that the Netherlands has developed into one of the most important locations for distribution centres for these types of products. With a per capita export of IT and consumer electronics of 55,199,804 USD in 2006 (International Trade Centre, 2009), the Netherlands was the third largest per capita exporter in the world and the sixth largest exporter in absolute terms, with a 5.36 percent share in the world market. Particularly in the categories of automatic data processing machines (HS 8471) and parts & accessories of computers and office machines (HS 8473), the Netherlands trades a large part of world imports and exports (for every category greater than seven percent). This importance also comes to the fore in the Balassa indices for exports of these categories of goods; both are 2.4 (Intracen trade data). In 2005 the

Netherlands was the fourth largest importer/exporter of high-tech products[43] in the EU after Germany, France, and the UK (Meri, 2008). Meri explains the relatively high value of exports for the Netherlands through the 'Rotterdam effect,' meaning imports and re-exports of these products through the port of Rotterdam. Although this effect is also well-known for Belgium with the port of Antwerp, Belgian exports are much lower than Dutch exports. Belgium only takes 1.3 percent of world market share for high-tech exports, whilst the Netherlands takes more than 4.5 percent in the same year (see Figure 7.2)[44]. Rotterdam effect as such is not enough to explain the Dutch position in these exports.

Figure 7.2: World market shares for high-tech exports, EU member states and selected countries, 2005



Source: Meri (2008, p. 4)

[43] The products included in this category are aerospace, computers and office machines, electronics and telecommunications, pharmaceuticals, scientific instruments, electrical machinery, chemistry, non-electrical machinery and armament. See for exact SITC codes (Meri, 2008).

[44] Part of the Dutch high-tech exports consists of domestically produced goods from high-tech firms such as ASML. But their products do not fall into the category of data processing machine or parts and accessories of computers and office machines for which Balassa indices are high. Furthermore, the share of the product group in which they fall in Meri's work (the group is 'other' in Meri's figure 8. In this group non-electrical machinery is included, of which SITC 7311 is part which includes the machinery of ASML) is a relatively small group of products in Dutch high-tech exports.

These large shares in re-exports are the result of European distribution center re-exports of large international lead firms in high-tech consumer products. Distributors do not play a large role in re-exports, as they mainly only operate in one country. There are just a few pan-European or global distributors, such as Tech Data, Ingram Micro, and Dertech. Besides, many country-specific distributors serve local markets. Even pan-European and global players have local sales organizations and distribution contracts with high-tech suppliers at the level of individual countries. However, they have centralized some of their distribution activities. Therefore, concentrations of high-tech product re-exports result from the European distribution centers of the lead firms (brands) serving distributors and large retailers in different European countries and sales organizations.

7.2.2 European distribution centres: mainly from US and Asian firms

The largest share of high-tech product exports from the Netherlands is probably taken by re-exports of European distribution centers from American and Japanese firms that serve the European market through these centers. A Capgemini and ProLogis survey in 2006 (Lenders et al., 2006) reports that 20 percent of all high-tech and electronics distribution centers in Europe is located in the Netherlands, followed by Germany (17 percent) and France (13 percent). In 1996 63 percent of European distribution centers in the Netherlands were from the US, 24 percent from Japan, 8 percent from Taiwan, 3 percent form Nordic countries, and 2 percent from Korea (BCI, 1996). The US is an important source of foreign direct investments in the Netherlands. In 1996 57 percent of all European distribution centers of US firms were located in the Netherlands. For Japanese, Taiwanese, Korean and Nordic country firms this figure was 52 percent, 71 percent, 60 percent, and 58 percent respectively (BCI, 1996). Two thirds of Japanese and American firms outsourced their European distribution centre. An even larger portion of distribution centers from other countries was outsourced in 1996 (BCI, 1996). This means foreign firms do not actually own the majority of European distribution centers. However, from 2005 to 2007 European distribution centers have been the second most important destination for foreign direct investments (see Table 7.1). In 2008 more than half of all foreign direct investments reported by the Netherlands Foreign Investment Agency went to sales and marketing offices and European distribution centers (Ministerie van Economische Zaken, 2009).

Table 7.1: The direction of foreign investments between 2005 and 2007

Activity	2005	2006	2007	Sum 2005-2007 *(millions of Euro's)*	Share 2005-2007 *% of total sum*
Manufacturing/assembly	199	140	232	571	39.6
European distribution centers	66	26	158	250	17.3
European/global headquarters	94	49	64	207	14.4
Marketing and sales	9	90	29	128	8.9
Other	108	0	17	125	8.7
Research and development	18	23	30	71	4.9
Repair/training centers	5	3	43	51	3.5
Shared services	1	23	5	29	2.0
Custom contact centers	6	2	1	9	0.6

Source: NFIA (2008)

A general picture of foreign direct investments by different countries might give an impression of the importance of these countries as owners or users of European distribution centers in the Netherlands. US firms were still very important sources of foreign direct investments in 2007, but Asian countries like China, Taiwan, Korea, and Malaysia had also started to develop as sources of foreign direct investment (see Table 7.2).

Table 7.2: The ten most important countries of origin of direct foreign investment in the Netherlands between 2005 and 2007

Country of origin	2005	2006	2007	Sum 2005-2007 *(millions of Euro's)*	Share 2005-2007 *% in total sum*
United States	295	201	157	653	45.3
PR China	4	12	174	190	13.2
Japan	122	28	38	188	13.0
Korea	12	13	36	61	4.2
Switzerland	0	60	0	60	4.2
United Kingdom	16	19	16	51	3.5
Sweden	0	0	45	45	3.1
Malaysia	0	3	36	39	2.7
Canada	1	0	37	38	2.6
Taiwan	8	17	12	37	2.6

Source: NFIA (2008)

All this shows that the Netherlands plays an important role as European distribution center for high-tech products, electronics and computers. In general lead firms outsource most of the logistic activities they perform in the Netherlands. One of the firms in the study had also located its European, Middle-East and African headquarters in the

Netherlands. Also in this case, many activities like IT, loan administration, repair centres, advertising, and public relations were entirely or to a large extent outsourced. A large part of the work of these headquarters then comes down to the coordination of service provider activities. This does however, not mean that all of these service providers are locally hired. They can come from other countries as well.

7.2.3 Concentration in Amsterdam, Rotterdam, and the south

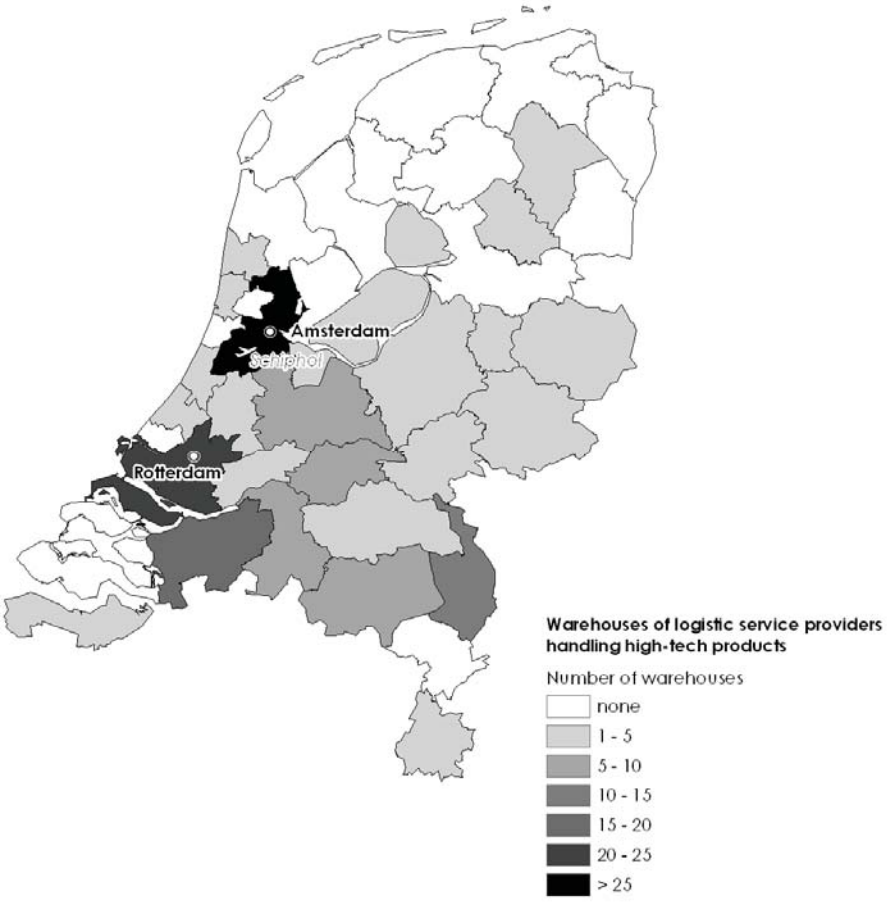
European distribution centres of high-tech consumer products are mainly most-likely located in the west, centre, east and south of the country. However, no data on the location of European distribution centres for high-tech consumer products is available. Only the Netherlands Foreign Investment Agency could provide some data, namely the location of distribution centres owned by foreign companies at January 1st, 2009. Their location is shown on Map 7.1.

Map 7.1: The location of foreign-owned European distribution centres of consumer electronics on January 1st, 2009

Source: NFIA, personal communication

Unfortunately enough, data on the location of European distribution centres of high-tech consumer products operated by a logistics provider that could show the importance of Amsterdam, is not available. The only other data available that might give an indication of the location of firms for high-tech consumer products is: (1) warehouse location data for logistics service providers who handle high-tech products and (2) data on wholesale firms in these products.

Map 7.2: The number of warehouses of logistics service providers who mention high-tech products as goods they handle by corop-region, June 2008



Source: map created with the information given in the list of members of NDL, available at www.ndl.nl

Map 7.2 shows the distribution of warehouses of logistics service providers who report that they handle high-tech products. This distribution is based on data compiled from information given at the website of NDL (Netherlands Distribution Country), an association that supports the Dutch distribution sector. This map clearly shows the largest concentration of warehouses in the Amsterdam-Schiphol area, around Rotterdam, and, although more scattered, in the region of Noord-Brabant and the northern part of Limburg.

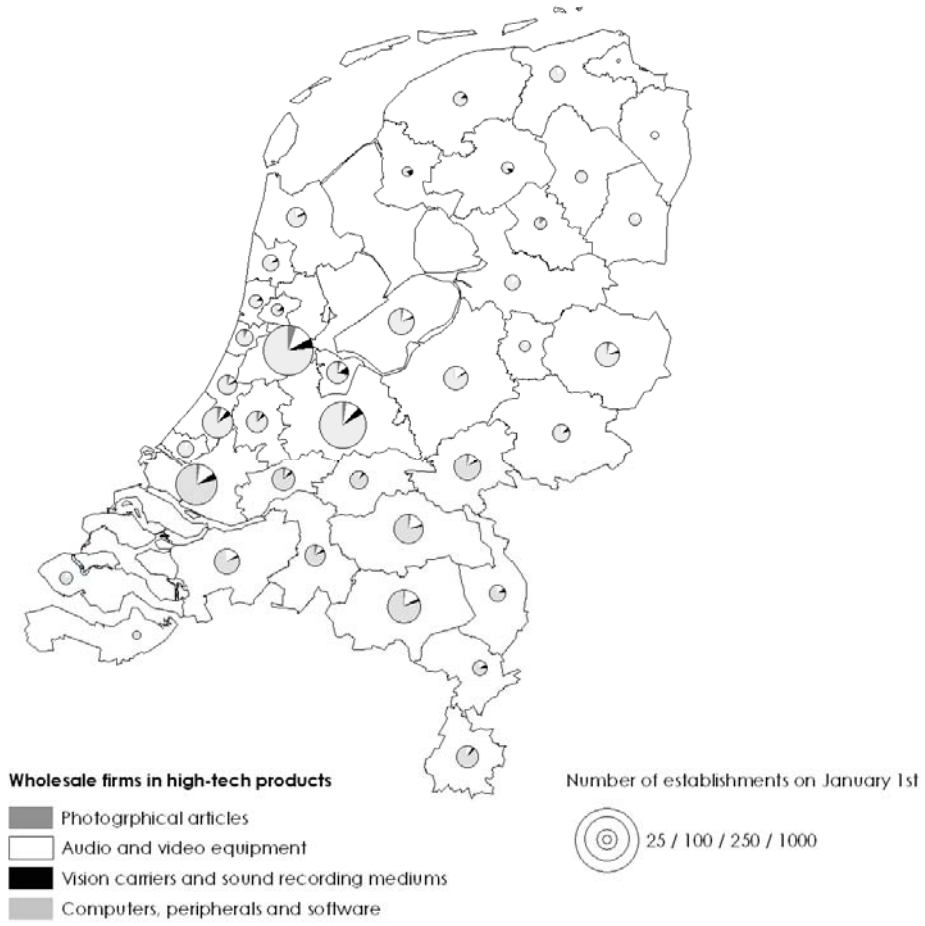
Although the warehouses on the map also include warehouses for goods other than high-tech products, the map does reflect some important points that might be related to high-tech products. First, the importance of the Schiphol-Amsterdam region seems to reflect the importance of air transportation in this sector. Second, as some high-tech goods come by container ship, especially parts less prone to technological change (e.g. laptop bags, monitors, head-sets), warehouses in the Rotterdam region are not surprising. Furthermore the map shows that the north of the country plays an insignificant role as a location for high-tech product warehouses.

Map 7.3 on page 204 shows more or less the same distribution of firms, although Brabant appears less important here. Although the wholesale firms on this map, as we have seen in the previous section, probably mainly only serve the Dutch market, their distribution might also reflect the location of their suppliers. The maps together indicate that distribution and trade services in this sector are mainly concentrated around Amsterdam and Rotterdam and are secondarily concentrated in the centre and south of the country. The North of the country is unimportant as a location.

7.2.4 Focus on European distribution centers

The focus of the fieldwork for this case study has been on firms that distribute high-tech consumer products through the Netherlands (or did so in the past), on distributors, and on logistics service providers that organize the flows of high-tech consumer products through the Netherlands. In the following paragraphs I will first discuss what the main activities of these firms engaging in high-tech import/re-export actually are. I will then discuss what these firms consider as the main location factors that have attracted them to the Netherlands, and the position that these functions have (developed) in the value chain.

