

Organisations of maritime transporters in the Low Countries, 1400-1800

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Analysis of the spatial structure of the maritime transport sector in the Low Countries in the early modern period has revealed fundamental differences in the 'origin' of communities of maritime transporters, in the functions of urban and rural maritime transport communities and in the spatial evolution of the so-called 'reservoir of shipmasters' providing carrier services to the Low Countries' international trade. Essential for the development of the spatial structure of the maritime transport sector in the Low Countries were changes in urban maritime trade networks on the one hand, and changes in regional (land-based) economies on the other hand. Both entailed a process of specialisation in the transport sector, which created the necessary conditions for the emergence of 'professional' (or 'specialised') urban and rural maritime transport communities.

This paper examines local and regional differences in the organisational forms of shipmasters in the Low Countries, and addresses the question to what extent the spatial structure of the maritime transport sector as a whole might have been influenced by urban and rural organisations of shipmasters.

It will be shown that shipmasters' institutions for collective action provided a framework for knowledge acquisition and exchange that had a significant influence on the size and scope of maritime transportation services provided by the institution's members. It will be substantiated that urban and rural maritime shipmasters' associations could have a positive effect when collective action supported an increase in the benefits of competitive advantage, and a negative effect, when collective action aggravated lock-in.

The source base of this paper consists of (1) archives of skippers guilds and mutual insurance boxes (or: compacten) in the Low Countries and (2) serial data sources about maritime transportation in the Low Countries. The first type of sources will be used to execute a comparative analysis of the organisational structure of shipmasters' guilds and 'compacten'. The second type of sources will support a descriptive analysis of informal organisations of maritime transporters.

Keywords: maritime transport, skipper guilds, mutual boxes, informal collectives, Low Countries, early modern period

INTRODUCTION

Following North's definition of institutions as the formal and informal rules that shape all human interaction (North 1990), organisations of maritime transporters in the Low Countries between 1400 and 1800 can be divided into formal and informal counterparts. Both were institutions that provided structure to communities of maritime transporters in the Low Countries' cities and villages. These institutions had various functions - from dealing with technical regulations to securing market access and promoting skills acquisition. Organisations of maritime transporters in the Low Countries were unique institutions of collective action. In some aspects, they were similar to craft guilds, but whereas craft guilds were essentially about the production of goods (Epstein 1998; Ogilvie 2004), organisations of maritime transporters were about the production of services. In other aspects, they were similar to merchant guilds and other services-producing guilds, but whereas these services-guilds dealt primarily with the production of services in one particular place (Greif, Milgrom and Weingast 1994), organisations of maritime transporters had a much wider geographical scope. A major difference between merchant guilds and other services-producing guilds, on the one hand, and organisations of maritime transporters, on the other hand, was that the latter's services were not provided 'on the spot' but 'at a distance'.

Typology of institutions of collective action

	Crafts guilds	Merchant and services-producing guilds	Organisations of maritime transporters
Type of production	Production of goods	Production of services	Production of services
Location of production	On the spot	On the spot	At a distance

Table 1: Typology of institutions of collective action

Among the formal organisations a distinction can be made between skippers guilds, mutual insurance boxes (in Dutch: compacten) and barges (in Dutch: beurtveren), even though the difference between these forms of formal organisation is not always clear. The so-called skipper guild of Leek, a village located about 15 km west of the City of Groningen, for example, had the same functions as a number of mutual insurance boxes in the same region (e.g. Pekela, Veendam, Wildervank en Oldamt) (see Appendix 1). In Workum, an old Frisian town located on the Zuiderzee, a guild of barge skippers coordinated the exploitation of a fleet of sixteen barges – thus witnessing the existence of guilds with a very specific function (Roorda 1973). To complicate the matter even further, skipper guilds sometimes organised so-called guild boxes for their members, which was a specific feature of skipper guilds in the Province of Groningen (Go 2009). Moreover, within the broad category of skipper guilds, institutional developments sometimes led to the split or merge of local skipper guilds into guilds of a more specific, or – on the contrary – more general nature. A typical example of such development can be found in the history of the skipper guilds of Amsterdam (Van Eeghen 2012). Evidence of formal organisations of maritime transporters can quite easily be traced in local and provincial archives as well as in primary source editions. In a number of cases, however, the actual guild archives did

not survive and the only remaining evidence is in legal documents that mention skipper guilds, mutual insurance boxes and barges¹.

