

ONE SOURCE TO RULE THEM ALL? COMBINING DATA ABOUT TRADE AND SHIPPING FROM AMSTERDAM TO THE BALTIC IN THE LATE EIGHTEENTH-CENTURY

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Even after the economic boom of the 17th century had faded away, during the 18th century Amsterdam remained an important entrepot for a wide variety of goods, especially to and from the Baltic, considered by contemporaries as the 'mother of all trades'. What role did local merchants have in the continuation of maritime trade? What were the challenges they faced? Combining different data sources might provide a better understanding of their activities. In this paper several data sources are discussed, with a focus on the Baltic trade and the use of data from both muster rolls and the Sound Toll Registers.

Keywords: eighteenth century, international trade statistics, Amsterdam, globalization, economic history, Baltic trade, navigation.

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1. Introduction

The Dutch Republic witnessed a period of unprecedented economic prosperity in the first half of the 17th century, later described by historians as a ‘golden age’. This was most evident in Amsterdam. It became the entrepôt of Europe, a major centre of the arts and sciences, and the birthplace of many innovations in finance, insurance, commercial services, shipbuilding and maritime transport (De Vries and Van der Woude, 1995; Prak, 2002). Amsterdam was a big magnet for both people, trade, capital and ideas; it was simply ‘the place to be’ in 17th century Europe.

Much of the historical debate on this prosperity has traditionally focused on the rise of the Dutch Republic as an economic powerhouse. What happened afterwards received far less attention. To many historians the 18th century was just a long period of stagnation and decline in the shade of a more glorious past (Brugmans, 1930; Boxer, 1965; Schama, 1977; Israel, 1988), and they found themselves confirmed by contemporary sources. A letter, written in 1764 by James Boswell to his friend William Temple about his visit to the Netherlands, summed it all up nicely: *“this trading nation must be in a very bad way. Most of their principal towns are sadly decayed, and instead of finding every mortal employed, you meet with multitudes of poor creatures who are starving in idleness”* (quote from Pottle, 1952). And Boswell was not the only one to note these changes. Commentators in the Dutch broadsheets of the time railed against the unscrupulous bankers, the frolicking of the regent class, the moral decay of the middle classes and the lazy merchants who rather sat on their piles of money than invest it in ‘good and honest’ trade, as they surely would have done if only they had lived a century earlier (Brugmans, 1912).

Indeed many of the defining factors that had contributed to the rise of the Dutch Republic in the 17th century were still present a hundred years later: its strategic location on a crossroads of trade routes connecting all major European economic regions; the presence of a large and relatively wealthy, literate and urbanized middle class; the accumulation of know-how and investment capital; it still boasted one of the largest merchant fleets in the world, serving a colonial trade network that spanned three continents. So, what had changed? Was it stiffer competition from merchants from other countries, especially the British? Some argue

that the Dutch were beaten in their own game, with the ‘Glorious Revolution’ of 1688 as the defining moment when the British copied Dutch business and financial practices and thus the foundations were laid for their own ‘golden age’ (Jardine, 2008). Others might rather point to the erosive effects of the increasing number of protectionist measures, starting with the Navigation Act of 1651 of Britain and the later mercantilist policies put in place by France, Sweden and Russia. Although not immediately these measures did have a damaging long-term effect on the Dutch merchant fleet that could only thrive in a truly open and free market. ‘Neutral goods in neutral ships’ was the maxim of 18th century Dutch shipmasters (Van Eyck van Heslinga, 1982) and it paid them a handsome dividend when countries other than their own were fighting. It was also based on the premise that Dutch neutrality was respected by all parties and could be backed up by naval force if necessary, but by the third quarter of the 18th century the five Admiralties of the Dutch Republic were no longer in fighting form (Bruijn, 1998).

But the 18th century had not been one long period of doom and gloom. Westermann (1948) discovered a new peak in Dutch economic growth between 1730 and 1740. Decline only had set in during the second half of the 18th century, when it became apparent throughout the Dutch economy, as was confirmed by Israel (1989). A major contribution to this economic debate came from Johan de Vries² who made a clear distinction between “absolute” and “relative” decline in the economy of the Dutch Republic (De Vries, 1959). Overall trade remained remarkably constant throughout the 18th century, but considering that trade in the surrounding countries rose considerably faster during the same period this meant an increasing gap, but not necessarily a decline. Recent studies seem to confirm this idea as even in the latest historiography of Amsterdam the word “decline” made way for “stagnation and stability” (Lesger, 2005). Maybe the 18th century is not the exception to the rule, but should we start to consider the *Wirtschaftswunder* of the 17th century as the oddity in Dutch history.

2. Not to be confused with the already mentioned Jan de Vries.

Meanwhile, the problems facing the much criticised merchants of Amsterdam must have seemed to them almost overwhelming at times, as solutions were mainly out of their reach, at least when it came to foreign economic policies or naval spending. This makes the question how these merchants were able to even continue trading, especially at the end of the 18th century, even more relevant. How did they cope with the major disruptions in international trade and shipping, caused by political developments in Europe and abroad, such as the American War of Independence or the wars of Revolutionary France? What sources do we actually have about trade and shipping in the Dutch Republic and what can they tell us about the very real economic circumstances the merchants in Amsterdam had to deal with on a daily basis? As the Baltic trade was considered the ‘mother of all trades’ of the Dutch Republic (Van Tielhof, 2002) and the cornerstone of Amsterdam’s prosperity, we will look more closely to developments in this sector in particular.