Map 7.3: Wholesale firms in high-tech consumer products (SBI-codes 51477, 51432, 51433, 5184) by corop-region



Source: map created with data from StatLine (Statistics Netherlands, www.cbs.nl)

7.3 Trade activities of the high-tech value chain in the Netherlands

7.3.1 European distribution centres: handling of goods, keeping stocks

Basically logistics services involve handling flows from production plants abroad including transport and customs formalities to the warehouse and within the warehouse. Traditionally, logistics services end when products are transported to the customers (lead firms), who are usually distributors or large retailers. Recently customer

service and stock management have emerged as new logistics services, yet this is something requiring further development. However, as a large logistic service provider explained (PH 7), lead firms appear afraid to outsource these tasks as they fear losing control over an important part of the value chain. Furthermore, shippers might know their markets and customers better than their service providers and are therefore better able to make the right supply-chain decisions in view of developments in the industry (Lambooy et al., 2001). At the same time, as the internet becomes a more important way of ordering high-tech products, the contact between customers and service providers may become more direct anyway. It may be a matter of time before logistics providers become more involved in customer service and stock management (PH 7).

Good stock management is essential in the high-tech value chain since it lowers costs by requiring less stock to be on hand. This is particularly true for first generation high-tech consumer products that are part of the Market World, are fashionable, and have short product lifecycles. They require quick handling and distribution. Concentrating this distribution makes efficiently organizing distribution possible, keeping idle inventory levels low.

> *"Those goods [high-tech market world consumer products, m.l.] have prices that fluctuate by the week. So when it takes three, four weeks to ship them here from the Far East, they might have already lost ten, twenty dollars off the sales price per item. Therefore this merchandise ships by air. It may cost you five, six dollars, but you can sell it immediately."* (PH 26)

Second generation products at the end of their product life cycle or parts of high-tech product packages that are less fashionable and have longer life cycles (such as monitors or memory cards) are part of the less-dedicated Industrial World. Often these products are no longer designed by lead firms, but by their suppliers (Schouten, 2008). These lower-valued and less time-sensitive articles can also come by sea.

Stock management is, however, not only a matter of centralization of inventory. To be able to have zero or very small amounts of inventory the value chain has to be managed upstream through manufacturing and downstream through retail. For this good forecasting skills are needed. Firms differ in how much attention they pay to both manufacturing and retail, but in general it means they try to influence activities at both ends of the value chain, usually without becoming financially responsible for these activities. One of the high-tech companies in this research has changed the way they purchase goods. Instead of buying from the factory, transporting goods to the warehouse and selling and redistributing the goods, they now only become the owner of the goods once the goods are in the warehouse and sold to a customer. This means at the same time they send the order to purchase from the supplier, let's say a laptop, they also

send a bill for the laptop to the customer. It is also only then that this company declares the products to customs. This way, they never own stock. On the other side of the chain, the company tries to control the stocks at retailers and distributors. This way the company tries to prevent having to get rid of remaining inventory at discount prices when new models are introduced. However, not all companies are so intensely involved in stock management at distributors and retailers. As a distributor explained:

> *"Some companies are not interested in keeping stocks at distributors low. Their only consideration is: once I've sold it to a distributor, it is one step closer to the final consumer and my work is done."* (PH 28)

However, even when stocks at retailers are not controlled by the lead firm and no zero-stock strategy is at work, good internal stock management is essential for lead firms, as it can generate enormous cost-savings. One of the companies in this research, for example, explained how splitting up its central European stock into different administrative units for each national sales organization or distributor had resulted in a reduction of their European stock costs by one third: from 150 million to 100 million Euros. Centralizing, better controlling, and eventually shifting stocks from one national sales organization to another had thus created a very big financial advantage.

As we will see later on, although stock management is important, the fact that inventory is stored in the Netherlands does not necessarily mean ideas or best practices of how to organize stocks also come from Dutch sources. It also does not imply that the countries to which these goods are sent, have Dutch-managed logistic centres abroad. But if management functions do not necessarily take place in the Netherlands, what work is undertaken in these European distribution centers? One example is the adaptation of goods for country-specific requirements. This can be achieved by something like adding a country-specific plug and has long been an important value adding activity in European distribution centers. This kind of value-adding is being increasingly done in the Far East, just as assembly activities have shifted from places like Ireland and Scotland to Eastern European countries with lower wages (Van Egeraat and Jacobson, 2005b). Therefore in Europe, increasingly only customer-specific (rather than country-specific) packages of goods are made.

> *"Our operations in the Netherlands consist mainly of moving boxes. Products are already country specific when they arrive here."* (PH 4)

Accessories such as laptop bags and the laptop itself generally come from different manufacturers and are transported to Europe differently; sometimes bags come by ship or truck, whereas laptops come by air. They are only combined in the European

distribution center. As inventories of goods are kept deliberately low, cross-docking and package-making is what mainly occurs in European distribution centers: goods come in, are handled, and leave the distribution center the same or next day.

> *"Everything goes by air. Flight time is about twelve hours. In general our flights land at night and our stuff is at our customers next day. They bring the goods right to our distribution center, the same morning things are combined: computers arrive, the accessories are already there, they are combined, a sticker is added to the box and the same afternoon the goods leave. Delivery can be next day. That's how fast it can be from the Far East to here."* (PH 24)

7.3.2 Distribution: the need of local presence

Lead firms and their head offices have strong control over stock management and logistics organization. Although they outsource logistics and transportation to often global logistic service providers, local presence of the lead firm is still felt as needed in distribution. No matter what country of origin a lead firm has, in my research every company tried to keep very tight control over its distribution and stocks. This opposes the idea of an author like (Whitley, 1998) that the context of the national business system of a lead firm influences its global organization. In the case of high-tech consumer products, the global context of technological innovation seems to be so dominant that for every lead firm, no matter its national origin, control over supply, distribution, and stocks is essential. Other parts of the value chain might show more traits of specific national business systems, but at the distribution link this research shows a more globally-uniform strategy of tight control over logistics and distribution activities.

> *"There is central management […] but we also have a man in Sweden, in Britain, in France, to keep these local people working. Because […] you have wishes and requirements and you really need someone able to address your wishes but who is also able to make sure that requirements are fulfilled. […] When you start to subcontract [to local people, m.l.] this does not mean that you can forget. On one hand this logistics service provider does not know everything. On the other hand, you just have to make sure that he understands you well. You have to supervise him."* (PH 17)

This need for local supervision of logistics and distribution might also have to do with the fact that there are probably no worldwide uniformly working logistics service providers. The Netherlands is dominated by foreign multinational logistics service

providers such as DHL, Schenke, Kuhne & Nagel, and FedEx. Many of the Dutch logistics providers have been taken over by these firms. Since large international logistics firms have grown mainly through such takeovers, their IT systems and ways of working can be quite different from country to country, although their general terms of contract will be the same (PH 10, PH 20). This means that a high-tech firm that has developed a logistics solution in one country and wishes to copy it in other countries without getting all kinds of complications with new IT-systems, does not necessarily avoid these problems when working with a multinational logistics service provider. However, firms still might perceive advantages to having a logistics service provider who operates in many countries. It gives them a feeling of being more flexible and communications tend to be easier between different branches of the same logistics provider than between different providers. But internationally operating logistics service providers certainly do not make local presence superfluous.

Local presence of lead firms is also needed when it comes to wholesale trade to different European countries. Literature indicates the importance of at least some customization in case of a global product launch (Bruce et al., 2007, Oakley, 1996). The larger the differences are with respect to retail channels and competition, country mores, language and symbolic meanings, and technological infrastructure, the more customization must take place for a worldwide launch (Bruce et al., 2007). Also interviewees mentioned that total centralization seems impossible when it comes to understanding and addressing markets.

> *"They would prefer to do everything [marketing and advertising, m.l.] from the headquarters and it has actually been like that for some time. But then, they recognized that they had so little knowledge of the Belgian and Dutch markets that they wanted to have real offices over there as well. Between Belgium and the Netherlands you already see a large cultural difference. So, it's hardly possible to manage everything from the headquarters… you always need local people. We had a Dutch guy running the Belgian market but he wasn't able to do that. Now, we have Belgians working for us for the Belgian market. You could possibly centralize back-office work, but front-office, I mean, sales and everything, then you really need Belgians for Belgium."* (PH 24, global high-tech firm)

Even in organizations that are very centralized when it comes to marketing and sales, local sales organizations are responsible for the translation of the centralized sales campaigns.

> *"Our budgets for marketing campaigns come from central headquarters. […] In the Netherlands we have to set up and rollout these campaigns with knowledge of the Dutch market. […] You don't have to rollout every marketing campaign, but once a certain marketing concept is invented, you have to follow that to a large extent. You cannot refuse everything."* (PH 4)

High-tech lead firms do not always own the sales organization abroad. Sometimes companies work with exclusive distributors who represent the company abroad and some large (internationally operating) resellers buy directly from the high-tech firm. Online purchases also mostly buy direct from these firms. Working with distributors lowers overhead costs and improves the fluid assets of firms. Smaller inventories are needed when using distributors for the supply of individual retailers. Also, these distributors are very country-specific in their approach. Most distributors operate in only one country and the few that are more pan-European in their approach still work with local sales organizations, and sometimes even warehouses.

7.3.3 Relations in the value chain

The relations of high-tech lead firms with distributors and retailers seem to be under pressure continuously and very sensitive to economic conditions. When a distributor does a good job and one of his customers becomes very large, the lead firm might want to take over this customer. Therefore this can be harmful to the relation. However, a lead firm also has means to please a distributor and to get its help, for example for local campaigns. These are often difficult to organize financially for a lead firm. Paying a distributor for specific campaigning activities increases the expenditures of lead firms. This is not much appreciated by the shareholders of high-tech lead firms. Instead of campaigning payments, a lead firm can give distributors discounts on product prices. This only influences turnover, which is less of a problem for shareholders. Discounts are carrots lead firms can use towards distributors. In return to these carrots, lead firms expect distributors to help the promotion of a product without making it a true campaign for which a distributor gets paid. The balance between giving and taking creates a tension in the relation between the high-tech firm and distributor.

> *"It is a game of give and take. Whenever something like that [lead firm takes over a customer of distributor, m.l.] happens, you have to talk to that distributor and explain that next time, there's something in for him."* (PH 4)

This 'something' can be a discount as mentioned above, although a distributor also knows that for such a discount he has to do something extra to stimulate sales, otherwise

he will never get a discount again. However, how much he will do depends on demand: when demands for a product decrease, a distributor may insist on giving discounts, otherwise he won't be able to move any of his inventories. With stagnating demand, distributors may gain more power vis-à-vis the high-tech firm. One can imagine that they then try to get a larger say in issues such as stocks, discount prices, and product releases. On the other hand, when demands are high, lead firms get more power and working with more distributors can even increase their powers vis-à-vis these distributors.

Nevertheless, we should not overlook the importance of distributors in the chain. In the end, lead firms greatly need the capability of distributors to finely distribute goods. Lead firms are not competitive in delivering goods at the level of individual retailer, nor having goods in stock, at the right price, under the right conditions, at the right time. Distributors state that they are closer to resellers and therefore, better able to meet their demands. Furthermore, distributors try to stand out through the services they offer, such as training, advice, and installation. This is not the kind of activity a lead firm is focused on to distinguish itself from other suppliers. Lead firms then, also need distributors.

Since both clearly have their own expertise, it cannot be said that the relations between distributor and lead firm is captive. The expertise of both partners suggests a modular kind of governance. However, it is clear that when the demand for a particular product is high, a lead firm can gain a lot more power in the relationship therefore approaching captive relations: a highly dependent distributor in spite of the distributor's capabilities.

In short, the international trade activities in the value chain of high-tech products in the Netherlands are mainly distributive services and partly also marketing functions that bridge cultural barriers. Marketing functions are primarily nationally based and do not lead to exports. They are generally located within various market areas and are not completely centralized. The function of international trade services in this chain in the Netherlands is mainly related to increasing the efficiency of the value chain, making smaller inventories possible. These are very logical functions when considering that Market World products are primarily involved, for which larger inventories and slow distribution chains are a problem.

The lead firms in this chain clearly control and coordinate the logistics functions, even when they are outsourced. However, logistics service providers may take the lead in activities relating to issues like customs. Through specialization they often develop superior skills, as they encounter customs problems more often than individual high-tech firms. These problems arise when highly innovative new products have not yet had clear customs procedures defined for them. For example, a product might change from one product category to another when a new tool is added, or it

might even become unclear what kind of product it is, making it difficult to declare. An example could be a screen that might be a television screen and a computer screen, or a mobile phone that is a camera at the same time. This can cause delays at borders with customs clearance. One can imagine that logistics service providers are better able to fix these sorts of problems than lead firms that do not have the same broad range of experience with border and customs processes. This, however, is not the case. Logistics service providers would rather form agreements with high-tech firms that free the logistics firm from financial claims. Responsibility then remains with the high-tech company to correctly declare these products.

7.4 Assets for the concentration and location of distribution and logistics of high-tech products in the Netherlands

7.4.1 The process of logistic design and location choice: from strategic headquarter decisions to localized assets

The desire to benefit from economies of scale is often mentioned by companies that have centralized their European logistics through a European distribution centre. Besides these internal economies of scale, warehouses, inventories, and external economies of scale may play a role. The process of logistics design and location choice, described below, shows that the role of these external economies increases at the level of detail reached in the decision process.

When a high-tech lead firm (shipper) wants to (re-)organize its European logistics, there are generally two strategies it can take. The first strategy applies to a situation where the shipper has already chosen a country for its location or has very clear ideas on how it wishes to organize its logistics. In this research an example of the former was a high-tech shipper from Japan that wished to locate in a specific German region since it was centrally located on the map of Europe. This area in Germany, according to the interviewee, was not very advanced in logistics. This fact was later discovered by the Japanese firm, but once located in Germany the firm only wanted to reorganize its logistics within Germany. A second strategy applies to firms that have no idea where to locate and how to organize logistics. The first method of approaching a solution to this lack of knowledge is pursued when a company defines its demand for logistics service providers in a specific country to organize logistics in the most efficient way. In the second case, a firm often starts with a consultant or demand-for-free consultancy of large logistics service providers. These consultants then develop several options for the organization and location of distribution centres and distribution.

To find an optimal location consultants and shippers that design their own distribution system work with general logistics parameters like product type, transportation modes and requirements, locations of production and demand, needs with respect to time to market, and expectations on market developments. With this knowledge they can make network analyses and decide how the market can best be served form a geographic point of view. Since time to market is very important in the logistics of high-tech products, it is important to locate European distribution hubs where products can be quickly transported to the markets.