Informal organisations of maritime transporters are harder to grasp, because neither the modalities of informal cooperation between maritime transporters nor the names of those who cooperated were written down in legal documents². Inevitably, any evidence of informal organisations of maritime transporters is indirect and any assessment of their functions has an element of speculation. Moreover, the distinction between formal and informal organisations is not always very clear: contemporary evidence suggests that both could co-exist in one community of maritime transporters. More importantly, however, informal organisations could have their roots in formal organisations. As we will see, mutual insurance boxes often seem to have offered a framework for the coordination of joint actions, even though this was not an explicit task of the mutual insurance box. North distinguishes between three types of informal constraints that arise to coordinate repeated interaction (North 1990). The first are extensions, elaborations and modifications of formal rules; the second – socially sanctioned norms of behavior and the third – internally enforced stands of conduct (North 1990). One potentially fruitful way to detect informal organisations of maritime transporters is to explore primary data sources in search for (indirect) empirical evidence of the presence of these informal constraints in the operations of maritime transporters. Within the discipline of maritime history, population analysis has been put forth as an effective way to get such information out of raw serial data sets (Scheltjens 2012 ; Scheltjens and Dopfer 2012 ; Scheltjens and Veluwenkamp 2012).

Typology of organisations of maritime transporters

	Formal	Informal
Types	Skipper guilds (urban) Mutual insurance boxes (rural) Barges (urban & rural)	Community-based populations of maritime transporters

¹ For an overview of skipper guilds in the Netherlands see : "Database Dutch Craft Guilds", http://hdl.handle.net/10411/10101_V1. Accessible via : <http://www.collective-action.info>. Written evidence about the following mutual boxes or schipperscompacten could be found (but probably more boxes have existed): Woudsend, Joure, Leek, Makkum, Pekela, Wildervank, Oldampt ; details can be found in appendix 1. An comprehensive overview of barges does not exist. Insofar as we limit our survey to maritime transport, only barges on international destinations were explored. A non-exhaustive overview of international barge services originating in the Low Countries can be found in Appendix 2.

² There is one major exception : the occasional cooperation of maritime transporters in legal issues. A good example is the case of 92 Makkumer shipmasters who gathered to protest against protectionist regulations installed by the City of Groningen in 1694. While such examples of collective action are numerous in the history of trade and transport, their occasional (non-institutional) nature forced us to exclude them from our survey. To complexify things, the Makkumer shipmasters that joined the action against Groninger city officials called themselves 'schipperscompact', referring to 'compact' in the meaning of 'group' rather than in the more common meaning of 'mutual insurance box'. Information about this 'schipperscompact' of Makkum was kindly provided by Drs. Jelle Jan Koopmans, PhD student at the University of Groningen.

Source base	Direct evidence (mostly legal sources)	Indirect evidence (serial data sources)
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Table 2: Typology of organisations of maritime transporters.

The goal of this paper is to identify various organisational forms of maritime transporters in the Low Countries and to address the question to what extent the spatial structure of the maritime transport sector might have been influenced by the functioning of formal and informal organisations of maritime transporters.

The paper is divided into three parts. In the first part, I contextualise the emergence of formal organisations of maritime transporters in the Low Countries between 1400 and 1800. The focus of this paragraph will be on the legal, spatial and temporal characteristics of the three main types of formal organisations. In the second part, an attempt is made to identify informal organisations of maritime transporters, applying available tools for the study of populations of shipmasters on the basis of historical databases of maritime shipping. In the third part, the impact of the formal and informal organisations of maritime transporters identified in paragraphs one and two on the changing spatial structure of the maritime transport sector in the Low Countries between 1400 and 1800 will be assessed. I will show that shipmasters' institutions for collective action provided an institutional framework for knowledge acquisition and exchange that had a significant influence on the size and scope of maritime transport services provided by institution members. I will substantiate that maritime transporters' associations could have a positive effect, when collective action supported an increase in the benefits of competitive advantage, and a negative effect, when collective action aggravated lock-in.