2. Trade statistics

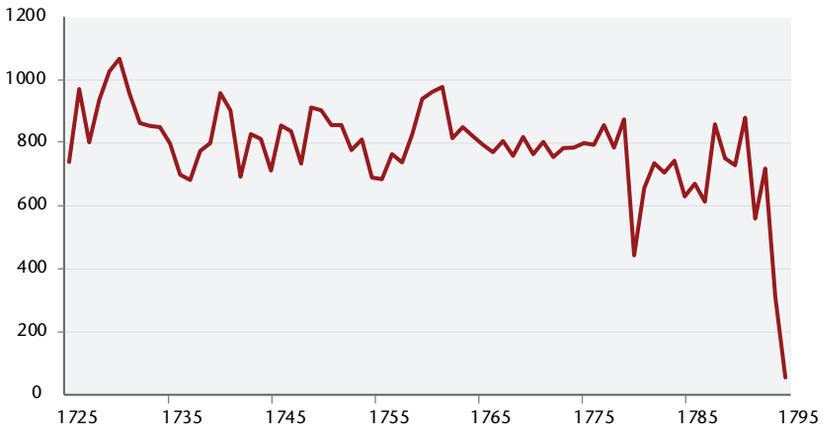
Throughout the 18th century there was hardly any form of systematic data collecting, at least not for the statistical purposes we have become accustomed to.³ Therefore we have to make use of largely indirect information; data that were not brought together for the purpose we are now using them for. While there are several sources that can be used as an indication of general economic developments, like population growth, migration, housing prices, employment and production, what are the sources that specifically concern trade and shipping in the 18th century?

Pringsheim (1890) was one of the first who made use of data available in the municipal archive in Amsterdam (Knotter, 1995): the collected duties of the ‘convoaien en licenten’ (Figure 1) and the published ship tidings of vessels arriving at Texel and Vlieland. The ‘convoaien en licenten’ were a collection of import and export duties on a number of commodities. These duties were raised at the sea and land borders of the Dutch Republic on behalf of the five

3. For a general discussion of the sources of Dutch trade statistics, see also the Scheltjens entry in this volume.

Admiralties, and were originally intended to maintain a fund to pay for the costs of protecting the merchant fleet by way of a convoy system ('convooien') in times of war. The accounts for 1681-1766 have survived. This makes this source particularly attractive for the study of long-term developments in trade. Not surprisingly, Pringsheim's own findings quickly found their way into other publications too (Brugmans, 1901; Becht, 1908; Brugmans, 1911; Posthumus, 1943-1964) before being proven wrong by Westermann (1948). Westermann corrected his colleagues for not taking into full account the long-term changes in the tariffs, let alone the effects of inflation over such a long period. The height of the tariffs also differed too much over the years and in 1725 the States General ordered a major overhaul of the administration. The data from before this reorganisation simply cannot be compared with those from the rest of the 18th century (Van Dillen, 1948: 148).

Figure 1. The collection of the 'convooien en licenten' duty, 1725-1796



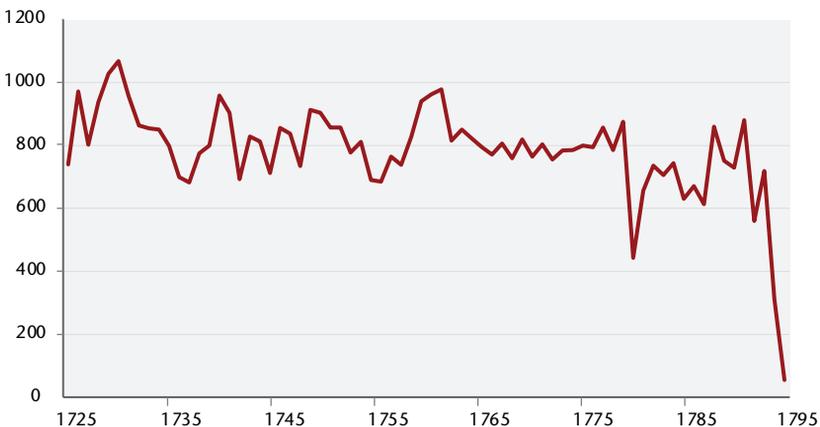
Source: Oldewelt, 1953: 127-129.

That there can also be problems with the very meaning of a data source, was pointed out by Oldewelt (1953) for the second source Pringsheim had used: the ship tidings. These tidings recorded the ships that had arrived at the roadstead of Texel and in the Vlie and from the 1770s onwards these were published weekly in the newspapers of the time. As Texel and the Vlie are the two major entry points from the sea to the port of Amsterdam, Pringsheim interpreted their numbers as the total number of ships that sailed for

Amsterdam. But there were more ports along the Zuyderzee, Amsterdam was only the largest. The use of this source raises another question, too. The very number of ships arriving does not say much on its own (Welling, 2009). Knowing their size or cargo capacity will prove much more useful especially as there were considerable differences between the sizes of the ships employed on different routes. For instance, ships to the Russian port of Archangelsk were on average twice the size of those that sailed to the Atlantic ports of Spain and France (Knoppers, 1977: Table I).

A second, and often used duty is the ‘gewone veil- en lastgeld’ (Oldewelt, 1953; Figure 2). It was a combined duty, consisting of the ‘lastgeld’ of 1623 and the ‘veil- en mastgeld’ introduced in 1645. The first was originally intended to attribute to the costs of protection provided by the Admiralties for ships in the Mediterranean trade, a dangerous route because of the presence of pirates from the Barbary states. In 1632 the measure was enlarged to include the Baltic trade. The second was added in 1645 for ships bound for Norway. These duties were combined in 1687. By 1702 the duty was not enough to counter the increasing costs for anti-piracy measures in the Mediterranean and the Baltic and a new fund was created to be supplied from another duty, the ‘verhoogde veil- en lastgeld’. The ‘lastgeld’ duty was raised annually and was based on the ship’s capacity, in lasts. The ‘veigeld’ duty was, like the ‘convoaien en licenten’, based on the value of the carried commodities.