> *"Depending on logistic parameters we 'hub' an order through Breda or through France."* (PH 6)

The more time sensitive high-tech products are, the more important a central location from which a large market can be served quickly becomes. The Netherlands is considered a good site for this. However, road congestion might become a push factor here. Proximity to airports is also very important, since almost all of these goods are transported by air. The attractiveness of an airport is dependent on how much freight it can handle and the cost of infrastructure around the airport. In general, the capacity and capabilities present at Schiphol Airport are considered good, but relocation is always an option.

> *"The roads around Amsterdam are increasingly busy and Schiphol has reached its growth limits, so you see many flows now relocating to Zaventem and Luxemburg."* (PH 10, international logistic service provider)

Also customs formalities play a role here. The Dutch customs are generally considered as very efficient and well organized. This lowers the costs and time of handling goods and shortens time to market. This is essential due to the short product life cycles of high-tech products.

Only in the next step, once possible regions for location are chosen, is the availability of logistics facilities taken into account. Some optimal locations from a geographic point of view aren't that optimal in practice, when there are no service providers available. The Netherlands might not possibly be the most central location in Europe in absolute terms, but a more central location like the Elzas in France is not an option since, as the respondents in this research explained, the region lacks the population and workforce needed to develop into an important logistics hub.

In the steps that follow, many other aspects like an attractive business climate are taken into account. The importance of multilingual skills was frequently mentioned

in this research. The Dutch labour market stands out positively in this: multilingualism is something not generally present in other countries and especially important when customer service is added to logistics operations in the Netherlands.

> *"Take, for example, the ability to speak English. When you look at Italy, the ability to speak English is definitely not obvious."* (PH 4)

The flexibility of the workforce in the Netherlands, with its extended system of temporary employment agencies is also important for logistics centres that have peaks and valleys in the demands placed on a workforce. Geodis Venlo Logistics Centre, for example, which is the European, Middle-East, and African distribution centre for a world leader in printing technology, employs a workforce between 250 to 500 people in peak times. This easy doubling of workforce is made possible with temporary workers. In addtion, when countries and regions are chosen for logistics, the actual location site has to be selected. Here availability and cost of office and warehouse space is important.

7.4.2 Domestic rivalry as a competitive advantage, only in late phases of location decisions

The strategy companies use to develop optimal logistics organization shows several important themes with respect to the assets that attract high-tech value chain logistics to a place. First, only a location that combines a central location within a market area with good logistics facilities, an attractive business environment (fiscal), and available space for operations, will be able to attract a European distribution centre or other logistics facility. These are then important characteristics or assets for the local production system and state to attract distribution centres of shippers of high-tech products.

Second, it shows that local knowledge on logistics like the ability to design the organization of logistics is not a first consideration when it comes to the location of these activities. Strategic decisions like how to organize logistic operations and in which countries to locate key functions such as warehousing and transportation hubs, are often made in a different country than where the logistics operations will be located. A global shipper might contact the consultancy branch of a global logistics service provider for its European operations, instead of the department of such a service provider in a specific country. Still, logistics service providers often mention Dutch knowledge of how to organize logistics flows and the leading position of the Netherlands regarding logistics-based knowledge, alongside the US, Germany, and the UK. Logistics service providers point to knowledge available in the Netherlands and the importance of using that knowledge for the Benelux market, the most important for tenders in logistics. As a representative of a large logistics service provider explains, when this knowledge comes

from corporate headquarters of the logistics company in let's say France, market responses would probably be slower and less adequate due to a lack of knowledge in the specific ways of doing things in the Netherlands. However, it is not clear that this is a matter of specific logistics knowledge. According to one of the interviewees, it is mainly a matter of perception that the Netherlands is very good in the logistics of information and communication technologies and consumer electronics. Furthermore, when a shipper has a tender for Benelux, this means that at the strategic level of the shipper (or its consultant) Benelux has already been decided as the best place to locate logistic operations. Shippers design the geographic organization of their European logistics largely in-company as part of their strategy, without specific Dutch knowledge.

> *"We are the ones who have developed the whole system of merging, hubs, producing; we have developed that system ourselves. It is something other parties can help us with to find smart solutions, but it is something we do ourselves as a company. So that's not some kind of unique knowledge available here." (Interviewer: you mean this is knowledge that is part of the global company?) "Yes, exactly!"* (PH 6, global high-tech firm)

In short, the decision to locate in a specific country at the strategic level seems not be dependent on the logistics knowledge available in a specific country.

Third, the way in which logistics decisions are made shows that, once a logistic model and optimal locations are defined with the help of network analysis, for example how or if the market will be split-up for distribution purposes, the availability of logistics providers and costs start to play a role. At this point, tenders often go out to different global logistics service providers that can show how they could fulfil the wishes of the shipper, and at what costs. Corporate then decides on the use of one or more logistics service providers at the corporate level of the shipper. Transport and distribution play roles only on local levels.

At this point domestic rivalry, one of the arguments in Porter's (1990) diamond, may emerge as an asset of a local production system. One could plead against this argument since shippers generally do not work with comparisons of local players when they decide upon the organization of their global or European logistics and locations of their operations. They work with global service providers for that, and therefore global competition seems to be more important than local competition. However, logistics providers do work with local transporters and other service providers of like those dealing in warehouse space. At that level intense local competition might result in better deals. These better deals with local service providers might also result in a situation where the best deals global logistic service providers can offer are often those located in the Netherlands. As a case in point, the broad choice of logistics service providers and

handlers at Schiphol airport enables firms to continuously look for the best deals and assure their shipments will quickly be handled after landing. This can be different at other airports, where less service providers are available (PC 17). If this is true, and the way in which shippers of high-tech products work to design and implement their logistic organization suggest that it is, the competitive strength for the location of the Netherlands as a trader (distributor) of high-tech products is partly due to the fierce competition of distribution and transport service providers based there.

7.5 Value chain governance and embeddedness of high-tech product distribution in the Netherlands

The previous section has shown how a mix of different factors makes the Netherlands an attractive place to locate a European distribution centre for high-tech products. It is however not very clear how territorialized these factors are. As explained in the theoretical chapter, geographical embedding is also dependent on how relations in the value chain are governed.

The relations between high-tech lead firms and logistics service providers are mostly modular or market-based, implying that shifts to other service providers are made rather easily. Furthermore, lead firms often do not have direct investments in logistics infrastructure like warehouses that would at least temporarily bind them to the Netherlands. In this respect the territorialisation and embedding of high-tech product import/export in the Netherlands do not seem very strong.

In the outsourcing of high-tech product logistics, key performance indicators play an important role. These are indicators of what a lead firm expects from its logistics service providers. Indicators include such things as percentage of losses or damages to goods, instances of delays, and mistakes in delivery. Often different logistics service providers are contracted at the same time and performances are monitored. The service provider with the best performance gets most of the work. Most lead firms tender logistics services yearly. This means that every year new service providers can be chosen. But changes to the global logistics service provider used are usually not the decision of the lead firm's branch in the Netherlands. This is decided higher up in the lead firm, as part of a broader strategy. Only the outsourcing of transportation at the local level is the responsibility of local organizations of shippers and logistics service providers. This suggests that the embedding of distribution activities of a lead firm is not so strong in the Netherlands.

However, although companies work with key performance indicators and an abundance of logistics providers suggest their expendability, some firms have quite strong relationships with their providers to ensure high quality levels.

> *"We try to speak to our warehouse operator at least once every three months and when problems arise, more often. [..]We recently visited them. We then also invite the transporters and before long we have an appointment to visit our customers here, to see what is going well, and what improvements should be made. […] At some point, when you know each other a bit more, it works much easier."* (PH 24)

Logistic service providers that organize the transportation and logistics of goods in the Netherlands for the lead firms might also outsource parts of the work, such as trucking. The outsourcing of this kind of work is mostly the responsibility of the local department of internationally operating logistics service providers.

> *"There's just a lot of local knowledge that goes with that. Selection of transporter… of course you always work with contracts, but you cannot see from the outset whether or not you are dealing with a good transporter. That comes by experience. That is local experience. And that is, of course, difficult. We use these key performance indicators for that. You can keep your transporters alert with that."* (PH 26)

Demand in the chain of high-tech products fluctuates; autumn is particularly busy. Companies tend to work with a stable basic amount of charters with long-lasting relations combined with more flexible contracting for additional capacity in peak times when *'you just have to source your truckers [trucking capacity, m.l.] wherever you can.'* (PH 7)

The relations described so far do not influence the decision to organize distribution through the Netherlands. The decision to distribute through the Netherlands relates to the location decision of the European warehouse. The distribution facilities used for central European distribution such as warehouse and computer facilities are generally all outsourced or designed to be. Large high-tech firms do not want to own these facilities since this reduces their flexibility and gives them less working capital. High-tech companies sometimes even ask their logistics service provider to take over the whole warehouse, all personnel included. However, when the logistics service provider owns a dedicated warehouse, this does not make the lead firm instantly more geographically flexible. In cases like this, contracts are often set for longer time periods than when warehouses are not dedicated to one specific client.

Also logistics providers often do not own the warehouses they use. They generally and increasingly rent these buildings. Flexibility in operations seems to be more important than low prices. Non-asset based companies are becoming the standard. Costs for writing off buildings are avoided, making a company more flexible. They can move quickly and without obligation. Smaller, independent players seem to be the last

to keep their own warehouses and sometimes rent them out to others. The possession of buildings can give them an advantage.

> *"With respect to costs, once you own a building outright, you can write off building on a longer period of time, offering a better deal to a customer… so you can work below general market prices. [..] But the trend is to chose for flexibility, more than for price advantages. Because, at some point, you know market prices and you know your competitors that are present in this region. You know what they pay and what you pay and prices are more or less equal everywhere. When you make an offer, and your colleague makes an offer, you know that these are more or less the same because the majority of the companies have sold their buildings and lease them back. The only difference you can make is a long-term contract that lowers prices."* (PH 10)

Logistics service providers generally dictate the specific software used in contractural agreements.

> *"That is especially the case with very large customers that have very large systems running. But in that case, the hardware used is still ours. Because the infrastructure, the cabling, and everything… we try to use our own since, whenever we loose a customer, we can re-use those things. Everything we can re-use we prefer purchasing ourselves. Other things we prefer to be customer-sourced."* (PH 20)

So the investment in warehouses does only temporarily fix European warehouse activities to the Netherlands. In principle these companies are quite flexible to leave when the costs of staying become too high.

Also the logistics knowledge present at logistic service providers does not seem to attach lead firms to the Netherlands. Since, although logistics service providers like to present themselves as fully able to invent logistics solutions, in general lead firms seem to be keen to invent their own solutions.

> *"First we intended to outsource logistics entirely, but what you see is that you still need a logistics position in your company, not only to be able to specifically explain your wishes to your logistics service provider, but also to communicate your requirements and how these can be met. Of course the nice scenario is when the logistics service provider tells you everything he can. But often you talk to salespeople and not to operational managers, and*

> *there is some… I have to be careful here, but there is some difference between these two."* (PH 17)

So although lead firms frequently use the Netherlands as their European distribution gateway, they do not specifically seem to use the logistics knowledge that is available in the Netherlands. They tend to source this knowledge from within their multinational organization, which is often outside of the Netherlands. This is the same for the global logistics service providers who may have a centralized research department to advise shippers on the organization of their European distribution, wherever it is in Europe.

Becoming place-bounded with respect to logistics activities seems to be something shipping companies like to avoid, in so far as this decreases flexibility and the ability to react to changing market circumstances. This is no surprise when we take in mind the characteristics of the high-tech industry discussed earlier in this chapter. For this industry capacity management is the most significant problem to be solved. This problem also affects the trade and logistics links in the chain, creating a scenario where costs to a certain extent are seen as less important than flexibility. The accommodation of flexibility has become one of the main competitive advantages to be developed, inter alia through flexibility in the labour force. However, it also results in a weaker position for trade-logistics services. They are easily hired and fired with fluctuations in the market.

Although the respondents of this case study generally see flexibility as important, they have also repeatedly mentioned costs as a major location factor. One of the respondents, for example, mentioned the relatively low cost of office space around Amsterdam, compared to other major European cities and logistic hubs. This makes the city a very attractive location for them. More general traits, like the attractive business and fiscal climate, were frequently mentioned. This includes such things as the relatively low corporate tax rate of the Netherlands, the possibility of tax deferments, and the participation exemption that applies to Dutch holding companies. This is an instrument to avoid double taxation when a company operates in different countries. These attractions of the Dutch business climate are, as we will see in the next chapter, clearly the result of a deliberate policy to attract foreign investment. This in tandem with a deliberate policy to develop the country into a distribution centre between Europe and beyond, has made the Netherlands a very attractive location for trade logistics and sales functions of foreign companies. Nevertheless, the analysis in this chapter shows that for high-tech trade logistics functions, the importance of costs in their location choice weakens their embedding to the Netherlands. When costs rise, or lower-cost areas emerge, these companies are prone to relocate.

This weak geographical embedding has also been reported for other parts of the value chain of high-tech products. A case in point is the Irish and Scottish microcomputer industry that suffered from many closures in the last decade. These

plants did not appear to be part of a cluster or agglomeration binding them to Scotland or Ireland. Rather they appeared to be drawn by relatively low wages and fiscal incentives. As a result, many of these plants closed their doors when wages rose from 1998 onward (Van Egeraat and Jacobson, 2005a). In this case, *'to a large extent, geographical proximity has been substituted by 'organisational proximity' […] and 'temporary geographical proximity'* (Van Egeraat and Jacobson, 2005a, p. 415), meaning operations can easily be located elsewhere while maintaining high quality management. Most of the information that had to be exchanged during operation of these plants was of relatively low intensity, requiring low levels of face-to-face contact. Even when face-to-face communication was needed, this could be organized through a combination of short-term travel of engineers or the stationing of resident planner-engineers (Van Egeraat and Jacobson, 2005a). This may have made relocation easier than in cases where local presence and proximity to local suppliers is important. In the case of centralized distribution and logistics links in the value chain, organisational proximity to distribution knowledge seems to be more important than geographical proximity.

As long as the Netherlands enables high-tech firms to operate effectively through short lead times from aircraft to distribution centre and final destination, as well as a flexible labour market to respond to fluctuations, these companies will remain here. However, when another place becomes more attractive due to lower land prices, fewer flight restrictions, or even more efficient customs, these companies may relocate. Logistics providers are in a continuous process of re-evaluation and possible relocation.