FORMAL ORGANISATIONS OF MARITIME TRANSPORTERS

In this paragraph, I distinguish between three major organisational forms in the Low countries' maritime transport sector. Of the three organisational forms, skipper guilds are the oldest and most traditional. They are equivalent to craft and merchant guilds, even though – as was mentioned above – the location of the services they provide is different. The first skipper guilds in the Low Countries emerged in the fourteenth century in cities like Elburg, Deventer, Kampen, Amsterdam, Antwerp, Bruges, Dokkum, Ghent, Groningen, Hoorn, Middelburg, Sluis and Zierikzee. While some of their activities probably were carried out at sea, this was not (yet) their main area of activity in the early years. First and foremost, these skipper guilds dealt with transport services in general, which could be of a local and regional nature. It was only after 1500 that the increasing supply of maritime transport services required some restructuring of skipper guilds that led to the emergence of separate guilds for inland and maritime transportation. Skipper guilds continued to be part of most Low Countries' cities for the entire period covered in this paper³.

³ A total of 173 skipper guilds could be retrieved from the database of craft guilds in the Netherlands. See: "Database Dutch Craft Guilds", <http://hdl.handle.net/10411/10101> V1. Some of these guilds were continuations under a different name of existing guild structures, some are mutual insurance boxes or barges rather than actual skipper guilds and some may have been involved in domestic and inland rather than maritime transport services, so the actual number of skipper guilds in the Netherlands is probably lower.

Maritime transport services were never in the hands of urban skipper guilds exclusively. Several villages in Flanders, Zeeland and Holland provided maritime transport services to the international trade networks of urban centres in their direct surroundings. The sixteenth century, an era of ‘maritimization’ and the globalization of European transport systems and of accelerated regional integration triggered by urbanization around the main estuaries of the Low Countries, witnessed an increase in the share of villages in the supply of maritime transport services from an estimated 20% to more than 60% (Scheltjens, unpublished). Early processes of specialization – dated back to around 1350 in Holland (Van Bavel and Van Zanden 2004) – spread widely across the Low Countries from the fifteenth century onwards and eventually led to the emergence of a stable “professional” maritime transport sector in some of the Low Countries’ rural settlements after 1650 (De Vries and Van der Woude 1997). It is in this context that the emergence of a large maritime shipping fleet in rural settlements in the Low Countries should be seen.

The specialization process that unfolded in the Low Countries’ rural coastal areas – predominantly in the area North of Amsterdam (Noorderkwartier), Friesland, the Province of Groningen and the Wadden Islands – entailed a social dilemma: when the supply of maritime transport services was the main (or even the only) source of income, how could it be secured in the absence of guilds? This problem could be dealt with in several ways, but probably the creation of mutual insurance boxes for shipmasters (and their respective households) was the most common solution in the Low Countries’ maritime transport sector. These ‘schipperscompacten’ (also called ‘guild boxes’ or ‘mutual boxes’) emerged primarily (but not exclusively) in areas that lacked a significant international trade of their own but that did have the means to supply transportation services to third parties. ‘Schipperscompacten’ could also emerge in affiliation with urban skipper guilds (Go 2009). Generally speaking, the regions mentioned above had an economy with a strong reliance on local natural resources (like peat or fisheries). Transportation by water was an intrinsic part of their economies, and when demand for natural resources in surrounding urban centres provided the opportunity, existing local and regional distribution patterns could quite easily expand into the maritime realm. Logically, ‘schipperscompacten’ were most prominent in Friesland and Groningen. Their emergence coincided with the maritime expansion of their rural coastal communities’ transportation services in the seventeenth and eighteenth centuries⁴. Guild boxes emerged as early as 1605, when the great skippers guild (*grootschippersgilde*) of the City of Groningen was founded (Go 2009)⁵. Its foundation marked the gradual development of an alternative insurance system in the northernmost parts of the Dutch Republic⁶.

‘Schipperscompacten’ should not be confused with ‘zeevarende buidels’ or ‘bootsgezellenbeurzen’, even though they have a number of shared characteristics (Go 2009; Bos 1998; Boon 1988; Van Royen 1987). Mutual insurance boxes for shipmasters incorporated elements of traditional urban skipper guilds, but reserved a

⁴ Often mutual boxes were called skipper guilds, or ‘vrije Societeit’ or ‘willekeur’ or ‘contract’. Although this complicates their identification at first, the distinction between a “traditional” skipper guild and a schipperscompact is quite clear: the former has restrictive membership, the latter has not; the former is a typically urban phenomenon, the latter is not.