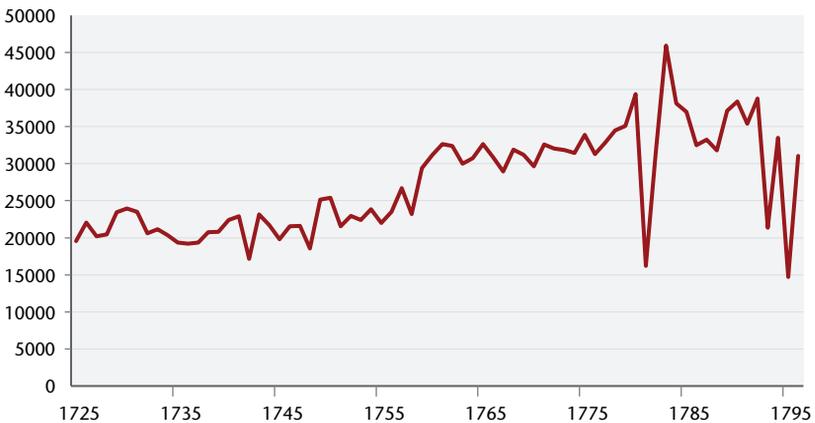
Figure 2. The collection of the ‘veil- en lastgeld’ duty, 1725-1796



Source: Oldewelt, 1953: 127-129.

The third duty is the 'paalgeld' (Figure 3). This source was first published by Heeres (1982), while Welling (1998) used it substantially in his research into the trade relations between the Dutch Republic and North America between 1771 and 1817. The 'paalgeld' duty was raised in all the Zuyderzee ports on the cargoes that were imported by the ships arriving at Texel and Vlieland. The duty was used for the maintenance of lights, buoys and other markers in the sea-lanes. Until 1836 the town of Enkhuizen was responsible for this maintenance and was allowed to raise this duty, although in practice it was collected by the same officers from the Admiralties as all the other duties. The annual ledgers or *Havenboeken van de Heffing van het Paalgeld* have survived for the years 1742 and 1771-1836 and record all the incoming ships, the name of the ship, the name of shipmaster and the port of origin. As the 'paalgeld' was based on the total value of the cargo, it is possible to establish which goods every ship was carrying. However, for ships from the West Indies and Africa only the total amount is documented, while those from European ports are broken down to specific types of goods and their subsequent values.

Figure 3. The collection of the 'paalgeld' duty, 1725-1796

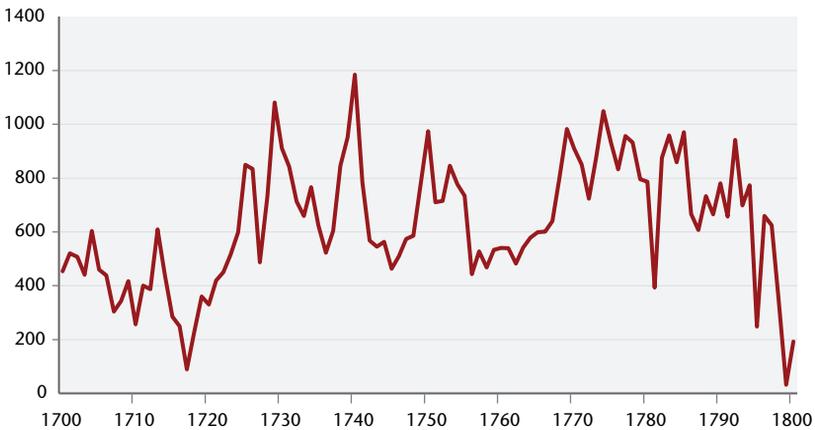


Source: Heeres, 1982: 9-11.

The composition and value of cargoes of individual ships can also be found in the Danish Sound Toll Registers, albeit only for ships going to and coming from the Baltic. Because of the long period of data collecting, 1497 to 1857 (Gøbel, 2010), and the

amount of details gathered, the registers provide both a consistent and highly detailed view on international goods flows, including those between Amsterdam and the Baltic (Figure 4). The Baltic trade was of great importance to the Dutch Republic and was considered by contemporaries ‘the mother of all trades’. Both Dutch shipmasters and merchants dominated the trade and shipping of Baltic goods, especially grain, for three centuries (Van Tielhof, 2002). The rise of Amsterdam as entrepôt in the 17th century was the direct result of the increasing trade in Baltic grain shipped through the port to a growing population in the south of Europe. This trade had been very substantial throughout, but also proved vulnerable to economic and demographic changes elsewhere. When after 1650 the population of Europe stopped growing this affected both the demand in northern grain in the South and the demand for southern products in the North, causing stagnation and decline in Amsterdam (Westermann, 1948; Posthumus, 1943-1964; Van Dillen, 1970). However, the port of Amsterdam remained an important entrepôt in the 18th century thanks to the large volumes of Baltic grain and southern products that still went through the port.

Figure 4. Overall traffic from Amsterdam to the Baltic, based on recorded eastbound passages through the Danish Sound, 1700-1800



Source: Sound Toll Registers Online.

In the registers can be found the commodities, the amounts in which they were carried onboard, from which port they came and

where they were going and by which shipmaster. Not only can we establish the share of Amsterdam in the Baltic trade, as an entrepôt for both Baltic goods as well as for goods for the Baltic markets, but also the part Dutch shipmasters played as carriers of these goods, also to other ports than those in the Dutch Republic. In the end, the Sound Toll was 'just another' duty with its own shortcomings. Officials were not allowed on board to examine the cargoes but depended on the declaration of the shipmasters. Also, we do not know from this source for which merchants these goods were carried or by whom the shipmasters were employed.

3. Merchant activities

To get a better understanding of the daily business of 18th century merchants in Amsterdam, the use of the above sources alone falls short; they provide us with insights on the level of trade, specific traffic flows and the sorts and amounts of the commodities involved, but at this point they cannot be related to individual merchants. Several studies have been published about merchants and their firms located in 18th century Amsterdam (Veluwenkamp, 1981; Jonker & Sluyterman, 2000; Voorthuysen, 2001), but most concern the larger firms and businesses like Hope (Buist, 1974), Van Eeghen (Rogge, 1949) and Insinger (Jonker, 2000). From the second half of the 18th century these larger firms started their transition from trading firm to merchant banks, and therefore their histories are atypical for the common merchant.