7.6 Changes in the high-tech chain and the position of the Netherlands

Developments in the value chain of high-tech products might affect the position of the Netherlands. There are three major developments that affect the chain: (1) Increasing speed of innovation; (2) Increasing shift of value-adding activities to low cost countries in Asia; (3) More and more security measures at borders.

The first development increases the need for speed and efficiency in distribution. Innovations make current technologies and products obsolete and make the ability to quickly bring products to market even more important. This can be done through efficient logistics. As has been discussed in Chapter 4, the ability to deliver flexibility in trade-logistics, seems to be a strong suit of the Netherlands. The respondents of this case study have mainly suggested that this logistics efficiency is due to labour market flexibility and fast Dutch customs procedures. Although a few respondents have also mentioned knowledge of logistics, it has not become clear that this is the ultimate advantage of the Netherlands in this field. As we already have seen in Chapter 4, this is also difficult to assess for the country as a whole. However, there are

some indications that the Netherlands has developed some competitive advantages or territorialized assets in this.

Another way product innovation is shortening product life cycles is through perceived obsolescence. This is the feeling marketers and advertisers want to give consumers in order for them to replace products that work perfectly well, but may not be the most up to date version or newest model. This can be done through sometimes only minor product enhancements, including new colours or product design. This may require lead firms to put even more effort into marketing their products. It is however questionable if these marketing functions will locate to where distribution takes place. In the words of Fred Forshty, VP for World Wide Manufacturing at Apple Corporation, the goal is *"the ability to launch new products quickly, with simultaneous worldwide introduction of localized versions"* (Oakley, 1996, p. 75). Whereas the production of localized versions will probably take place in Asia, where the largest part of production already takes place, the introduction of these versions will most likely be organized either by central headquarters or by nation-specific sales organizations. These local sales organizations are quite important for tapping markets, even without the localized versions of sales products mentioned above.

The second development will mean less product-based value-adding activities for Europe and the Netherlands. Distribution may increasingly become a matter of redistribution without stocking and value-adding activities. However, the third development of increased security requirements will probably add work to the flow of goods at the point of entry to the EU.

> *"Security is an issue. Over the last ten years there has been a tremendous change. Airfreight security has increased tremendously, to the detriment of speed. And it costs a lot of money. The building has to be secure, all freight has to be known, declared, from a known customer recognized as such by the military police. Freight has to be recognized as capable of being transported by air. The last years after September eleventh, a lot of administrative duties have been added. That has been a very big change."* (PH 26)

This makes efficient handling at the border and a market-sensitive customs organization even more important than before. For this, solutions based on information and communication technology and joint action by public (e.g. customs), semi-public (e.g. port authorities), and private (logistic service providers) parties may be important. Chapter 4 has already shown that this practice of joint action is something rather well-developed in the Netherlands. The continuation of developments described above and the increased need for logistic knowledge may make distribution activities in high-tech product value chains more embedded in the Netherlands and may add to the

continuation of high levels of re-exports of these goods. However, as we have seen in this chapter, these relations are definitely not certain and it still is something to be proven in the course of time.

To conclude, this chapter has shown that, just as expected, physical and juridical infrastructure and an attractive business climate are important assets for attracting trade-logistic activities. Contrary to our expectations it is not very clear that products from the Market World, that are more demanding with respect to logistics, use localized knowledge on logistics. The headquarters of high-tech lead firms and logistic firms, mostly located outside the Netherlands, seem to be the most important sources of knowledge of this kind that they export to the Netherlands through their in-company network of offices.

Chapter 8

Conclusion

Variety of trade activities and embedding of trade: mixed competitiveness of the Dutch trade hub

This research has tried to show how varied the embedding of international trade is in the Netherlands, and therefore how difficult it is to speak of *the* Dutch trade hub, let alone strengthen the role of the Netherlands in international trade with only one generic type of policy. At least three types of trade nodes should be distinguished: a distribution node, a marketplace node, and a trade-network node. However, in discussions on trade hubs such a distinction is generally absent, making it hard to truly understand what is going on economically. Dutch policy has particularly been focused on the development of the distribution node and the stimulation of distribution activities. But, as an answer to the first research question, the cases have shown that many other trade activities also generate re-exports. The cases show that enabling flexibility in value chains of the Market World is a very important role of traders and service providers in the Dutch trade hub. In each type of node, different ways are found to increase this flexibility: through logistics services in the distribution hub, through the use of effective coordination of overseas production networks in the trade-network node, and through the offering of a broad and deep assortment in the marketplace node. Also of relevance are the debate on coordination and control functions, and the distinction between different types of trade nodes, worlds of production and value chains. Having the trade – as expressed in re-exports – definitely does not imply any coordination or control of the flows in the chain, especially not in the case of a distribution node. Furthermore, the embedding taking place is not the same for every kind of trade service, value chain organization, and type of product. Policies to develop the trade node, therefore, seem to need being quite case-specific and sensitive to the possible different types of trade nodes, if they want to become really effective in embedding international trade. This chapter will discuss these issues and answer the questions this research began with. Furthermore, I will reflect on the theoretical framework used, and the research carried out. I will finish with questions open for debate and research.

8.1 The role of the Netherlands in international trade and the coordination and control of value chains

The cases have shown that the international trade role of the Netherlands only involves coordination and control functions to a small extent. In the first type of trade hub, the European distribution centre, control of the value chain and also coordination of the distribution activities is generally in the hands of (foreign) lead firms and offices outside of the Netherlands. If logistics complexity increases due to increasing variability in demand and geographical disintegration of the value chain, knowledge for the management and coordination of logistics in this chain becomes more important. The availability of this knowledge and related facilities within the distribution hub might then develop into a territorialized asset bringing coordination and control functions of logistics and distribution to the Netherlands. However, contrary to our expectations, until now the logistics control activities of highly internationally-organized logistics service providers and lead firms, even in Market-World chains do not seem to be strongly attached to the Netherlands through knowledge of logistics. This might be explained by the fact that international operating lead firms consider the knowledge on distribution as strategic and therefore prefer to keep it in-company.

In the case of the Netherlands as an international marketplace for cut flowers, the value chains that use the market are much less integrated. Control of the chain is not clearly in the hands of one party. The market is the link between independently operating supply and demand sides. But the market itself, its rules of the game and organization, are controlled in the Netherlands. This market and its rules of the game are, however, also subject to external forces such as changes in value chain organization, and new players and geographical areas entering the market. The market has to adapt to these changes. How the market does, is in the hands of the actors creating the market. In the case of flower trade, these are Dutch producers or an independent private party like Tele Flower Auction. The cooperative auctions have opened up their markets to foreign producers and have started a direct sales department, resulting from changes in production and demand, especially from large retailers operating as lead firms in the consumer-driven value chain. At the same time, whether or not lead firms like it, Dutch auctions as a marketplace embody an important force in the chain, controlling a uniquely broad assortment of flowers. So, although control of demand might be located somewhere else, control of supply is still anchored in the Netherlands. Therefore, control over demand does not imply control over supply when they are connected through a marketplace.

In contrast, traders in the trade-network node coordinate parts of the chain. At the same time, the case of clothing shows that these traders do not necessarily also control the chain. For clothing, control is mainly outside of the Dutch trade network

node, as (foreign) lead firms decide when and how something should be done. Since the focus is on coordination, in theory this network node can function very well without actual flows of goods (imports and re-exports) passing though the Netherlands. The paradox is that having coordinative power in a chain does not have to imply that goods physically pass through the area where coordination takes place. Goods can easily take a different route. The competitive power or asset developed by a trader in a trade-network node lays not so much in the handling of physical flows, but in the handling of flows of information.

In all three types of trade hubs coordinative power can exist without physical flows. In the case of the Dutch distribution node, we see a recent development, supported by the Van Laarhoven Committee, to develop logistics knowledge and coordinative power. Ultimately this can imply that flows that pass through other hubs, will be coordinated by Dutch firms. In the case of the marketplace node of flowers, physical trade can change into virtual trade backed by a network of quality control centres at production sites. Physical trade flows can become much more direct, although financial flows still pass through a virtual central marketplace in the Netherlands. Lastly, in the case of the trade-network node, private-label suppliers can start directly sending products from foreign producers to foreign customers. Coordination and control functions therefore are not necessarily attached to physical flows nor are they attracted by them. The development and embedding of flows and of coordination and control functions therefore should be approached differently by policy makers and researchers.

8.2 The embedding of trade activities in the Netherlands

The embedding of trade in the Netherlands very much depends on the type of trade node involved, type of trade activity, and the value chain at stake. The mechanisms of localization, as described in geographic theory, and the mechanisms of embedding through value chain organization are important. When there is no clear localization advantage, or these are territorialized in limited ways by being present in many other locations as well, trade is only embedded in a limited way to the Netherlands. This way it is possibly much easier to forecast trade with general trade- and gravitation models. When localization economies play a role, as is especially the case in the marketplace node, much more case-specific knowledge is needed to understand the location of trade. Even the addition of logistics friction to gravitation and trade models (as Lee, 2008 has reported as important to incorporate in these models) will probably not enable these models to ideally describe trade patterns. But as an addition to these models, the research also enable us to see that gravitation models should probably be adopted to specific types of trade nodes and goods to become better able to describe actual trade

patterns. For example, cultural knowledge, should probably play a less smaller role in a model that describes distribution hubs than in a model describing a trade network node. Since the most important variables attaching trade are different in each type of hub, the strength and type of embedding of trade varies.

8.2.1 Weak embedding of the distribution hub

The first role of the Netherlands, distribution, shows, as expected, only a relatively weak embedding, to a large extent based on imitable factors. The central location of the Netherlands is important, as well as a good supply of labour, attractive fiscal conditions, and fast, efficient customs. In the case studies of the clothing and high-tech products, logistics knowledge did not emerge as very important criteria for European distribution centres since the knowledge of logistics design appeared to be mostly company based as opposed to bounded to a specific geographical location. The focus on costs makes the embedding of logistics activities in the Netherlands always in danger. Relocation is almost permanently considered. A case in point are semi-production services like market customization of products, which have moved from Dutch European distribution centres to China or other Asian countries to lower costs.

That being said, distribution centres still may be more strongly attached to a place. At this point then, world of production becomes an important aspect to take into account. Flexibility and speed are increasingly important as more and more (Industrial World) products become marketed, entering the Market World. Goods also become more and more dedicated at the level of the individual (Prahalad, 2009), in a way becoming part of the Interpersonal World. Therefore, flexibility and dedication also become more important in trade and logistics. To be able to deliver the flexibility demanded, it is important for logistics service providers and traders to act and react flexibly to changes. Flexible, efficient and fast logistics is not only a matter of low costs and good infrastructure in ports, rails, roads, waterways, and airports. It is also a matter of conventions that enable customs to quickly adapt to new products and circumstances and of logistics service providers who are able to flexibly and innovatively adapt to new situations. As shown in Chapter 7, there are some indications that the Netherlands does possess these qualities. The development of these qualities depends on many more territorialized processes, such as the development of local customs conventions, joint action of public and private parties at different levels, and different industries engaging in logistics innovations and knowledge dissemination.

Embedding through logistic innovations and organizational conventions, however, cannot be developed or stimulated by general policies alone. It is at the level of specific industries that innovations have to be created. What is needed for dedication and flexibility in flower distribution is different to that in the distribution of clothing and

high-tech products. Therefore, connections have to be made between the logistics sector and respective industries that are in demand for logistics services. Not only because of differences in product characteristics, but apparently also because of industry-specific conventions. This has become clear through the comparison of the distribution hub of clothing to that of high-tech consumer products. It appeared that outsourcing of distribution in the distribution node of clothing is very differently governed than in the case of high-tech products. Relational governance of transactions appeared to be important in the case of clothing. This may have to do with the fact that the clothing chain is generally more disintegrated than the high-tech chain but also the culture or way of doing things in an industry as a whole seems to play a role here. Embedding of trade-distributive activities then, seems to depend also on industry specific conventions and can possibly be stimulated when close collaboration between specific industries and the sector of logistic services leads to favourable institutional and infrastructural conditions for distribution activities to take place. However, this research indicates that we also should be cautious with expecting too much of this relationship: it seems that logistic knowledge does not necessarily attract physical logistic flows.

8.2.2 Strong geographical embedding of the marketplace

In the second role of the Netherlands, the marketplace, embedding can be very strong since both logistics efficiency and knowledge on products and markets attach trade in the Netherlands and, as expected, the marketplace node clearly functions as a cluster of input-output relations and knowledge exchange. In the case of floral trade described in this research, due to large domestic production sold through the international marketplace, buying and selling through this market also means efficient distribution for foreign producers and traders. This type of chain seems quite uncommon. It is comparable to the chain of high quality fresh food that has a European node in Rungis near Paris. These unique places have developed over time and as long as they are able to adapt to changes in production and consumption markets, and can attract broad and deep assortments, they are very difficult to imitate or relocate. The unique cooperatives of producers in the Netherlands are a very important base for the broad and deep assortment of the Dutch marketplace. However, increasing integration in chains, often reported for fresh food (Phyne and Mansilla, 2003, Dolan and Humphrey, 2000, Barrett, 2004, Barrett et al., 1999) and growing importance in the trade of flowers, can undermine the position of trade centres like these. It can become more difficult for the auction to attract a broad and deep assortment as (foreign) growers prefer delivering directly instead of through the auction. The paradox however, is that these integrated chains, at least as far as the flower trade is concerned, undermine the node and, at the same time, are dependent on it; the marketplace diminishes the risks retailers have when they make

direct contracts with producers. The auction (marketplace) is a buffer in direct-to-producer-and-retailer contracts to get rid of excessive volume ordered in these contracts or to supply extra demands. Surpluses can be sold here and larger than expected demands purchased, allowing for a more flexible supply for consumers during occurrences like shortages.

8.2.3 The unimportance of the node in the trade network

In the third role, that of trade-network node, embedding in the Netherlands is, as expected, not as strong as in the marketplace node. To the extent that there is embedding of trade in the Netherlands, it is based on the professional networks of individuals who develop the network by participating in it and who pass on this network knowledge to future generations within the companies they work for. Embedding in this role is mainly based on the immobility of labour. This is not to say that this makes this knowledge detached from the Netherlands. It is very possible that this knowledge is embedded in a country. Education, trade missions, overseas trade offices of government, industry associations, or banks can replicate and create this type of knowledge within the trade-network of a specific country, but in the case of clothing trade, these aspects appeared only of minor importance.