⁵ The records of the guild boxes of the great skippers guild of Groningen have not been preserved.

⁶ Unfortunately, available data on schipperscompacten is scarce and mostly limited to some legal documents.

more prominent place for regulations concerning life and damage insurance. Moreover, membership was less restrictive (in the case of the guild box organised by the great skippers guild of Groningen it was voluntary) (Go 2009) and the geographical scope of the individual members' supply of transport services was taken into consideration when fees were calculated (Go 2009; Geerdink van der Worp 1994; De Graaff 1999; Bakker 1967/68).

Barges have a somewhat ambiguous position among the formal organisations of maritime transporters in the Low Countries. Most barges were operative on domestic routes, whereas only a limited number of barges can be attributed to the domain of maritime (sea-going) transportation⁷. The exploitation of domestic barges was organised in separate guilds, like, for example, the 'Guild of the barge between Workum and Amsterdam' (Roorda 1973) or the several 'métiers des bateliers' in the Southern Netherlands (Heirwegh, unpublished). In other cases, barges were part of the activities of local skipper guilds, either as a one-sided organisation, or as a cooperation of two (and sometimes more) places that wanted to operate such regular service together (Fuchs 1946). Besides, Wagenaar stipulated that a great number of barges existed that were not formally organised (Wagenaar 1760-1802). Similar organisational differences apply to the international, sea-going barge services that appeared in the beginning of the seventeenth century. For example, the international barge services between Amsterdam and London, Rouen, St. Valéry, Bremen, Hamburg and (later) Dunkirk were operated under the jurisdiction of so-called commissioners of the Great Skippers Guild of Amsterdam – they were not formally part of the great skippers guild itself (Van Eeghen 2012). The barge services between Rotterdam and Dunkirk, and between Rotterdam and Ostend and Bruges, on the contrary, were organised by the City Council of Rotterdam, but membership of the skippers guild was stated as a requirement in article III of the ordinance (Jaerboeken 1770).

A rather puzzling case is that of the 'Combinatie-beurt' between Amsterdam and Rouen, of which a concept was issued in 1766⁸ and published in 1767 (Jaerboeken 1767). This barge was organised as a 'Contract van Reederye' in which nine ships would be built and equipped to sail on a regular basis between Amsterdam and Rouen. It was a private initiative that arose out of discontent with the existing barge service between Amsterdam and Rouen. The entire operation was financed by 64 part owners, and among them were the nine shipmasters that should operate the fleet. This contract seems to be unique for several reasons. First of all, it was very uncommon before 1825 to have more than one ship in a rederij (Broeze 1977; Oosterwijk 1996). Secondly, it was very uncommon to organise a barge service in this way. Finally, and most strikingly, the barge service between Amsterdam and Rouen was the involvement of cheese merchants from Hoorn⁹. Unfortunately, there are no records

⁷ For an overview, see Appendix 2. Barges on international riverine routes not taken into consideration in this paper. For literature about these barges, see (Fuchs 1958; Heirwegh, unpublished; De Peuter 1999).

⁸ Stadsarchief Amsterdam, 366: Gilden en het brouwerscollege, 391: Stukken betre_ende de vaart op Rouen en S. Valery. 1651 – 1787 (see also : Van Eeghen 2012)

⁹ Art. 13 : Zullen in dit Contract moogen deel neemen en genodigt worden de noornaamste Kaas Negocianten in Noord Holland en wel bysonder die der Stad Hoorn, ten eynde des te beeter in staat te zyn, om deese Beurt door eygen versndige te doen bestaan en door de de goede en prompte behandeling en directie, de verloope Commissien op deese stad te doen recouvreeren.

available that can proof its actual existence, but at least some of the names mentioned in this 'Contract van Reederye' also appear as barge skippers in the Paalgeldregisters of Amsterdam¹⁰.