But who are these common merchants? Contrary to the already mentioned firms, the archives of these smaller businesses did not survive so it is difficult to learn about their daily activities. Many merchants were united in larger associations, called 'directies' or boards, which were organised according to the regions with which they traded the most and whose elected boards lobbied the governments and town councils of both Amsterdam and the major trading ports, like the Board of Eastern Trade ('Directie der Oostersche Handel en Rederijen voor de Oostzee') for the Baltic, the Board of Muscovy Trade ('Directie van de Moscovischen Handel') for Russia, the Board of Norwegian Trade ('Directie van den Noorweegschen Handel'), the Board of the Greenland Fisheries ('Directie van de Groenlandsche Visscherij') or the Board of Trade and Navigation to

the Levant and the Mediterranean ('Directie op de Levantsche Handel en de Navigatie in de Middellandse Zee') (Bruijn, 1990). Merchants were barred from doing business directly in Asia due to the strict trade monopoly of the East India Company (VOC), but from the 1730s they were able to trade directly within the wider Atlantic, when a similar monopoly held by the West India Company (WIC) was lifted (Den Heijer, 1994).

The archives of these boards contain the names of the board members and sometimes the names of the associated merchants, too. From the income tax statements from 1742, we discover that in that year 33 recipients stated their profession as a 'cargadoor' (Oldewelt, 1945). The 'cargadoors' or ship's agents played an important role in bringing together merchants who needed a ship to carry the goods and the shipmasters who could provide that service. The number of 33 ship's agents is remarkable, as at that time London counted just one ship's agent; it is an indication of the high level of specialisation and efficiency that allowed the port of Amsterdam to remain ahead of the competition (Broeze, 1977: 134). The 'cargadoors' could be found at the Exchange ('Beursgebouw') where they had their own stands (Spooner, 1983: 19-20). According to a floor plan of the Exchange from 1801 the 'cargadoors' were located right in the middle of the courtyard. Not far from them assembled the 'cargadoors' and shipmasters specialised in regions and ports, like Hamburg and Bremen (pillar 14), Great Britain (pillar 34), Sweden (pillar 39) and Surinam (between the seventh and 41st pillar). That the 'cargadoors' played an important role was also confirmed by Le Moine de l'Espine and Le Long (1780: 292-294). In their description of several services available to the merchant in Amsterdam, they stated that it was through the 'cargadoor' that a merchant came into contact with the shipmaster when he needed a ship or just wanted to ship some items, and when a deal has been made, it was the 'cargadoor' who could make a contract too, without the need to visit a notary.

4. The muster rolls

The important role of the 'cargadoor' in the port of Amsterdam is also evident from another source, the muster rolls. 'Cargadoors'

acted as local correspondents, especially to shipowners who did not live in Amsterdam.

In the Municipal Archive in Amsterdam there is a collection of some 30,000 muster rolls, ranging from 1747 to 1852.⁴ Muster rolls are written, legally binding labour contracts between the captain and his crew, and usually valid until the end of the stated voyage. Both the rights and responsibilities of the captain and the crew are specified in full detail, listing the everyday tasks of the crew but also the daily rations of food and drink crew members can expect and the wages they will earn on a weekly or monthly basis. The archive was collected by the 'waterschout' or water bailiff, who policed the port of Amsterdam and, among other duties, was present when the muster roll was read to and signed by the crew (Oldewelt, 1935). After the signing of two copies of the muster roll the water bailiff kept one copy – the other remained with the ship's captain.

Apart from some handwritten copies, all muster rolls in the Amsterdam archive are large pre-printed forms containing a standard text with empty spaces where the name and nationality of the ship, its captain and crew and its next destination were filled in. At the bottom of each document, and continuing on the reverse side, was the list of the mustered – hired – crew. Every member of the crew was mentioned with his full name, his position or rank while on board, his home address when from Amsterdam or the name of his home town when from outside Amsterdam, followed by the wages per week or month. A simple cross for a signature indicated the approval of the said crew member to the conditions on which he had embarked for the voyage ahead.

The voyage was defined in the muster roll by one or more destinations. In most cases they bore the name of a specific port or a region, for example Danzig or the Baltic, but sometimes the description reads like an itinerary – to the Baltic and then to the French Atlantic coast. Most ships did not have their cargoes assigned when the muster roll was drawn up, and many crews were still being mustered while a ship's agent advertised at the nearby Exchange that a ship was ready to sail within days to the specified destination. When even the destination was unknown at the

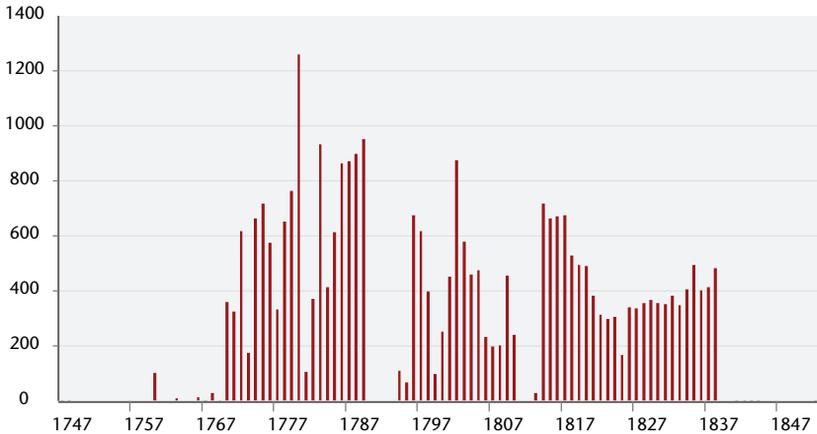
4. Stadsarchief Amsterdam: Archief van de waterschout (archive no. 38).

moment of signing the standard phrase “*op Avontuur*” was used, meaning the ship and crew were ready to sail, mostly by the week, to whatever the destination shall be (Broeze, 1977: 134). Furthermore, it was always possible for the captain to deviate from the given destination, and this, too, was captured in a standard phrase: “*waar de Capt. Syn orders sullen komen te vallen*”. Activities like whaling, privateering or slave trading were specifically mentioned in the margins of the muster roll, but apart from that, there usually is no information in the document about the cargo the ship would be carrying nor about its tonnage.