Integration in the value chain makes the position of these networkers as employees of independent trading companies insecure. Although the superior networks and knowledge on how to operate within these networks of, company-integrated or independent, traders will most likely remain important for many international value chains, this role can be undermined as it becomes easier to operate in different communities of practice. Increased globalization lowers barriers to trade and makes it easier to operate abroad. In the case of trade intermediation in the international value chain of clothing, we have seen that more and more Chinese, especially in coastal areas, are able to speak English, undermining the role of the Western European trade intermediary. Increased proficiency in English facilitates the organization of outsourcing in China without a European trader or middleman. So threats for this role are present in (1) internal integration of the role by a foreign lead firm, and (2) in the disappearance of portions of trade roles resulting from globalization and declining barriers to trade. Still, the role of the intermediary does not seem to be outmoded all together, as the ease to do business internationally grows. For example, when design and branding of products in the Market World become increasingly specialized jobs, the need for an intermediary able to translate the demand generated by designers and brand creators to production may grow. This means there is a need for someone who is able to understand both communities of practice. As connections by air are important to stay connected to these different communities of practice, airport connectivity might be very important. And,

perhaps contrary to intuition when speaking about a node in trade of goods, in this case connections by air for passenger traffic seem to be more important than those for air cargo flows.

8.2.4 Developing and embedding coordination and control functions: a giant trader with feet of clay?

As early as the Dutch Golden Age (seventeenth Century), the Netherlands had an important role as a coordinator of flows of goods, no matter if they physically passed through the Netherlands or not (Jonker and Sluyterman, 2000). Many services were added to these flows such as insurance, financing, and transportation. These services were especially important when Dutch industry related to trade was in decline, and supply and demand increasingly attempted to trade directly without the intermediation of Dutch wholesalers. When Dutch dominance over the physical flows of goods was lost during the eighteenth Century, the Dutch Republic adopted and ensured economic vitality through a growth in trade services (Jonker and Sluyterman, 2000). However, over time these trade services were also lost. According to some commentators, this happened because these trade services lacked industrial processing or actual flows of goods related to it through the Netherlands, and made the country a *"giant with feet of clay"* (Jonker and Sluyterman, 2000). But contrary to this, one could also state that the development of these services enabled the Netherlands to remain a trading nation much longer than would have been possible otherwise; trade would have been lost much earlier (Jonker and Sluyterman, 2000). This development in the Netherlands and its related discussions, show the unstable equilibrium existing between a specialization in trade, distribution, logistics, and production. Although these different activities have become largely uncoupled, they also seem to need some relationship to each other to make them competitive, and to geographically embed them.

In many cases trade roles cannot exist without physical flows and/or production clusters. If we focus too intently on logistics knowledge, we may lose the actual distribution, making it difficult to develop product specific logistics solutions and innovations as actual distribution activities are no longer available for us to analyze and study. At the same time, for the role as marketplace, it is clear that production and producers are also crucial. In the long run it is probably impossible to keep a marketplace of flowers without producers closely related to it. Finally, in the case of clothing, we have seen that it is difficult to keep trade flows and coordination of production passing through the Netherlands as production is lost and foreign producers become more accessible. We may now shift to fashion logistics as a competitive advantage and lose the coordination of parts of the chain.

A very delicate balance exists between the different trade roles described in this research. If we have flows because of excellent logistics facilities, we may not have the coordination of these flows. If we have this coordination, because of strong trade-networks, we may lose physical flows, as we are able to organize direct flows of goods to foreign customers. The relationship between coordination of flows and the route taken by physical flows is often hard to see, and it is questionable if this coordination necessarily means we obtain these physical flows. Still it is clear that coordination of flows without physical flows geographically related to them, is in a sense a weak position and could result in a trade giant, with feet of clay, as the organization of the value chain changes or technical developments enable new players to obtain competitive power. Nevertheless, this is just how the economy evolves. Therefore a loss of physical distribution or re-export should not be seen as a sign of competitive weakness per se, it could also reflect a shift in competitive strength and be a sign of great adaptive capabilities.

8.3 Reflections on the research

Based on the theory, this research started with the supposition that the embeddedness of trade activities to a place depends on three aspects: (1) the role of trade depending on the world of production of the goods involved; (2) the assets needed for the activity which depends on the role of trade and also on the type of trade node; (3) the territoriality of these assets; and (4) the organization of the value chain and the way in which the trade activity in the chain is governed. These aspects have been helpful to research and explain the cases. In the case of clothing, being aware of these aspects can show us why a European distribution centre is embedded in the Netherlands so differently than a private label company, although they both operate in the same world of production. The fact that the organization of the value chain was included, helped us understand why a European distribution centre completely outsourced to a logistics service provider in non-dedicated logistics facilities, is replaced much easier than a European distribution centre hierarchically integrated into a firm through foreign direct investment. The idea of territoriality gives us room to also analyze historic, path-dependent developments that have created certain relations in the value chain. Particularly in the case of clothing, it was striking to see how strongly people tend to stick to their partners, not only in the case of private labels sticking to their producers, but also to their logistics service providers. This was a very different situation than the one presented in the case of high-tech products, where fulfillment contracts are created on a yearly basis. The possibility to codify transactions plays an important role here.

8.3.1 Worlds of production: different roles of trade in different worlds

The worlds of production that have been used in the research have clarified the role trade and distribution activities play in a value chain, including which needs they serve. Yet, contrary to what was expected at the beginning of the research, the organization of trade within one world of production is very diverse and this same world can utilize different types of trade nodes and activities. The Industrial World is often hierarchically governed, with trade internalized in the lead firm, and distribution organized through a location geographically separated from trade. But the Industrial World also uses the marketplace node or the trade-network node. At the same time, a specific type of trade node can serve different worlds of production, using a different set of node-specific assets in each world. For example, the auction must serve the Industrial World by having a large amount of flowers, but not a very broad assortment. In the Market World however, broadness of assortment is a critical asset of the auction since it enables dedication. Whereas the main asset of a trade-network in the Interpersonal World is that it enables dedication of production to demand, in the Market World the main trade-network asset is that it enables flexibility and shortens reaction times to new demands. Table 8.1 gives an overview of this. Based on the case studies it's clear that the role of the distribution hub in every world of production is more or less the same: distribution hub costs can be cut as economies of scale in distribution are created.

Table 8.1: The role of different trade nodes in different worlds of production

Type of trade hub	Industrial World	Market World	Interpersonal World	World of Innovations
Distribution hub	Economies of scale in distribution and warehousing	Economies of scale in distribution Time saving	Economies of scale in distribution	The distribution hub does not play a role
Marketplace	Flexibility in quantity & distribution efficiency	Flexibility in quality and assortment & distribution efficiency	Dedication through the availability of assortment	Knowledge centre, comparison
Trade-network node	Lowering risks and hassles	Flexibility in assortment and time saving	Dedication through close collaboration with supply	Network for business opportunities, access to products and markets

A hub in distribution can also be the result of very efficient infrastructures and procedures that attract flows of goods because they facilitate greater speed in the value chain. This seems to be especially important in the Market World although speed might also be important in other worlds, as we will see ahead. Only in the World of Innovations the distribution hub does not seem to play a role, as it is not through physical concentration of flows, but rather knowledge and innovation that new technologies get distributed.

The marketplace hub has a slightly different use in different worlds of production. In the Industrial World, the marketplace hub mainly seems to be a tool for increasing the flexibility in quantity to traders and retailers. In the flower trade, wholesalers used the auction to sell a surplus of common industrial types of flowers bought through direct sales contracts. They also used it to supplement the supply of such flowers when direct sales contracts did not provide sufficient stock. Furthermore, the marketplace created important efficiencies in distribution. The same marketplace has a different role in the Market World. Here flexibility in quality and assortment is more important. Again, in the example of flower trade, traders in this world use the auction to purchase a varied assortment of flowers enabling them to serve customers in different geographical markets with diverse demands. In the Interpersonal World of flowers we have seen it is less for flexibility and more for availability of assortment, that the marketplace is used. The marketplace enables traders in the Interpersonal World to find the dedicated and specific selection of flowers they need. Dedication is made possible by the broad variety of goods available at the marketplace node. In the World of Innovations the marketplace is not used as the trading place per se, but serves as a place where traders can gain knowledge of the newest trends and product developments. In reverse, product developers can get a good idea of market wishes at the central marketplace. The marketplace node enables easy comparison of new and different products, and enables one to see new trends in these developments. We have seen this role for the marketplace in the World of Innovation of flowers, but also for clothing, where (temporary) clusters of fashion cities play an important role in disseminating new fashion trends and innovations.

The complexity of the marketplace node and the many worlds of production it can serve, probably make this trade node so strong. It is a kind of node able to adapt to many changes in the value chain and can serve both an increased demand for dedication and for efficiency and speed. This role then, is truly a jack-of-all-trades. However, it is not one easily created from scratch. In the case of flowers it is related to existing production capacities of the Netherlands and institutional structures that create the ability to control the marketplace: the cooperative auctions. However, the Teleflora Auction shows that other types of sales organization can create a better functioning marketplace. In more general terms, what seems to be required for the functioning of a

marketplace node, is an ability to attract a broad and deep assortment. This will often be the result of path-dependent processes and institutional structures that are very specific to a place. Changes in these institutional structures can influence the ability to attract a broad and deep assortment, weakening the position of the marketplace.

Lastly, let's review the trade-network node. In fact, it is not so much the trade-network *node* as the trade *network* that is used in different worlds of production. In the Industrial World the trade network seems to be primarily used to lower risks and hassle. Through the trade network, risk and hassle that comes with buying/selling, entering new markets, or finding cheaper producers can be lowered. For example, some clothing wholesalers fulfil demand for very basic promotional ware through their trade network. Producers of such ware and market demand are unable to find each other without a trader, due to unfamiliarity with each other's markets. Also, retailers demanding large quantities of industrial-type flowers use the trade network node of wholesalers, as they seek to avoid the hassle of contracting out unknown producers. This is also a role of the trade network in the Market World, where time pressure issues and changing tastes can be addressed through the trade network. Cases in point here are private-label suppliers accustomed to supplementing collections of retailers in the Market World. In the Interpersonal World the trade network is used to enable more dedication in supply. For example, the trader can fulfil very dedicated demands of corporate clothing through the trade network. The trade-network enables dedication through close collaboration with supply. This is different from the marketplace node, where dedication is achieved through the availability of a very broad assortment, allowing the possibility for a trader to combine a broad assortment in a dedicated way. In the World of Innovations the trade-network functions as a way to locate new business opportunities and access new markets. We have seen this use in the floral trade, where ennoblers use close contacts with growers and traders to create an exclusive market for a new variety.

8.3.2 The time dimension

Although the worlds of production model helps us understand the role of trade, when this model is used to analyze trade, it seems to be incomplete with respect to an essential market determinant: time. This determinant influences the need for speed in the value chain.

When we think about time as a product characteristic, shelf life becomes an issue. Products of the Industrial World can be quite perishable (e.g. flowers) and therefore, have short shelf lives, making them poorly suited for storage and in need of efficient logistics and trade. This implies that much less circulating capital (inventory) is possible with these products. Goods are sold or they are lost when there is no demand. This gives the floral market, no matter the World it serves, supply characteristics of the

Market World, without the demand characteristics of that same World. Where increases in speed and flexibility (smaller production runs) are important ways to solve the problem of variable demand in the Market World, this is not the case in the Industrial World. Here conservation techniques making products less perishable are much more important for diminishing losses. Of course conservation techniques can also be important for products of the Market World, such as flowers. This is because in this case flowers are more perishable than demand trends. Conservation then becomes a solution. When demand trends are shorter than the shelf life of products, shorter production runs and increasing speed in the chain are ways to gain higher returns. To conclude, there is a need for some addition to worlds of production in order to understand the role of trade. That is the shelf life of products.

Time as a market characteristic has to do with the impatience of markets due to instances where a product must meet seasonal or other time-dependent demands, like those related to trends and fashions[45]. Of course, the worlds-of-production model includes the idea of demand uncertainty versus predictability, which is related to trends and fashions. But the relation with time including the need for speed in the value chain is not as straightforward as one might think. A product with highly unpredictable demand might not have any time pressure in the chain. It does not have to be a fashionable product with an impatient market. Dedication of demand also does not cover the time dimension very well, since a very dedicated product often does not carry heavy time-pressures in delivery. Specialized high-tech microscopes that are custom-made can easily be sent by container ship to Europe, as the buyer has planned the purchase of microscopes months in advance. On the contrary, high-tech gadgets that are also dedicated to a specific market and are far less expensive might need transportation by air in order to take advantage of a sales peak in that specific market. Time in the form of shelf life as a product characteristic, and the degree of impatience as market characteristic, need to be added to the worlds of production model to more fully understand the role of trade in each world.

8.3.3 A model to understand the geographical embedding of trade activities

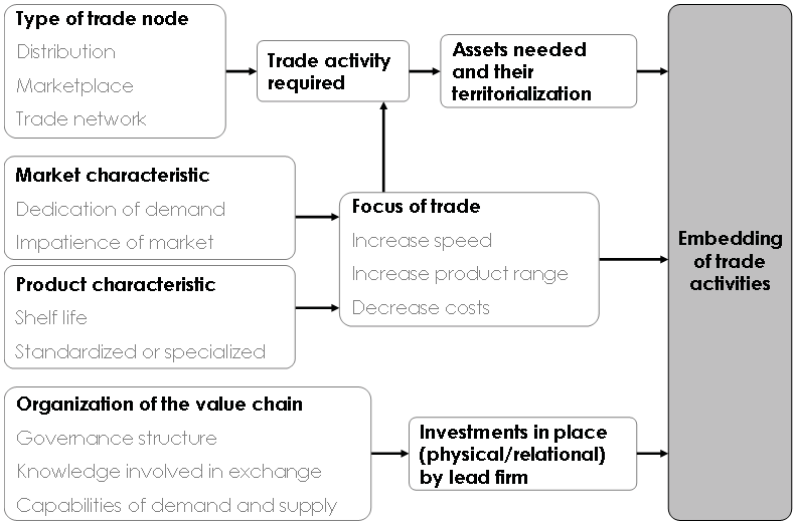
To conclude, to understand the geographical embedding of trade activities the following ingredients are needed (see also Figure 8.1). The first thing to consider is the process of territorialization of assets. The assets of relevance depend on the trade activity involved. It is important to see that product and market characteristics influence the role of trade

[45] Variability in demand is often the result of innovations and technological improvements, as is the case with high-tech products. Although this is a product-led variability in demand, I include these kind of 'trends' here in market characteristics since they fuel demand characteristics and do not characterize the product itself. The demand for the product changes not because the product does not work anymore (it is not perishable), but because new technologies or fashions usurp the product's market position.

in the chain. Therefore they influence the type of trade activity required and the assets needed for this activity. Furthermore, the type of trade activity found differs from the way in which trade is organized: through a distribution node and an internalized trade department within a multinational company, through a marketplace node, or through a trade-network. The second force to consider is the process of embedding through value chain organization and investments made by lead firms in a specific place. These can be immobile investments in infrastructure, buildings, or equipment. They can also be investments in the training of people. When people receive training and become part of a community of practice through experience, the immobility of labor makes this investment to a large extent immobile, and attaches lead firms to a place. The more specific conventions are, the more prone a lead firm will be to maintain existing service providers once chosen. Of course these investments to be made in an exchange relationship depend on the capabilities of demand and supply and the knowledge and information needed for the relation to take place.