Skipper guilds, mutual insurance boxes and barges share two basic occupations: preserving quality of service and securing the shipmaster's income. The first occupation of skipper guilds, mutual insurance boxes and barges was the pursuit of quality of service. Each of the formal organizations approached this issue in its own particular way, but in all cases quality of service was preserved by means of membership regulations (rules for admission or exclusion, membership fees), technical regulations (rules for equipment) and operational regulations (practical rules). The second task was to secure the income of organisation members (i.e. shipmasters) and their respective households. Skipper guilds and barges tended to secure income for their members through exclusivity regulations, whereas mutual insurance boxes had a different perspective on income-related issues. The difference between skipper guilds, barges and mutual insurance boxes seems to have been at least partly due to differences in the structure of ship ownership¹¹. Exceptions notwithstanding, it may be substantiated that ship ownership among members of skipper guilds mostly took the form of a minority share in the ship, whereas ship ownership by members of mutual insurance boxes was the opposite, with shares usually exceeding 50% and going up to full ownership of the vessel¹². The situation for barges is less clear. There is archival evidence of parts in barges being issued and purchased, but there is also evidence of barges being owned by the shipmaster. To complicate the matter, some sources also indicate that the number of members of a barge guild was sometimes larger than the number of barges available (Heirwegh, unpublished). On the basis of the available data, it is impossible to identify a dominant ownership structure insofar as barges are concerned. The differences in ship ownership between members of mutual insurance boxes and skipper guilds, on the other hand, do help to explain the different approaches towards income-related issues by skipper guilds and mutual insurance boxes. In the latter case, having an operative vessel at disposal was of primordial importance to secure income and to prevent skippers from sinking into poverty (Go 2009). Therefore several regulations would address issues related directly to the ship and anything that could hinder its availability.

INFORMAL ORGANISATIONS OF MARITIME TRANSPORTERS

Informal organisations of maritime transporters are considered broadly as extensions to formal organisations (North 1990). Such non-restrictive definition allows interpreting available serial sources of maritime transportation in the Low Countries as evidence of collective action. The point of reference between community-based

¹⁰ The database of the so-called paalgeldregisters is accessible at : <http://www.let.rug.nl/welling/paalgeld/appendix.html>.

¹¹ Cargo ownership is not an issue in this respect: several mechanisms were developed in the late Medieval and early modern period to insure cargoes. Ship ownership did not influence the functioning of cargo insurance mechanisms and cargo ownership did not influence ship .

¹² Indicative in this respect is the fact that in the willekeur issued by the so-called 'skipper guild' of Pekela in 1712, members' premiums were not calculated on the basis of destination, as was the case in the mutual box of the great skippers guild of the City of Groningen, but on the basis of the value of the ship.

formal institutions of collective action and serial data sources is the shipmaster's domicile. A brief survey of names listed as members of guilds and mutual boxes allowed to substantiate that most formal organisations probably had informal extensions: names of shipmasters that were members of a formal organisation could be retrieved in serial data sources (e.g. the Danish Sound toll registers¹³), but usually more names – presumably of non-members from the same domicile – appeared in these sources as well. Of course, 'false' identification with a particular domicile could be at play here, and limitations of both types of sources (annual membership lists vs. serial data sources) are another factor that may account for differences between the two. Regardless of these limitations, the behavior of populations of shipmasters (i.e. groups of shipmasters from the same domicile), as it appears from serial data sources on maritime shipping like the Danish Sound toll registers, can be interpreted as evidence of collective action made possible by informal organisations. There is good reason to assume that such informal organisations of maritime transporters were quite common; and this assumption can be substantiated through comparison with Wagenaar's categorization of barge services in the Dutch Republic in the eighteenth century. Wagenaar makes a distinction between barges that were the result of cooperation between two (or more) cities and barges that were 'one-sided' organisations. As a third category, Wagenaar lists barges for which no formal agreements existed (Wagenaar 1760-1802). Considering that this was true for the highly regulated barge services in the Dutch Republic, and taking into account the results of previous exploration of serial data sources like the Danish Sound toll registers (see: Scheltjens 2009; Scheltjens and Veluwenkamp 2012), I believe that indirect empirical evidence from serial data sources provides sufficient proof for the existence of informal organisations of maritime transporters. In the remainder of this paper, we will treat indirect evidence correspondingly.