What makes the muster rolls from Amsterdam somewhat unique is that we also come to know a bit more about ownership. Although smaller ships were still owned by their captains, most of the sea-going vessels were owned not by one, but by a group of private investors, and the ship’s captain was hired by them. This form of shared ownership or ‘partenrederij’ was common practice in the 17th and 18th century in order to reduce the huge risks and liabilities involved in sea-going commerce (Broeze, 1977: 106-112). The costs for outfitting a ship and hiring a crew during a pre-arranged number of voyages were spread over several private investors, mostly merchants with a stake in the cargoes carried by the ship. Usually the individual shares (‘parten’) accounted for 1/32 or 1/64 of the total sum. When the agreed number of voyages had been completed, the final balance was drawn up. Any gains or losses were divided between all participants according to their share in the enterprise, after which the partnership was dissolved. The administrative tasks involved were performed by a ‘boekhouder’ or ship’s accountant, usually the largest shareholder.

After the signing of the muster roll the water bailiff wrote on his copy the name of the person he could contact if something were to happen to the ship or to individual members of its crew. Not surprisingly, in most cases this was the name of the above mentioned boekhouder, who acted on behalf of the owners. If the ship in question was a foreign registered vessel, the name on the muster roll was usually that of a local contact, called a correspondent. By the end of the 18th century merchants from Amsterdam acted as accountants for several ships at the same time, while also providing their services as correspondents to merchants from outside Amsterdam. Among them we find an increasing number of the ‘cargadoor’ firms.

Figure 5. Number of muster rolls, 1747-1852



Source: Stadsarchief Amsterdam: Archief van de waterschout (archive no. 38).

Unfortunately, the archive of the water bailiff is rather fragmentary (Figure 5). While the position of water bailiff was established in Amsterdam back in 1641, the oldest surviving copy of a muster roll in the archive only dates from 1747. Of the following twenty-odd years just 163 copies remain, and the picture is even worse for the concluding years 1839 to 1852, from which a meagre 13 copies have survived. A more or less continuous series has only survived for the years 1770 to 1838, but even within this series several months are missing, as do all records from 1790 to 1793, 1811 and 1812.

Apart from the gaps in the archive itself, there is another, related, issue. Muster rolls only exist in the archive of the water bailiff of Amsterdam when a captain hired one or more new crew members while his ship was moored in the port of Amsterdam. If the crew came on board prior to the ship's arrival in Amsterdam, say in Rotterdam, there is no record of it in the archive in Amsterdam – but ideally there should be one in Rotterdam. If only some crew members were hired in Amsterdam, while the rest of the crew was already on board when the ship entered the port of Amsterdam, a new document would usually have been drawn up and signed, but more often than not it only mentioned the names of these new sailors, not of those already on board.

So how does the number of voyages from the muster rolls compare to other statistics about the port of Amsterdam? Unfortunately, there is no conclusive source. As we already concluded, the numbers of ships entering the Texel and Vlie cannot be used as the number of ships coming to Amsterdam; they account for all the ships going to all the ports along the Zuyderzee. All other attempts to quantify trade in the port of Amsterdam have been based on special taxes which were usually charged on imports, not on exports. So we do have some idea of the extent of incoming traffic, but not of how much went out. Even if the archive of the water bailiff were complete, the muster rolls cannot provide us that answer either; not all shipmasters hired a crew in Amsterdam. But, if we argue that every ship that sailed into the port of Amsterdam had to sail out again eventually, the number of incoming ships can still be used as an indication. Welling (1998; 130) estimated that an average of 3,000 ships per year frequented the port of Amsterdam until 1798 when the number first dropped to 2,500 and by 1810 had nose-dived to a mere 200 ships per year. This means that for the 18th century the number of muster rolls, taking into account that the archive is incomplete, would be about a quarter to a third of the total number of ships. This discrepancy cannot result from missing muster rolls alone and can only mean that most ships arriving in Amsterdam did not hire new crews there.

5. The Baltic as case-study

From Amsterdam ships sailed to every port in the world and this is reflected in the muster rolls. Although the rolls only exist in cases when new crew members were taken onboard, we find that all regions are accounted for. The largest share – roughly a quarter of all muster rolls – concern voyages to the Baltic, followed closely by voyages to ports along the Atlantic coast of France, Spain and Portugal. These two regions are interconnected; many ships sailed from Amsterdam to the Baltic and then sailed on to southern ports before returning to Amsterdam again. That number might be even higher, as a number of ships whose destination was unknown at the time of signing the muster roll could have sailed to the Baltic after all. Some others might have sailed to another or a second destination than the one stated on the muster roll, or they did not

even set sail at all. This means that whatever was written on the muster roll as a destination might not be where the ship actually sailed to. This is where the Sound Toll Registers might provide a useful instrument to check upon the ship's actual movements. If the ship really did sail to the Baltic, it should show up in the Registers. Although this is not a guarantee that it did arrive at its destination, this might be confirmed by its recording in the registers on its way out. The strength of combining the two sources is that the Sound Toll Registers include information about the cargo.

The voyages of four ships, the *Johanna en Pieter*, the *Jonge Lieve*, the *Henderina* and the *Houtmolen*, all mustering new crews in 1770, are used as examples here for the thousands of ships that sailed from Amsterdam to the Baltic each year.

Captain Ijsbrand Mouthaan of the *Johanna en Pieter* mustered a crew of eight on 24 April 1770 intended to sail from Amsterdam to Saint Petersburg and back. Mouthaan arrived at the Sound three weeks later, on 15 May. The cargo consisted of a wide range of products, from sugar and exotic spices, to brazilwood, planks, bales of cotton, Turkish yarns, salted lemons, prunes, cheese, wines and vinegar, peas and fish. He returned three months later, on 22 August, at the Sound with a consignment of hemp, canvas and sail cloth, candles, Russian leather and furs.