The embedding of trade then follows from the territorialization of assets needed for specific trade activities and the place-bound investments made by a lead firm through the organization of the value chain. The geographical embedding of trade can be stronger through processes of territorialization, more temporary through lead firm investments in a place, or not present at all since assets are ubiquitous. This brings us to the following model to understand the embedding of trade activities (Figure 8.1).

Figure 8.1: A model to understand the geographical embedding of trade activities



The mechanisms of territorialization and lead firm investments operate within a context of changing production and consumption areas, tastes, technologies, cultures, and institutional structures like trade agreements. Figure 8.1 therefore, does not show a stable relationship. Although the aspects that influence place embedding of trade activities will stay the same, cases will show changes of context, value chain organization, and product/market characteristics leading to changes in trade embedding for specific products to specific places.

As embedding of trade is found at a specific place, the model gives clues where to look in order to explain this embedding. Investments made by lead firms in a place and the processes of territorialization as described in this research, are the key processes through which geographical embedding develops. The other blocks shown in the model are the methods for finding assets important in a specific case, and for finding the investments made by lead firms.

8.4 Further research and debate

As the world economy becomes increasingly integrated and product markets appear to grow geographically, product differentiation and dedication also increase. We have seen this in the case of clothing, with more and more collections per year. We have also seen this with flowers, where new market areas open up and flowers become increasingly branded. High-tech products also show this trend. Customization has grown, with multicolour laptops, mobile phones, and gadgets personalizing mass-produced goods. In every case study, flexibility and speed have grown in importance as assets in the chain since they enable dedication for changing markets. It is striking how the Netherlands tries to adapt to this increased demand for dedication and flexibility through intensive co-operation between logistics and distribution firms, advising committees of government, and national projects for improving logistics innovativeness and knowledge development. The way in which the Van Laarhoven Committee has assumed the challenge of the Dutch trade node shows great resemblance to the Committee and subsequent lobby group and association, Netherlands Country of Distribution.

What does this tell us about Dutch competitive strength in trade? This is an interesting question, especially in light of the varieties of capitalism-based literature stating there is a link between the institutional structure of a country and the type of economic activities it specializes in. Different territorialized production systems may be best suited to the demands of trade in different worlds of production and different kinds of products. Evidence has been found that there is a relationship between social systems of innovation and production and patterns of scientific, technological, and industrial

specialization. Institutions influence the assets in which they are invested, and in this manner affect the activities competitive advantages develop for (Amable, 2003).

It is interesting to place the Dutch trade hub in this perspective. Since this research only consists of Dutch cases, it has been impossible to look for patterns in the relationship between territorialized production systems and the world of production that accommodates trade. However, it is clear that the Dutch corporatist structure, in which public and private parties work together, has helped to create trade assets that need cooperation for their development. In the distribution node the coalition between state and industry resulted in the strong development of infrastructure. In the marketplace node of flowers the cooperation between growers created the dominant power of the auctions. Joint action of industry and state institutions has also made possible the development of efficient border procedures. In the case of clothing trade this joint action is much less present and the role of private-label suppliers is under great pressure. The corporatist structure, in which public and private parties work together, seems to be important in the adaptive capability, especially for the distribution hub and marketplace node. They create the institutional and technical innovations that allow for more flexibility, dedication and speed of distribution and trade that are increasingly needed in value chains, particularly in the Market World. It is less clear how this corporatist structure might add to the competitiveness of trade networks, but it certainly helps the distribution hub and marketplace. Countries that do not have such strong linkages between industry and government in the field of trade and distribution might encounter more difficulties in adapting a distribution hub or marketplace node to these changes in value chains. Future research could try to make these links between characteristics of a country's institutional structure and its role in international trade clearer by researching different countries, including their existing institutional structure for international trade and distribution.

Another direction in which future research could head is the link between logistics knowledge, physical flows of goods, and coordination and control of value chains. Although the relation between them is often present in policy debates, it is still uncertain how exactly they are related and what changes in the proportion between them mean for things like jobs (number, types), competitiveness, and the power to coordinate or control (parts of) the value chain. This research suggest at least that this connection is not as straightforward as one might think or hope. To make expectations of policy measures to strengthen logistics knowledge and innovation realistic, these relations should be more fully understood.

Finally, knowing that Dutch re-export data can include so many different kinds of activities that are embedded so differently in the Netherlands, it is time for a new interpretation in policy and debate on the changing volumes of re-exports.

Appendix 1

Topic list of interviews with firms

1. The firm:
    a. location(s)
    b. activities
    c. product
    d. role in the value chain

2. Knowledge
    a. needs
    b. development (of firm and individual staff members)

3. Relations of the firm
    a. with customers
    b. with (service) suppliers
    c. with competitors
    d. with other organizations (industry, government etc.)

4. Staff of the firm
    a. educational background
    b. work experience

5. Geography
    a. of firm relations
    b. of staff origin
    c. of knowledge development of staff

6. Developments in the value chain of relevance to the firm

Appendix 2

List of interviews and meetings attended

Persons interviewed	*yymmdd*
Mr. N Anten	050324
General Manager Connekt	
Mr. A. Barberi Ettaro	060214
Senior Consultant International Trade MODINT	
Mr. L. Bisschops	060501
General Manager Gerlon b.v	
Mr. Boerlage	070424
Representative Terra Nigra	
Mr. R. Brouwer	070126
Representative in the Netherlands Senghong Fashion	
Mr. M. Claessen	080929
General Manager FloraHolland Aalsmeer	
Mr. C. De Bruin	060530
General Manager Du Pon & De Bruin	
Mr. M. Dekker	070206
General Manager De Gooijer International B.V	
Member of management board of VGB (organization of wholesale traders in horticultural products)	
Mr. E. Denekamp	060206
CEO World Fashion Centre Amsterdam	
Mr. W. Duyts	081024
Chair of Huurdersvereniging World Fashion Centre Amsterdam	
Mr. R. Ebbing	060505
General Manager Christian Sijnen Mode	
Mr. P. Feith	080811
General Manager Men's Club Fashion	
Mr. B. van Gils	060531
General Manager The Makers b.v.	
Mr. P. Goejer	060420
General Manager, entrepreneur Style Circuit/Gift Master	

Mr. S. van Haaren	081028
Manager Supply Chain Management Nikon Europe b.v.	
Mr. B. Hampsink	070108
Former General Manager TNT Fashion Logistics	
Mr. R. Hartnack	080822
Former Director Contract Logistics, Unique Logistics	
Mr. E. Hendrikse	080821
Commercial Director Geodis Logistics Benelux	
Mr. F. Heuckeroth van Hessen	070525
Former Marketing Manager Cargo, Schiphol Cargo	
Mr. J. van Hoek	080818
Logistics Supervisor UTi Nederland b.v.	
Mr. S. Hofstra	050308
Project Manage, Air Cargo Netherlands	
Mr. R. van der Horst	080201
Marketing Specialist the Netherlands, FedEx Express Europe, Middle East, Indian Subcontinent & Africa	
Mr. H. Jordaan	060127
Professor Amsterdam Fashion Institute, consultant	
Mr. B. Kasteel	081015
Buying Director Wibra	
Mr. H.J.J. Kloosterman	070124
Director Urban Xchange - strategist Green Park Aalsmeer	
Mr. A. Koekoek	070418
Representative Hilverda	
Mr. M. Kooij	070413
General Manager Kooij	
Mr. B. Kos	081023
Chair of Huurdersvereniging World Fashion Centre Amsterdam	
Mrs. W.C.W.A Kreeft	060412
Manager Mervin Marx Europe B.V.	
Mr. R. Kwaspen	060501
General Manager Textielfabrieken H. van Puijenbroek (HAVEP) and Bucofa	
Mrs. S. Laan	081028
General Manager Nikon Holdings Europe b.v.	
Mr. H. van Laar	050315
Represenatative Goederenvervoer Randstad (GOVERA)	

Mr. J. Lanning *Responsible for trade policy at HBAG – sector flowers and plants (hoofdbedrijfsschap agrarische groothandel)*	070122
Dr. J. Levelt *Education Manager Apple*	060926
Dr. G.-J. Linders *Assistant Professor, Department of Spatial Economics, Vrije Universiteit Amsterdam*	070223
Dr. M. Luppes *Project Manager Speerpunt Internationale Economische Relaties (Focus on International Economic Relations), CBS (Statistics Netherlands)*	070111
Mr. S. Moons *Senior Economist Directorate General for Foreign Economic Relations, Ministry of Economic Affairs*	080923
Prof. Dr. J. van Nunen *Professor Operations Research and Information Sciences Erasmusuniversiteit Rotterdam*	081118
Mr. T. van den Oetelaar *Business Development Director Rhenus Contract Logsitsics b.v.*	081118
Mr. M. Onclin *General Manager Tele Flower Auction*	070420
Mr. R. van Os *CEO A&Q Fashion b.v.*	060420
Mr. B. Radstaak *General Manager Air Cargo Netherlands*	050308
Mr. A. Roos *General Manager Centraal Bureau voor de Rijn en Binnenvaart*	050329
Mr. M. de Ruiter *Supply Chain Consultant Flora Holland (former VBA)*	070404
Mr. P. van Ruler *General Manager Green Park Aalsmeer*	070124
Dr. M. Scheffer *Lector Textile en Fashion Management, Saxion Hogeschool*	070129
Mr. R. Smit *Area Manager Import FloraHolland, Naaldwijk*	070309
Mr. R. Taal *Director Public Sector and EMEA Healthcare Netherlands, Dell*	080908
Mr. M. Tak *Co-director Trescona B.V.*	060420

Mrs. J. Tiesinga	070109
Programma Internationaal Zakendoen, Kamer van Koophandel Amsterdam, Afdeling regiostimulering	
Mr. D. van der Velden	060503
General manager ILG	
Drs. A.F. Veldhuyzen van Zanten	070130
CEO Royal Van Zanten	
Mr. S. van het Verlaat	050323
General Manager Voorlichtingsbureau Shortsea	
Mr. E. Vermeulen	060501
Sales Coordination, Gerlon b.v.	
Mr. G. Vriend	080811
Director Business Development DHL Exel Supply Chain	
Mrs. T. van der Wansem	060504
General Manager Men's Club Fashion	
Mr. J. Wijker	060411
Director Label Support/Summum Womens Wear	
Mr. J. Willemse	080829
Manager Operations Computer Systems, Toshiba information systems Benelux	
Mrs. D. Winters	081007
Commercial Manager General Cargo, Containers & Logistics Port of Amsterdam	
Mr. N. de Wit	070614
Transport Manager Van Es Transport b.v.	
Mr. K. Zandbergen	070413
Sales representative Blumex	
Mrs. A. Zeimentz	070222
Managing Director European Operations, Donna Karan	
Mrs. M. Zevenhuizen	070228
Marketing Manager Rucanor	
Mr. M. van Zijverden	081101
CEO Dutch Flower Group	
Mrs. Drs. R. Zuurbier	070410
General Manager Zuurbier Rozen	
Mr. P. van der Zweep	070416
Representative VGB (Organization of Wholesaletraders in Floricutural products)	
Mr. J. Zwetsloot	070209
Former director HOBAHO	

Personal communication with representatives of

Actebis Computers b.v.	090731
BAS Distributie	090730
Fashion Solution	060828
Nike, business development	070109
Van den Bos Lily Pact b.v.	070308

Meetings attended

Avonden aan de Amstel, 'De promotie van jonge Nederlandse modeontwerpers' (The promotion of young, Dutch fashion designers) *Modint & Amsterdam Fashion Institute, Amsterdam*	061005
Avonden aan de Amstel, 'Dutch XXL' *Modint & Amsterdam Fashion Institute, Amsterdam*	071122
Avonden aan de Amstel, 'Mode met de muis' (Fashion on Internet) *Modint & Amsterdam Fashion Institute, Amsterdam*	071214
Avonden aan de Amstel, 'Nederland productieland!' (The Netherlands production country!) *Modint & Amsterdam Fashion Institute, Amsterdam*	090205
Creating the future in global trade and logistics *Erasmus University, Rotterdam*	081107
Currid, E. (2009), 'Creative cities: the Warhol economy' *AMIDSt Lecture Series, Universiteit van Amsterdam*	090224
Flora Holland Trade Fair *Flora Holland, Naaldwijk*	070309
GOVERA congres 'Pluk de vruchten van Govera' (Take advantage of Govera) *Amsterdam*	041015
Hortifair 2007 *RAI, Amsterdam*	071112
Hortifair 2008 *RAI, Amsterdam*	081016
Kom in de Kas! *Different locations in the Netherlands, especially location Zevenhuizen*	070331
Prahalad, C.K., 'The future of global business gateways: network innovation' *AMIDSt Lecture Series, Universiteit van Amsterdam*	090312

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GROOT HANDELSBLAD (2007g) Metz lanceert bloemistennetwerk Scala Verde. *Groot Handelsblad,* 15**,** 9.

GROOT HANDELSBLAD (2007h) Themanummer: marketing & promotie. *Groot Handelsblad,* 15.

GROOT HANDELSBLAD (2007i) Tulpenaanvoerders Aalsmeer meest betrouwbaar. *Groot Handelsblad,* 15**,** 18.

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GROOT HANDELSBLAD (2008a) Aanvoerinformatie verslechterd. *Groot Handelsblad,* 16**,** 14.

GROOT HANDELSBLAD (2008b) Betere afspraken over virtueel veilen. *Groot Handelsblad,* 16**,** 15.