RESULTS

Analysis of the spatial structure of the maritime transport sector in the Dutch Republic in the early modern period has revealed fundamental differences in the 'origin' of communities of maritime transporters, in the functions of urban and rural maritime transport communities and in the spatial evolution of the so-called 'reservoir of shipmasters' providing carrier services to the Low Countries' international trade. Essential for the development of the spatial structure of the maritime transport sector in the Low Countries were changes in urban maritime trade networks, on the one hand, and changes in regional economies on the other hand. Both entailed a process of specialisation in the transport sector, which created the necessary conditions for the emergence of 'professional' (or 'specialised') urban and rural maritime transport communities. In this paragraph, I address the extent to which the spatial structure of the maritime transport sector might have been influenced by regionally-specific formal and informal organisations of maritime shipmasters. To streamline this complex and speculative effort, I focus on the local emergence of collectives of individual shipmasters and on their collective behavior (Scheltjens and Dopfer 2012). My findings can be summarized as follows. First of all, the behavior of maritime transporters in the Low Countries between 1400 and 1800 did not have a random character. Secondly, there is nothing individual about the behavior of maritime transporters in the Low Countries between 1400 and 1800; they did not operate in a

¹³ See: <http://www.soundtoll.nl>

vacuum and any business decision made by individual shipmasters fit into a set of rules defined by the (formal or informal) collective of which the shipmaster was part. Therefore, locally- and regionally-specific collectives of maritime transporters, either formal or informal – as an extension of formal organisations – , had an impact on the structure of the maritime transport sector as a whole. This impact was positive insofar as it increased the benefits of competitive advantage, but it became negative, when collective action aggravated lock-in. In the context of economic-geographical changes in the demand and supply of goods (and their respective effect on the directions and frequencies of good flows between demand and supply areas) – collective action of maritime transporters in the Low Countries resulted in the rise and decline of communities of maritime shipmasters operating in service of the Dutch Republic’s centres of trade. However, local and regional differences in the organisational structure of their respective institutions for collective action do not seem to have had a decisive impact on the spatial structure of the Dutch maritime transport sector. There is no evidence in support of such argument. It seems that institutional differences between urban skipper guilds, rural mutual insurance boxes and informal organisations of maritime transporters did not have a direct impact on the daily operations of shipmasters. Economic-geographical factors – i.e. the position of shipmasters’ communities in demand and supply structures – and technical factors – i.e. the type of ship at disposal – were clearly more important. However, the operational patterns of local communities of maritime transporters provide ample evidence of specialisation in a limited number of routes and cargoes and do suggest that the variety of existing institutions for collective action was important to the maritime transport sector in the Low Countries, but not in purely economic or technical terms, rather in terms of culture.

DISCUSSION

Organisations of maritime transporters were institutions that shaped the actions of their members. They were institutions that created, supported and preserved local business cultures¹⁴. In my opinion, that was their primary function¹⁵. Precisely because of this, organisations of maritime transporters could have a positive or a negative impact on the maritime transport sector in the local community. To make this point clear, let us take a short look at the maritime transport community of Hindeloopen, a small Frisian town that was famous for its exceptionally large population of shipmasters. Throughout the early modern period, shipmasters from Hindeloopen were the Dutch Republic’s most famous timber transporters (Lootsma 1940). They operated mostly on behalf of merchants and entrepreneurs in North-Holland (predominantly Amsterdam and the Zaan area). Already in the sixteenth century, shipmasters from Hindeloopen transported large quantities of timber from Norway to Amsterdam. By then, the local business culture of the maritime transport community of Hindeloopen, with timber and Northern Europe as its main features, had completed its initial formation process. From that point onwards, the reputation built up by the community-based collective of shipmasters triggered further

¹⁴ Providing an accurate definition of the term business culture is not unproblematic. We consider Lipartito’s description of business culture to be a good starting point : “Business culture is that set of limiting and organizing concepts that determine what is real or rational for management, principles that are often tacit or unconscious” (Lipartito 1995).

¹⁵ In order to substantiate this claim, I have tried to interpret the results of a number of case-studies about community-based populations of maritime transporters and their behavior.