Many ships went from Amsterdam to the Baltic only to return to Amsterdam after a second voyage to the south of Europe as was the case with the *Jonge Lieve* of Eldert Brandaris. Brandaris mustered a crew on 31 May 1770 for a voyage to St. Petersburg and Marseilles. Two weeks later he arrived at the Sound with a varied cargo of sugar, indigo, planks, paper, yarns, cotton and linen, vinegar, wine and cheese. On 23 August Brandaris again called at the Sound, this time with a load of iron, hemp and sail cloth destined for Marseilles.

In some cases the real destination was unknown at the time of signing the muster roll, as was the case with the *Henderina* of Claas Gorter. According to the muster roll, signed on 29 May 1770, the ship could sail either to Lisbon or Cadiz from the Baltic. It did go to the Baltic according to the Sound Toll Register, where its arrival was noted on 15 June as coming from Alicante and was heading for an unspecified Baltic port with a cargo of salt. From this we learn

that the *Henderina* came from Alicante before she moored in Amsterdam to muster her new crew. On 8 September that same year the *Henderina* was on her way out of the Baltic again. She had visited the port of Viborg and was carrying wooden planks to Cadiz.

The ship *Houtmolen* made several voyages from Amsterdam to the Baltic and back in the year 1770. Captain Cornelis Sleswijk of Lemmer came from Riga when he registered at the Sound with a mixed cargo of hemp and rye bound for Amsterdam. He mustered a crew in Amsterdam on 2 August for a return voyage to Riga. Two weeks later he arrived at the Sound with nothing to declare, the ship sailed in ballast. A month later he again sailed from Riga to Amsterdam when he declared a cargo of barks, spars and masts, hemp and rye at the Sound.

Table 1 shows the different Baltic ports mentioned in the muster rolls, taken from a 5-year sample between 1770 and 1800.⁵ As some muster rolls stated more than one destination, as many ships either stopped at other ports on their way to the Baltic, or would do so on their return voyage, only the first and second destinations have been taken into account. In most cases these were either ports along the Zuyderzee or the Atlantic coasts of France, Spain and Portugal (Le Croisic, Bordeaux, Porto, Lisbon, Setubal, Cadiz). The largest number of documents simply stated the Baltic as the intended destination.⁶ It is quite possible that these ships were still waiting for their actual orders to come through at the time the muster roll was signed, but as many shipmasters were specialised in the Baltic trade, at least the region was known. For a number of muster rolls the destination was entirely unknown. The number of muster rolls which stated 'Avontuur' as their intended destination accounted from eight (1770) to 59 (1785) documents. As these ships might have sailed to destinations outside the Baltic they have not been included in the table. The most popular destination by far was Riga, followed by St. Petersburg, Danzig and Narva.

5. As no muster rolls survived from 1790, documents from the year 1789 have been used instead.

6. In cases where two destinations were mentioned, both in the Baltic, these have been counted as ships going to the Baltic in general.

Table 1. Ports in the Baltic, as mentioned as first and second destinations in the muster rolls, 1770-1800

Destination	1770	1775	1780	1785	1789	1795	1800	Total
Alborg					1			1
Anholt				1				1
Arensburg	1		7	1				9
Baltic	19	60	46	52	101	4	19	301
Copenhagen	1	3	10	4	9		2	29
Dagö		1						1
Danzig	21	15	26	7	6		1	76
Domenæs				1				1
Elbing			5	1				6
Flensburg		1					1	2
Frederikshafen		3	5	9			1	18
Göteborg		1	2	2	8	5	2	20
Greifswald					1			1
Helsingør				1				1
Koningsbergen	7	12	13	6	7			45
Kronjstadt		1			1			2
Landskrona					3			3
Libau	1	7	24	5	5	1	1	44
Lübeck					1			1
Marstrand		1	2	1	1			5
Memel		9	22	8	7			46
Narva	7	5	13	19	11		7	62
Nörrköping					3			3
Pernau	2	15	9	11	10		1	48
Pietarsaari				1				1
Pillau	2		7	1	2			12
Reval	2		1	1				4
Riga	25	85	81	39	35		9	274
Rostock		1			2		1	4
St. Petersburg	11	25	24	11	32		4	107
Stettin		6	6	2	3			17
Stockholm	3	1		1	5	2	2	14
Swinemünde			1					1
Vaasa					1			1
Viborg	4	7	11	6	11		2	41
Windau	1		7	2	1			11
Wismar					1			1
Total	63	114	195	141	268	12	53	
Total number of muster rolls	359	718	1 263	616	954	68	253	
% to Baltic	18%	16%	15%	23%	28%	18%	21%	

Source: Stadsarchief Amsterdam, Archief van de waterschout (archive no. 38).

What can we find out about ownership or the merchants involved in the Baltic trade? Only a very small number of shipmasters sailing to the Baltic seem to have been also the owners of the ship. From 1760 to 1800 fourteen shipmasters also acted as the ship's accountant, while only five of them mustered a crew in Amsterdam more than once during this period.⁷ In all other cases the names in the muster rolls were of merchants or 'cargadoor' firms. However, it remains unclear in what capacity these people were connected to the ship as both merchants and 'cargadoors' routinely acted as accountants. Tables 2a to 2e show the names of the five most important accountants for ships sailing to the Baltic and the other four most popular destinations from Table 1: Riga, St. Petersburg, Danzig and Narva, based on a 10-year sample from 1770-1800. From these some interesting patterns emerge. From these regional top fives, seven firms or companies appear in more than one list: Hijlke Jacobs & Comp. (Baltic, Riga, Danzig); Thomas Asma & Ruurds (Baltic, Riga, Danzig); Jacob de Flines & Zn. (Baltic, Riga); Tamme Beth Ijsbrandsz & Zn. (St. Petersburg, Danzig); Koopman, De Witt & Lenardsz (Baltic, St. Petersburg); Tijmen Drieses (Baltic, Narva); Jan, Dirk and Willem van Vollenhoven (Riga, Danzig) and Ten Broeke & Comp. (Riga, Danzig). Some routes seem to be completely dominated by one or two firms. This is most evident for St. Petersburg with half of all ships registered to Tamme Beth Ijsbrandsz & Zn. and where the next accounted for only six and at Riga where the firms of Pieter Woestenraad & Blok and Hijlke Jacobs & Comp. are mentioned 14 and 13 times respectively, but that is still twice as many as compared to the third largest, Ten Broeke & Comp. Lastly, the trade to Narva seems to have been in the hands of Zaandam firms, with Gerrit Cornelisz Visser, Jan and Willem Middelhoven and Pieter Corver & Zn.