GROOT HANDELSBLAD (2008c) Boy van Droffelaar, nieuwe voorzitter Bloemenbureau: architect van een aardverschuiving. *Groot Handelsblad,* 16**,** 6-7.

GROOT HANDELSBLAD (2008d) Ciccolella Groep wil verder groeien. *Groot Handelsblad,* 16**,** 8-9.

GROOT HANDELSBLAD (2008e) Gematigd optimistme over 2008. *Groot Handelsblad,* 16**,** 8-9.

GROOT HANDELSBLAD (2008f) Interview: 'Ik was een nieuwlichter'. *Groot Handelsblad,* 16**,** 11.

GROOT HANDELSBLAD (2008g) Keuring van chrysanten nog lang niet op orde. *Groot Handelsblad,* 16**,** 18.

GROOT HANDELSBLAD (2008h) Met KBT-Pro techniek en efficiency veilig gesteld. *Groot Handelsblad,* 16**,** 14-15.

GROOT HANDELSBLAD (2008i) Meting van knelpunten bij beeldveilen Aalsmeer. *Groot Handelsblad,* 16**,** 15.

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Summary

The Netherlands is famous as a country of trade: a place where flows of goods from all over the world come together and from where they get redistributed throughout Europe and the World. The strength of the Netherlands as a trading nation is often illustrated with data showing a growth of re-exports from the Netherlands (ESB-Dossier, 2003, WRR, 2003, Kusters and Verbruggen, 2001, Mellens et al., 2007). Re-exports are exports of goods that first have been imported. Without any significant industrial processing, these imported goods leave the Netherlands. The only thing that really happens in the Netherlands to these goods is a change in ownership: they first come into the possession of a Dutch-based person or company and subsequently to a foreign-based person or company. Re-exports are different to mere throughput, where no change of ownership takes place.

The growing re-exports receive, as said, a lot of attention from researchers and policymakers. To explain the very high Dutch re-exports – already counting for more than half of our total exports – they often point to the favourable location of the Netherlands close to the sea, its ports, hinterland connections, and trade-mindedness. Although these are all relevant conditions to explain re-exports, these explanations lack a clear understanding of the different activities that create re-exports and are not specific enough to be fully able to fully interpret re-export data and what they really mean. More specific, it is unclear to what extent the Netherlands as a (re-export) trading nation depends on decisions taken elsewhere, or that, as part of the activities that create re-exports, coordination and control activities take place in the Netherlands, producing other areas and countries dependent on the Dutch. Without knowledge of the activities that are hidden behind re-export data, it is difficult to interpret re-export data in specific cases, to explain how re-exports are attached to the Netherlands, and, in view of policy making, how this attachment or embedding can be stimulated through policy, if at all.

Research questions

This research has tried to get a better understanding of re-export related trade activities in the Netherlands and their embedding in the Netherlands. An important starting point of the research was the idea that different types of goods and different types of trade activities would have a different kind of embedding in the Netherlands. Three basic types of trade activities and related trade nodes that create re-exports have been identified at the start of the research. First, a trade hub can be a place that only physically connects demand and supply through distribution activities. This is, for example, the case when European distribution centers import goods in the Netherlands and re-export them to the European market. The European distribution centers are in fact purely logistic nodes: trade deals are made elsewhere. But legally trade flows do take place through the Netherlands when goods are imported and re-exported. I've called this case a distribution node. Second, a very different type of node exists when supply and demand physically come together. The trade hub then is a true marketplace where goods are shown and change owner. A case in point is the international flower auctions in the Netherlands where traders and flowers from all over the world converge. Finally, a trade hub can be a place where scattered demand and supply become connected through traders and their trade networks. The trade hub in that case, is not a place where demand and supply literally meet each other and are concentrated, but only the place where they are connected. Traders organize the connections between markets and import and export goods through their trade network that in this way passes through the Netherlands. I call such a trade hub a trade-network node.

This research has tried to answer three questions in relation to re-exports and the concentration of trade in the Netherlands.

(1) What trade activities and trade role lay behind the re-export data in the Netherlands and to what extent does the Netherlands play the role of a coordination and control centre in the trading function of international value chains?
(2) Through which processes are these trade activities attached to the Netherlands and to what extent are they in such a way attached that they cannot be easily relocated?
(3) What are, in light of the answers given to the previous questions the strengths and weaknesses of the production system of international trade in the Netherlands?

This research shows the variegated forms of embedding of trade activities and re-exports in the Netherlands in the three types of trade hubs mentioned above. It reveals that not

every type of activity resulting in re-exports shows the same strength of embeddedness in the Netherlands: some activities appear to be much easier to relocate than others. Because of the various ways in which trade can be embedded, the Dutch trade node shows different strengths and weaknesses. Because of the very different ways trade is attached to the Netherlands and the variety of reasons for trade activities to become concentrated, a much more precise and case specific study of the Netherlands as an international trading country is needed. Only then re-export data and changes in these data can be interpreted rightly and is it possible to formulate policies to stimulate one or more specific types of trade roles in international value chains.

Theory and methodology

This research takes re-exports as an activity in larger value chains that run from design and raw materials to final products and consumption. The value chain, although possibly having a linear connotation, is not taken as a strictly linear concept in this research: all steps in the chain can have different horizontal and vertical connections with players inside the own or related chains, giving the relations between players in fact a network-like structure. Value chains are often global in nature, as design, for example, takes place in the United States, while production is in China, logistics and supply chain management are executed in the Netherlands, and consumption takes place in the entirety of Europe. This means global chains and networks of activities are at stake.

The way in which globalization is often described – as a process of deterritorialization and worldwide competition between regions – seems to suppose a very loose connection to specific places of specific activities in chains and networks, including trade and re-exports. However, this does not necessarily have to be the case. A key concept in this research has been *territorialization* as developed by Storper (1997). Following Storper, activities that depend on territorially-specific resources are not very easy to relocate. Territorially-specific resources can be related to unique, only locally available things like knowledge, scale economies, or historically developed (complementary) institutions.

Although location-specific factors are important to explain how strongly an activity is embedded in a place, this does not mean that activities that are not based on territorially-specific resources can be relocated very easily. To understand why, the relations in the value chain of which trade activities are part, have been taken into account. When large investments have been made by a foreign lead firm in a location, for example to enable logistic activities, these investments will, at least temporarily bind activities to this place. Also investments in personal relations that enable trade to take place can make it very costly to change to new trade partners. To understand the embedding of trade activities in the Netherlands, therefore, not only territorially-specific

resources but also relations between partners in the value chain have been taken into account.

Storper's (1997) work enables us also to make a distinction between different types of world of production, carrying all their own characteristics with respect to the input needed to make the product (specialized versus standardized), and the markets a product focuses on (specific, uncertain versus generic, predictable markets). The typology of worlds of production is used in this research to understand the role trade plays in different cases and the activities that are related to trade in different cases. This led to the hypothesis that in every world of production – Interpersonal World, Market World, Industrial World, and Intellectual World – other factors would be important to explain the existence of trade and trade nodes.

To answer the research questions, a literature and document study has been conducted into the role of international trade in Dutch economic policy. Also, three case studies have been carried out into international trade and re-exports through the Netherlands: clothing, cut flowers, and high-tech products. More than seventy semi-structured interviews have been conducted with business people in these industries about the organization of the value chain, the trade activities of their company or of the Netherlands for the specific product, and the relations the companies have with their location and the Netherlands through their staff, knowledge pools, and other organizations or infrastructures. Besides the interviews, a study of (business) literature, websites, and visits to business conventions have been an important source of information. As far as is available, statistical data have been used to support the argument.

The strength of the Dutch trade hub

An analysis of Dutch policy in the fields of trade and distribution shows that trade hasn't received a lot of attention as an industry in its own right. Trade has mainly been stimulated through export stimulation and the development of the Netherlands as country of distribution. Recently, especially the development of logistic knowledge, has received a lot of attention. The case studies of trade in high-tech products and clothing through European distribution centers show that it is questionable if the development of knowledge in the field of logistics and distribution will lead to the attraction of physical flows of goods and trade.

Clothing: speed and flexibility

Besides a short section on European distribution centers, the case study of clothing has been mainly focused on private label companies. These are companies that organize production abroad, and to different extents, also design clothing for other companies

such as fashion brands, catalogue houses, or chain stores. Private label companies play the classic role of a trader as a connection between different worlds. The trade generated by these companies has been chosen as a case-in-point of the trade network node.

Traders in this chain add speed, flexibility, and certainty to the value chain of clothing. Their help is needed as production abroad is often difficult to organize because of cultural differences and communication problems. Although private label firms coordinate parts of the value chain, they are also very dependent on decisions taken elsewhere in the value chain or the network: the decision to use a private label to organize production abroad is taken by lead firms that also have the choice to coordinate production without the help of a private label firm.

Contrary to our expectations, the functioning of private labels hardly depends on local clusters of knowledge-exchange on fashions or trade opportunities or of input-output relations. The strength of Dutch private labels seems mainly to be explained by historical developments and characteristics of Dutch home market demand. There is no strong embedding of this type of trade to the Netherlands, especially because the private label firms have a weak position towards demand. Organizational changes in value chains, like an increase of integration of activities within larger firms, will strongly influence the rationale for their existence in the Netherlands.

Cut-flowers: large choice, efficient logistics, superior knowledge

The case of cut-flowers has been chosen in this research as the ultimate example of trade through a centralized marketplace: at the Dutch auctions, supply and demand literally meets on a daily basis. At the auction, exporters and importers buy a rich assortment of flowers from thousands of growers that often only grow a few different varieties.

At the central marketplace of the auction, external scale economies as a result of clustering are very important: clustering enables efficient logistics of a product that is mostly produced in monocultures, while trade to the final consumers takes place in a broad and deep assortment. Also, local knowledge advantages are important to explain the continuous strength of the central marketplace, even in times of increased production abroad and integration of activities in the value chain. In and around the Dutch auctions traders and producers meet and are best able to hear the business whispers on product and price developments. Foreign trade is very dependent on the assortment present at Dutch auctions and the knowledge of Dutch traders. Flower trade is dominated and controlled by the Netherlands and can only with great difficulty be taken over by other countries. The very strong embedding of trade in this sector can be explained by the various forms it shows: it is based on economies of scale as well as knowledge advantages and on long historical developments of infrastructures and institutions that have resulted in the very broad and deep assortment the flower auctions offer today.

High-tech consumer products: costs count

Re-export of high-tech consumer products represents the case of a distribution hub: re-exports of this product are almost only created by European distribution centers of large, international lead firms. Only a few international operating distributors exist that operate as international traders in high-tech products. In general, trade to retailers is organized through national operating distributors and/or national sales organizations of producers, whilst European distribution is in the hands of the producers.

This case shows the dependence on large infrastructures (ports, roads), taxation rules, and efficient border procedures of distribution activities. Infrastructures, taxation, and efficient customs lower costs and increase speed in the chain. Since these are the main reasons for distribution activities to locate in the Netherlands and distribution is very strongly organized and controlled from head offices abroad, they aren't very strongly embedded in the Netherlands. Relocation of these activities is almost permanently taken into consideration. In view of the way logistic and distribution activities are generally controlled from abroad, it is by no means certain that through the development of logistic knowledge, logistic flows will become physically more strongly embedded in the Netherlands.

Variegated forms of trade, re-exports, and embeddedness

This research shows the relevance of making a distinction between different types of trade nodes that lies behind apparently unidirectional re-export data. Different types of trade nodes show a different form of embedding. This research also demonstrates that the interpretation of the role of a specific trade node can only be done accurately when the type of product that is traded and the way in which the value chain is organized are taken into account. This means that we have to look at the larger chain or network in which a trade activity takes place to understand the forces to which a specific trade activity is subject to and what room there is to strengthen the role and embedding of that trade activity. Finally the insights of this research put into perspective the importance we attach to growing or falling re-export data. They can reflect competitive strength as well as weakening of the position of the Netherlands as a trading nation. An increase of re-exports does not necessarily mean an increase in power to control international trade, as much as a loss can reflect a shift in competitive strength from physical handling towards coordination pur sang and be a sign of great adaptive capabilities.

Samenvatting

Nederland staat erom bekend een handelsland te zijn: een plek waar goederenstromen van over de hele wereld samenkomen en waarvandaan goederen over Europa en de wereld worden gedistribueerd. De kracht van Nederland als handelsland wordt regelmatig geïllustreerd aan de hand van het hoge en groeiende wederuitvoercijfer van Nederland (ESB-Dossier, 2003, WRR, 2003, Kusters and Verbruggen, 2001, Mellens et al., 2007). Bij wederuitvoer worden goederen uitgevoerd die eerder zijn ingevoerd. Zonder enige noemenswaardige industriële bewerking verlaten deze ingevoerde goederen ons land. Het enige wat er werkelijk met deze goederen gebeurt in Nederland is eigendomsoverdracht: de goederen komen in het bezit van een Nederlands ingezetene en vervolgens in dat van iemand in het buitenland. Wederuitvoer is daarmee iets wezenlijks anders dan doorvoer, waarbij geen sprake is van eigendomsoverdracht.

De groeiende wederuitvoer heeft, zoals gezegd, de aandacht van veel onderzoekers en beleidsmakers getrokken. Om het hoge percentage wederuitvoer – ondertussen al meer dan de helft van onze totale uitvoer – te verklaren, wordt vaak gewezen op onze gunstige ligging aan zee, onze havens, achterlandverbindingen en onze handelsgeest. Hoewel dit allemaal relevante aspecten ter verklaring van wederuitvoer lijken, ontbreekt in deze verklaringen een helder zicht op de werkelijke activiteiten die schuil gaan achter wederuitvoer en daardoor geven ze ons onvoldoende houvast bij het interpreteren van de wederuitvoercijfers. Met name is het onduidelijk in hoeverre we in Nederland als handelsland afhankelijk zijn van beslissingen die elders worden genomen of dat we ook coördinatie en bestuursfuncties uitvoeren die andere gebieden juist afhankelijk maken van ons. Zonder kennis van de activiteiten die schuilgaan achter wederuitvoer is het lastig het hoge wederuitvoercijfer in specifieke gevallen te verklaren en, met het oog op beleid, te begrijpen hoe die wederuitvoer met Nederland is verbonden en die verbondenheid of inbedding mogelijk door beleid is te stimuleren.