specialisation in ship type, route and cargo. For a certain period of time, the local business culture had a positive impact on Hindeloopen's maritime transport sector: shipmasters from the community were considered to be "the best in the business"; their business culture was recognised far beyond community borders. Such appraisal of capabilities needs not to be understood as a general truth concerning the maritime transport sector in the Low Countries; as a rule, the reputation of a community-based population of shipmasters as "the best in the business" applied to the small set of very specific (repeated) actions, which constituted the major part of their local business culture. The primary effect of the success of the local business culture on the community-based population of shipmasters was one of expansion: newcomers, adhering to the local business culture, made the population grow. Important to stress here is that this growth was accomplished within the framework of action provided and endorsed by the local business culture. In general, within a community-based population of shipmasters, the chances to successfully develop an alternative range of maritime transport activities, parallel to the one in which the community had obtained its reputation, were slim. Indeed, both the process of emergence of a local business culture and that of its further development were highly path dependent. This, in turn, made local business cultures vulnerable to changing circumstances at the product supply side, the demand side or in the community of shipmasters itself¹⁶. However, when dramatic changes occurred in the supply of timber from Norway, and new timber outlets were sought in the Baltic in the last decades of the seventeenth century, shipmasters from Hindeloopen were able to respond to this geographic supply shift and became the dominant transporters on the routes between the eastern Baltic (Narva, Vyborg, Riga, etc) and the Dutch Republic in the first half of the eighteenth century (Lindblad 1997; Scheltjens 2009). Apparently, at that time, their reputation was strong enough to deal with such significant changes.

Inevitably, at a certain moment, a point of saturation was reached. For the shipmasters of Hindeloopen this happened in the 1730s (Scheltjens 2009). There was less and less room for newcomers and an internal battle for preservation began. In severe economic circumstances this could easily lead to the decline of the population. Remarkably, there is evidence that some sort of "last in, first out"-rule was applied in such situations (Scheltjens 2009). Clearly, specialisation now became a negative factor for the maritime transport sector in the local community. Hence, the business environment in which the shipmasters community of Hindeloopen and many others operated was one where each collective of shipmasters had some sort of monopoly on a very specific range of activities. It was hard to break with previous experience, accumulated as a collective, and internalised as a local business culture. The path dependent specialisation process had a negative impact on the local maritime transport sector: there was no way out. Such phases of decline could be of a temporal nature, like a fluctuation, but in the long run, they could also become a trend, leading towards obsolescence of the community-based population of shipmasters. This appears to have been the case for Hindeloopen's maritime transport community in the latter part of the eighteenth century (Scheltjens 2009).

¹⁶ This is not the time to go into detail about the range of changes that could have an impact on the growth or decline of communities of shipmasters. Changing import and export regulations, wars, capacity constraints at the shipmasters' homeport, international competition and changes in the location of production or consumption are but a few potential factors.

CONCLUSION

In first part of this paper, I have presented the results of an analysis of formal and informal organisations of maritime transporters in the Low Countries between 1400 and 1800. After an initial survey of the different types of formal organisations of maritime transporters, I have pointed out that informal organisations also constituted part of the Dutch maritime transport sector, even though evidence of their existence is far more fluid and harder to grasp than in the case of formal organisations. In the second part of the paper, I have made an attempt to treat formal and informal organisations as variations of the same thing. Both were institutions that existed for the benefit of their population members, but rather than merely facilitating collective action, I have substantiated that organisations of maritime transporters - both formal and informal – functioned primarily as institutions that created, shaped and preserved local business cultures. Collective action in the maritime transport sector in the Low Countries seems to have been a result of the emergence and prosperity of local business cultures rather than a deliberate aim of formal organisations of maritime transporters.

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APPENDICES

Appendix 1

Woudsend	1705	>1725
Veendam, Wildervank, Oldambten	1743	?
Oude en Nieuwe Pekela	1712	>1794
Makkum	1750	1802
Workum and Hindeloopen	1707	?
Stavoren	1746	?
Sneek	1748	?
Joure	?	?
Leek	1764	1858

Sources: see literature cited and archives consulted.

Appendix 2

From	To
Amsterdam	Antwerp
	Brabant, Flanders
	Bremen
	Brussels
	Dunkirk
	Emden
	Gent
	Hamburg
	Leuven
	London
	Mechelen
	Oldenburg
	Rouen
	Sluis
	St. Valéry
Groningen	Bremen
	Emden
	Hamburg
Leiden	Antwerp
Middelburg	Antwerp
	Bruges
	Brussels
	Rouen
	Sluis
Rotterdam	Antwerp
	Axel
	Bruges
	Brussels
	Dunkirk
	Ghent
	London
	Mechelen

	Nieuwpoort
	Ostend
	Rouen
	Sas van Ghent
	Sluis
	St. Valéry
Termunterzijl	Emden

Sources: see literature cited and archives consulted.