7. These five shipmasters were Simon van Putten of Hindeloopen (8 times), Cornelis Sleswijk of Lemmer and Sietje Lammerts of Hindeloopen (3 times) and Sjoerd Abes Kat of Hindeloopen and Siebe Cornelisz. Rotgans of Amsterdam (2 times).

Tableau 2a. Most named persons and firms in muster rolls of ships to the Baltic, 1770-1800

Baltic (N=174)	1770	1780	1789	1800	Total
Luitje Broers		4	5		9
Pieter Smit Everhardsz		1	4	4	9
Frederik Lammers			8		8
Jacob de Flines & Zn.	2		6		8
Allert Joostes		2	5		7
Hessel Sijmensz & Zn.	1	1	5		7
Thomas Asma & Ruurds	2	3	1	1	7
Tijmen Drieses		1	5		6
Hijlke Jacobsz & Comp.		3	2		5
Jacob Paulus & Barend Vermeulen		2	3		5
Koopman, De Witt & Lenardsz		4	1		5

Source: Stadsarchief Amsterdam, Archief van de waterschout (archive no. 38).

Tableau 2b. Most named persons and firms in muster rolls of ships to Riga, 1770-1800

Riga (N=152)	1770	1780	1789	1800	Total
Pieter Woestenraad & Blok	4	10			14
Hijlke Jacobsz & Comp.		6	5	2	13
Ten Broeke & Comp.	2	4	1		7
Cornelio van Castricum	1	5			6
Thomas Asma & Ruurds		2	4		6
Jacob de Flines & Zn.	3	2			5
Jan, Dirk and Willem van Vollenhoven	2	3			5
Arnoldus Hooghard & Zn.	2	2			4
Christiaan Fraser		2	2		4
Claas Taan & Zn. (Zaandam)			3	1	4

Source: Stadsarchief Amsterdam, Archief van de waterschout (archive no. 38).

Tableau 2c. Most named persons and firms in muster rolls of ships to St. Petersburg, 1700-1800

St. Petersburg (N=68)	1770	1780	1789	1800	Total
Tamme Beth Ijsbrandsz & Zn.	5	15	11	1	32
Jacobus and Martinus van der Schaaf	2	2	2		6
Koopman, De Witt & Lenardsz			3		3
Tijmen Lubberts & Zn.			2		2
Van Heijningen & Denijs Tentijen			2		2
Weddik & Wendel		1	1		2

Source: Stadsarchief Amsterdam, Archief van de waterschout (archive no. 38).

Tableau 2d. Most named persons and firms in muster rolls of ships to Danzig, 1700-1800

Danzig (N=57)	1770	1780	1789	1800	Total
Jacob de Clercq & Zn.	1	4			5
Tamme Beth Ijsbrandsz & Zn.		2	2		4
Thomas Asma & Ruurds	1	3			4
Hendrik Walje or Waare Jr.	1	2			3
Adam Hackman			2		2
Bartholomeus Pampus (& De Grijs)		1		1	2
Hijlke Jacobsz & Comp.		2			2
Jacob de Flines & Zn.	2				2
Jan, Dirk and Willem van Vollenhoven	2				2
Ten Broeke & Comp.	1	1			2

Source: Stadsarchief Amsterdam, Archief van de waterschout (archive no. 38).

Tableau 2e. Most named persons and firms in muster rolls of ships to Narva, 1700-1800

Narva (N=39)	1770	1780	1789	1800	Total
Gerrit Cornelisz Visser (Zaandam)	4		4		8
Arnoldus Hooghard & Zn.	2				2
Cornelis Duijm & Van de Stadt		2			2
Dirk Visser				2	2
Frederik van der Valk & Ternuijs		2			2
J.A. Goebel			2		2
Jan en Willem Middelhoven (Zaandam)		2			2
Pieter Corver & Zn. (Zaandam)			1	1	2
Tijmen Drieses		1	1		2

Source: Stadsarchief Amsterdam, Archief van de waterschout (archive no. 38)

During much of the 18th century Dutch merchants profited from their country's neutrality while most other European countries were at war with each other. By the end of the century the tables were turned. The war with Great Britain in 1780-1784 and the Revolutionary and Napoleonic Wars ten years later resulted in a sharp decline in the Dutch share of the Baltic trade. No ship flying the Dutch flag could possibly leave a port without the risk of being taken by a British warship or privateer. With the Admiralty incapable of providing sufficient ships to organise an adequate convoy system, Dutch merchants either chose not to risk their capital and kept their ships in port or brought their ships under

the flag of a neutral country, a procedure called the 'flag of convenience'.

Using a flag of convenience required some very dodgy paperwork (Kolff, 1944; Van Eyk van Heslinga, 1982). A foreign merchant from a neutral country had to be found willing to buy the ship and its crew. This new owner merely acted as an agent on behalf of the true owners who agreed to buy back their ship in due course, just by shredding all the documents. Not to raise too much suspicion the ship got a new, foreign sounding name and its crew had to be relocated to a foreign town. The analysis of the muster rolls of Amsterdam bring up some interesting evidence of this illegal practice. (As do the Prize Papers in London, because in the end out at sea many ships were still caught red-handed.)