Onderzoeksvragen

In dit onderzoek is geprobeerd om meer zicht te krijgen op de aan wederuitvoer gerelateerde handelsactiviteiten en hun inbedding in Nederland. Uitgangspunt van het onderzoek was de gedachte dat verschillende typen goederen en verschillende typen handelsactiviteiten op een verschillende manier met Nederland zouden zijn verbonden. Meer concreet is uitgegaan van drie basistypen van handelsactiviteiten en daarmee drie typen handelsknoopunten die voor wederuitvoer kunnen zorgen. Ten eerste kan een handelsknooppunt een plek zijn waar vraag en aanbod door distributieve activiteiten samenkomen. Dit is het geval wanneer door bijvoorbeeld Europese distributiecentra goederen worden geïmporteerd en vervolgens worden geëxporteerd naar markten in Europa. De distributiecentra zijn puur logistieke schakels, koop- en verkoopafspraken worden elders gemaakt. Een heel ander type handelsknooppunt ontstaat als vrager en aanbieder en de te verhandelen goederen elkaar fysiek treffen in het handelsknooppunt. Dit is bijvoorbeeld het geval in de bloemenhandel waar in Aalsmeer handelaren en bloemen van over de hele wereld bij elkaar komen. Er is sprake van een fysieke marktplaats. Een derde vorm van een handelsknooppunt is een knooppunt waar handelaren geconcentreerd zijn: een knooppunt in handelsnetwerken. Handelaren organiseren de verbinding tussen markten en importeren en exporteren daarbij goederen via hun handelsnetwerk.

Dit onderzoek beantwoordt drie vragen met betrekking tot de wederuitvoer en concentratie van handel in Nederland.

(1) Welke handelsactiviteiten en handelsrol ligt er achter de wederuivoercijfers van Nederland en in hoeverre speelt Nederland een rol van coördinatie en bestuurscentrum van handel in internationale waardeketens?
(2) Door welke processen zijn deze handelsactiviteiten met Nederland verbonden en in hoeverre zijn ze dat op zo'n manier dat ze lastig zijn te verplaatsen?
(3) Wat zijn, in het licht van de antwoorden op de eerste twee vragen, de sterkten en zwakten van Nederland als internationaal handelsland?

Dit onderzoek laat de veelvormigheid zien van de inbedding van handelsactiviteiten en wederuitvoer in Nederland in de drie hiervoor genoemde typen handelsknooppunten. Het laat ook zien dat lang niet elk type activiteit dat wederuitvoer genereert even sterk met Nederland is verbonden: sommige activiteiten lijken veel eenvoudiger te verplaatsten dan anderen. Er zijn dus verschillende sterkten en zwakten aan te wijzen in de rol van Nederland als internationaal handelsknooppunt. Omdat handel zo verschillend met Nederland is verbonden en er zulke verschillende redenen voor het ontstaan van een knooppunt in Nederland zijn, is een veel nauwkeuriger en case

specifiekere bestudering van Nederland als internationaal handelsland nodig. Pas dan kunnen wederuitvoercijfers en veranderingen daarin goed geïnterpreteerd worden en kan veel gerichter beleid geformuleerd worden ter bevordering van één of meer specifieke handelsrollen in internationale waardeketens.

Theorie en methodologie

In dit onderzoek is wederuitvoer gezien als een activiteit in langere waardeketens die lopen van het ontwerp en grondstoffen van producten tot eindproducten bij de consument. De waardeketen is in dit onderzoek niet strikt lineair opgevat: alle schakels in de keten kennen verschillende horizontale en verticale verbanden met actoren uit de eigen keten en uit andere ketens zodat eigenlijk sprake is van netwerken. Deze waardeketens omspannen vaak verschillende landen. Zo kan ontwerp van een product in de Verenigde Staten plaatsvinden, terwijl in China wordt geproduceerd, in Nederland de logistiek en voorraadbeheer worden uitgevoerd, en in heel Europa geconsumeerd. Het gaat dus om wereldwijde ketens of netwerken van activiteiten die met elkaar zijn verbonden.

De termen waarin globalisering over het algemeen wordt neergezet – deterritorialisering en wereldwijde concurrentie tussen gebieden – lijkt te veronderstellen dat elke schakel in een keten of netwerk, dus ook die van handel en wederuitvoer, slechts licht of in het geheel niet is verbonden met het gebied waarin zij plaatsvindt. Dit hoeft echter niet het geval te zijn. Centraal in dit onderzoek staat het begrip *territorialization* van Storper (1997). Volgens Storper zijn activiteiten die afhankelijk zijn van gebiedsspecifieke bronnen (*territorially specific resources*) niet zo eenvoudig naar elders te verplaatsen. Gebiedsspecifieke bronnen kunnen gerelateerd zijn aan unieke lokaal aanwezige kennis, of aan niet meer in te halen schaalvoordelen, infrastructuren, of unieke, met de lokale geschiedenis verbonden (complementaire) instituties.

Hoewel locatiespecifieke factoren belangrijk zijn om te begrijpen hoe sterk een handelsactiviteit op een plek is ingebed, is het nog niet per se zo dat een activiteit die niet is gebaseerd op unieke, moeilijk te imiteren kenmerken heel eenvoudig is te verplaatsen. Om dit te begrijpen is naar de relaties in de waardeketen gekeken waarin handelsactiviteiten plaatsvinden. Wanneer er door een buitenlands bedrijf grote investeringen zijn gepleegd in een locatie om bijvoorbeeld logistieke activiteiten mogelijk te maken, zullen die investeringen in ieder geval tijdelijk de activiteiten aan een plek binden. Ook investeringen in persoonlijke relaties die het mogelijk maken om handel te drijven, kunnen ervoor zorgen dat het erg kostbaar is om handelsactiviteiten te verplaatsen en op andere handelspartners over te stappen. Behalve naar locatiespecifieke kennis- en productiefactoren, is dus ook naar de relaties tussen partners in de

waardeketen gekeken om te begrijpen door welke processen handelsactiviteiten met Nederland zijn verbonden en er zijn ingebed.

Op basis van Storper's (1997) werk is ook een onderscheid te maken in verschillende productiewerelden die elk eigen kenmerken hebben wat betreft de input die nodig is om het product te maken (gespecialiseerde middelen versus gestandaardiseerde inputs) en de markten waarop een product zich richt (specifieke, onzekere versus generieke, voorspelbare markten). Dit onderscheid is in dit onderzoek gebruikt om te begrijpen welke rol handel in verschillende gevallen speelt en welke activiteiten er daarom mee zijn verbonden. Er werd verondersteld dat in elke productiewereld zoals Storper die onderscheidt – Interpersoonlijke Wereld, Wereld van Markten, Industriële Wereld, Intellectuele Wereld – andere factoren belangrijk zijn voor handel en om het voorkomen van een handelsknooppunt te verklaren.

Om de onderzoeksvragen te beantwoorden is een literatuur- en documentenstudie gedaan naar de rol van internationale handel in het Nederlandse economische beleid en zijn drie cases onderzocht van internationale handel en wederuitvoer door Nederland: kleding, snijbloemen en high-tech consumentenproducten. Ruim zeventig personen die werkzaam zijn in de handel in deze producten zijn geïnterviewd over de organisatie van de waardeketen, de handelsactiviteiten van hun bedrijf/ voor dit product in Nederland, en hun relatie met en locatie in Nederland (personeel, kennis, andere organisaties). Naast de interviews vond er ook voor de casestudies een uitgebreide literatuurstudie en (beleids)documentenanalyse plaats. Het onderzoek is, waar mogelijk, met statistische gegevens ondersteund.

De kracht van het Nederlandse handelsknooppunt

Uit een analyse van het Nederlandse beleid op het gebied van handel en distributie blijkt dat handel, verrassend genoeg, niet heel veel aandacht heeft gehad als een op zichzelf staande sector. Handel is vooral gestimuleerd door de promotie van Nederland als distributieland. Recentelijk heeft in dat kader vooral de ontwikkeling van logistieke kennis in Nederland de aandacht gekregen. De casestudies van de handel in high-tech producten en kleding door Europese distributiecentra in Nederland, laten zien dat het nog maar de vraag is of de ontwikkeling van kennis op het gebied van logistiek en distributie ook leidt tot het aantrekken van fysieke stromen.

Kleding: snelheid en flexibiliteit

De casestudy van kleding is vooral gericht geweest op *privatlabel*bedrijven. Dat zijn bedrijven die in opdracht van andere bedrijven, bijvoorbeeld winkelketens, postorderbedrijven of kledingmerken, de productie van kleding in het buitenland

organiseren en in meerdere of mindere mate ook het ontwerpproces van deze bedrijven overnemen. De private label bedrijven spelen de klassieke rol van de handelaar als verbinding tussen werelden. De handel door deze bedrijven is dan ook gekozen als een voorbeeld van een knooppunt in een handelsnetwerk.

Handelaren in deze keten brengen snelheid, flexibiliteit en zekerheid in de waardeketen van kleding. Dit is nodig omdat productie in het buitenland vaak lastig is te organiseren door culturele verschillen en communicatieproblemen. Ze coördineren dus delen van de waardeketen, maar zijn tegelijkertijd sterk afhankelijk van beslissingen die elders in de waardeketen of het netwerk worden genomen: namelijk om te werken met een private label in plaats van de organisatie van productie zelf ter hand te nemen.

Anders dan gedacht spelen lokale kennisuitwisseling en positieve externe effecten van clustering eigenlijk geen rol voor het functioneren van private labels. De kracht van de Nederlandse private labels kan vooral door historische ontwikkelingen en kenmerken van de Nederlandse vraagmarkt worden verklaard. De gebondenheid aan Nederland van deze handel lijkt zwak en moeilijk te beïnvloeden, vooral doordat er geen beslissingsmacht zit bij de handelaren in Nederland. Veranderingen in de organisatie van de waardeketen van kleding, zoals een toenemende integratie van activiteiten door bedrijven, beïnvloeden sterk het bestaansrecht van deze bedrijven in Nederland.

Snijbloemen: grote keuze, efficiënte logistiek en superieure kennis

De casus van snijbloemen is in dit onderzoek gekozen als hét voorbeeld van handel door een gecentraliseerde marktplaats: op de Nederlandse veilingen komen vraag en aanbod iedere dag letterlijk bij elkaar. Exporteurs en importeurs kopen er een rijk assortiment bloemen van duizenden kwekers die meestal maar een paar variëteiten kweken.

Op de centrale marktplaats die de veilingen zijn, gelden heel sterk alle externe schaalvoordelen die ontstaan door clustering: het maakt de logistiek efficiënt van een product dat veelal in monoculturen wordt geproduceerd, maar in een rijk assortiment wordt verkocht aan de eindconsument. Ook lokale kennisvoordelen blijken hier een belangrijke verklaring voor de voortdurende kracht van deze centrale marktplaats, zelfs in een tijd van toenemende buitenlandse productie en integratie in de keten: in en rond de Nederlandse veilingen ontmoeten handelaren en producenten elkaar en kan het best worden opgevangen hoe het met product- en prijsontwikkelingen staat. De buitenlandse handel is dus sterk afhankelijk van het assortiment dat aanwezig is op de Nederlandse veilingen en de kennis die de Nederlandse handelaren hebben. De handel in snijbloemen wordt daarmee sterk door Nederland beheerst en gecontroleerd en kan zeer lastig door een ander land worden overgenomen. De sterke verbondenheid van de handel in deze sector kan worden verklaard door de veelvormigheid van de verbondenheid: hij is zowel op schaalvoordelen als kennisvoordelen gebaseerd en op een lange historische ontwikkeling van infrastructuur en instituties die ervoor hebben gezorgd dat de

veilingen zo'n breed en diep assortiment tot op de dag van vandaag hebben weten samen te brengen.

High-tech consumentenproducten: kosten tellen

De wederuitvoer van high-tech producten door Nederland is voor dit onderzoek gekozen als een voorbeeld van een distributieknooppunt: wederuitvoer voor dit product verloopt eigenlijk uitsluitend via Europese distributiecentra van grote, internationale producenten. Er zijn maar een paar internationaal opererende distributeurs die als echte handelaar in deze producten kunnen worden gezien. Over het algemeen is de handel dus georganiseerd door nationaal opererende distributeurs en is Europese distributie in handen van grote producenten.

Deze casus laat zien dat het vooral infrastructuur, fiscale voordelen en een efficiënte douane zijn die distributiefuncties aantrekken: ze verlagen de kosten en vergroten de snelheid in de keten. De casus laat ook zien dat deze functies niet heel sterk aan Nederland zijn gebonden en sterk vanuit het buitenland worden aangestuurd: verplaatsing van deze activiteiten uit Nederland wordt continu overwogen. Gezien de manier waarop de distributie zowel door verladers als logistiek dienstverleners vanuit het buitenland wordt aangestuurd, is het nog maar de vraag of door logistieke kennisontwikkeling ook logistieke stromen zelf aan Nederland gebonden kunnen worden.

Een veelvormige handel, wederuitvoer en inbedding

Het onderzoek toont dat het zeer relevant is onderscheid te maken naar verschillende typen handelsknooppunten die achter de ogenschijnlijk eenduidige wederuitvoercijfers schuilgaan: verschillende typen knooppunten blijken anders in Nederland te zijn ingebed. Ook laat het onderzoek zien dat het interpreteren van de rol van een bepaald type knooppunt eigenlijk alleen goed kan als rekening wordt gehouden met het soort product dat wordt verhandeld en de manier waarop de keten is georganiseerd: we moeten dus kijken naar de langere keten of het netwerk waarin de handelsactiviteit plaatsvindt om te begrijpen aan welke krachten een bepaalde handelsactiviteit onderhevig is en welke ruimte er is om de rol die die activiteit speelt en de inbedding van die activiteit te versterken. Ten slotte leiden de inzichten uit dit onderzoek tot relativering van de waarde die gehecht moet worden aan stijgende of dalende wederuitvoercijfers: ze kunnen net zo goed een sterk aanpassingsvermogen laten zien van de handel als een sterker of zwakker wordende positie van Nederland als handelsland. Verder betekent een toename van wederuitvoer niet noodzakelijkerwijs dat ook de macht om internationale handel te controleren toeneemt, net zo min als een verlies van wederuitvoer per se zwakte uitdrukt. Het kan evengoed betekenen dat de

concurrentiekracht verschuift van fysieke afhandeling naar coördinatie en regie van handelsstromen en derhalve een teken zijn van een sterk aanpassingsvermogen van de economie aan internationale ontwikkelingen in de waardeketens van producten.