Dutch merchants favoured the nationalities of the larger neutral states like Austria and Prussia, but also of Denmark, Sweden and the many small German principalities and free cities bordering the North Sea. Tiny states like Papenburg, Oldenburg and Kniphausen saw their merchant fleet multiply overnight. Although not complete for the years 1780-1784, from the surviving muster rolls a similar picture emerges: in 1781 32% of the ships that mustered a crew in Amsterdam flew the Prussian flag, in 1782 this was 35% and in 1783 23,8%. In 1782 36% had an Austrian nationality, in 1783 this was the case for 15,7% of the ships. In 1782 15% was Danish, followed by Russian (2,6%) and German, with ships registered in Bremen, Lübeck and Hamburg accounting for 3,2%.

Surely captains from these neutral countries saw new possibilities to carry goods to and from the port of Amsterdam too, as their Dutch counterparts had done for so many years before. Only by comparing the muster rolls over a longer period of time might we be able to determine whether these Austrian or Prussian ships were Dutchmen in disguise.

Take the ship *Jonge Anna Buwalda* for example. Captain Siebe Broers sailed on the *Jonge Anna Buwalda* and mustered a new crew in Amsterdam in 1773, 1774 and 1780. The ship's accountant for the first two voyages was the firm Fokkes & Van Heijningen, in 1780 it was Jan and Pieter Kersijes. Three years later the *Jonge Anna Buwalda*, still under the command of Broers and with the Kersijes firm as its accountant, now hailed from Emden, flying a Prussian

flag. In 1786, Siebe Broers mustered a new crew in Amsterdam for the *Jonge Anna Buwalda*, this time for a voyage to the Baltic. This time Broers is registered as an inhabitant of the Frisian town of Lemmer, while the *Jonge Anna Buwalda* flies a Dutch flag, again. In a similar case Sipke Pietersz Sevensma was captain of the *Jonge Barber* when he mustered a crew on 18 September 1780, the firm of Van Heijningen was its accountant. In 1782 and 1783 we find the same Sevensma as captain of the *Sociëteit* of Bruges, while the same firm of Van Heijningen & Tentije were the ship's correspondents.

The newly acquired nationalities not only provided a – relatively – safe passage on the high seas but opened new possibilities for trade, too. Ports hitherto closed to Dutch ships due to mercantilist policies, were now open to trade. This must have proved to be highly profitable; even years after the Fourth Anglo-Dutch War had ended an increased number of foreign ships kept mustering new crews in Amsterdam. In 1788 they still comprised 10% of all muster rolls, while before the outbreak of the war their number was practically nil.

It is widely believed that the Dutch were driven out the Baltic by the end of the 18th century due to stronger local and British competition, and the numbers from the Sound Toll Registers have usually been used as evidence for this (Knoppers & Snapper, 1987). However, as evident from the examples of the *Jonge Anna Buwalda* and *Jonge Barber*, many more ships may actually have been Dutch in disguise, the extent of which has still to be fully exposed.

6. Methodological issues

Combining different data sources clearly has its advantages, but also presents new challenges to the researcher. The biggest issue with combining different data sources is spelling. Many different ways of spelling of names and places existed and this makes it difficult to ascertain the true identity of either a shipmaster or a destination. The Dutch shipmasters translated the names of many ports they sailed to. For instance, the port of Le Havre was usually called 'Habel de Graas' or 'Haver de Graas', derived from the French Le Havre de Grâce. In a similar vein, Drøbak in Norway became 'Droogbak', Topsham in England 'Topzon' and Greifswald 'Griepwolde', La Coruña 'de Caronie' and Bayonne was generally

referred to as 'Bayoenen', Le Croisic became 'de Krooswijk' while the Oslofjord was called 'het Soenwater'.⁸ However, it only becomes difficult when such a dutchified place-name might point to different ports. How can we be certain that when St. Martin ('Sint Maarten') is mentioned in a document it refers to the port on Île de Ré and not to the Dutch island in the West Indies? Does 'St. Valery' mean St. Valéry-en-Caux or St. Valéry-sur-Somme? The same problem occurs with the spelling of names of shipmasters. Foreign surnames have often been written down phonetically. This makes it near impossible to find that same person in another source. Also there are many Jansen, Jansz. en Janszoon in Dutch, so how can we make sure that we have found the right one? Because the shipmaster's name is the only value to 'cross-reference' data from the muster rolls and the Sound Toll Registers (the latter source does not provide shipnames), it can turn trying to find a match between the two different sources into looking for the proverbial needle in a haystack.

7. Conclusions

Unfortunately, there is not one single source that can be used to study the trade activities by merchants from Amsterdam to answer all our questions. For the trade to the Baltic however, combining data from muster rolls with the Sound Toll Registers does look promising and the findings presented here are even just preliminary ones.

From the perspective of the muster rolls in the Amsterdam archive alone the ships mentioned set sail into the great unknown. They might have reached the stated destination or they did not – either way, there is no way of telling based on the muster rolls alone. In The Sound Toll Registers we can check whether the ships that left Amsterdam for the Baltic did – at least – make it to the Danish Sound. We might even be able to tell whether they have reached their destination in the end, too, as the last port they visited is recorded on their return voyage from the Baltic, again recorded in the Sound Toll Registers. A major advantage is that the Sound Toll Registers mention the cargoes carried by the ships in

8. A great help in translating place-names is Damsteegt, 2001.

and out of the Baltic. While from the muster rolls we can deduct ship names, crew names and crew totals, and some of the merchants involved. Combined, these two archival sources prove to be very complementary. As shown in some of the examples, it is even possible to ascertain the true identity of some ships, lifting the veil on ships flying flags of convenience in times of war.

Therefore, using these two different sources it may be possible to provide a more nuanced view of the evolution of the Dutch position in European international trade. While the historiography usually holds for granted that Dutch trade rapidly fell after 18th century, a judgement based on the record of the Sound Toll, the analysis of the Amsterdam archive suggests that a growing part of Dutch trade was in fact carried under other flags, either to escape retaliation from the nations at war with the Dutch Republic or to go around the increasing level of customs duties to which ships bearing a Dutch flag were submitted in the second half of the 18th century.

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