THE COMMERCIAL RELATIONSHIP BETWEEN AMS-TERDAM AND THE PORTUGUESE SALT-EXPORTING PORTS: AVEIRO AND SETUBAL, 1580-1715

Cátia Antunes*

Abstract: This article will show the relationship established between the largest Portuguese salt producers and the Amsterdam market, which served as a staplemarket until late in the seventeenth century. The main goal is to look into the preferences of the Dutch distribution market and to which extent that influenced the Portuguese exports of salt during the long seventeenth century. We will pay special attention to the trading routes, curves of shipping, prices of freightage and individual merchants involved in this transactions.

Salt was one of the most important products to be traded before the widespread use of refrigeration, being only second to cereals in its strategic importance. Salt was used in manufacturing and preservation of food and hides. Fishing and other activities were heavily dependent on this by-product of the sea. Therefore, to realise the importance of salt simultaneously as product and a hard currency is essential to comprehend the importance of the salt producing areas throughout the world during the Early Modern period.

One of the most successful salt producers in then world was Portugal. Since early times, this stretch of land in Western Europe combined the accessibility to the Atlantic Ocean and the possibility to build salt pans along the coast line with a temperate climate that allowed for salt production almost the whole year around.

Generally, all the Portuguese ports in the Medieval and Early Modern periods produced salt as a complement to their fishing activities. However, with the development of international relations during the thirteenth century, salt acquired an unprecedented commercial value.

While salt production was widespread in Portugal, only Aveiro and Setubal were

^{*} Lecturer at the University of Leiden, The Netherlands. Department of History, under the section Economic and Social History. Main research interests: socio-economic networks during the Early Modern period, urban history (particularly of ports), globalisation before the 19th century. Publications: 'Sea and land: the integration of the Dutch and Portuguese urban hinterlands in the European maritime system during the seventeenth century', Simonetta Cavaciocchi (org. in the name of the International Institute of Economic History 'F. Datini', *Ricchezza del Mare, Ricchezza dal mare (secc. XIII-XVIII). The wealth of the sea and wealth from the sea, 13th to 18th centuries*, vol. 1, (Prato 2005), 115-145; 'Credit and investment networks in the Early Modern period: the financial relationship between Amsterdam and Lisbon, 1640-1705', *Actas del X Simposio de Historia Económica. Análisis de redes en la Historia Económica. Xth Symposium of Economic History. Network analysis in Economic History* (Bellaterra, 2005). (cd-rom form); *Globalisation in the Early Modern period: the economic relationship between Amsterdam and Lisbon (1640-1705)*, (Amsterdam 2004); 'Urban links, trade networks and globalisation in the Early Modern period: Amsterdam and Lisbon, 1640-1705 – a case study', M. S. Beerbühl & J. Vögele (eds.), *Spinning the commercial web. International trade, merchants, and commercial cities, c. 1640-1939* (Frankfurt am Main etc. 2004), 65-85

able to place their output in the international markets, being because of their ability to produce enough to feed the local and international market, being because of the better quality of the product sent abroad. Be as it may, Aveiro and Seutbal developed from small fishing, salt-producing outlets into major players in the international salt markets.

In order to revisit Aveiro's and Setubal's importance in the international markets, I have chosen to analyse their relationship with the largest staple and consumer market in Europe during the Early Modern period: Amsterdam. Amsterdam depended heavily on salt imports for the fishery of Holland and Zealand, as well as to use as trading advantage in the Scottish and Baltic markets. Therefore the first step to understand the relationship between Amsterdam and the Portuguese ports of Aveiro and Setubal is to realise the significance of shipping levels during the period between 1580 and 1715. This period is particularly important because both the Northern Provinces of the Netherlands, by then already claiming the status of Republic of the Seven United Provinces of the Netherlands, and Portugal were under the sway of the Habsburg empire. So the first question one should ask is to which extent did the status of break-away province on the part of the Republic, and of integral part of the Habsburg empire, first, and as independent kingdom afterwards, on the part of Portugal, did influence the socio-economic relationship between these ports? Therefore, it is pertinent to look into the relationship between political decision-making processes in The Hague, Lisbon and Madrid and the development of the Amsterdam-Aveiro and Setubal economic relationship during this period.

The measurement of the economic relationship between Amsterdam, Aveiro and Setubal will be made by using the freight contracts for Aveiro and Setubal passed by the notaries of Amsterdam in this period, as well as, some accounts presented by diplomatic personnel sent to Setubal to check the speed and efficiency of the exports. We will compare our findings with already existing data and show the discrepancies between both sources of information. We will also intend to provide possible explanations for these differences.¹

1. The routes

An extensive analysis of the Amsterdam notarial archives has revealed that there were four main routes to reach Aveiro and Setubal. The simplest contracts disclose the direct route, i.e., from Amsterdam to Aveiro or Setubal and straight back, or alternatively via one other European port. A merchant hired a skipper under whose command the ship was to leave Amsterdam and go to Aveiro or Setubal. The contracts tell us the return cargo that had to be loaded in the Portuguese ports and the price of the freight for that trip. For example, on April 29, 1596, Hans Muijlkens and Jacob van Neck hired skipper Sijmon Jacobsen, citizen in Zuiderwoude, to go to Aveiro and fetch some salt. Hans Muijlkens own the contract for three quarters of the cargo and

1 V. Rau, Os holandeses e a exportação do sal de Setúbal nos fins do séculos XVII (Coimbra: w.n., 1950). V. Rau, Rumos e vicissitudes do comércio do sal português nos séculos XIV a XVIII (Lisbon : Faculdade de Letras, 1963). V. Rau, Estudos sobre a história do sal português (Lisbon: Presença, 1984). M. J. V. B. M. da Silva, Aveiro Medieval (Aveiro, Câmara Municipal, 1991). I. Amorim, Aveiro e a sua provedoria no século XVIII (1690-1814) – estudo económico de um espaço histórico, vol. 1 (Porto: w.n., 1996). I. Amorim, Aveiro e os caminhos do sal. Da produção ao consumo (Aveiro: Câmara Municipal, 2001). Jacob van Neck for one quarter. The ship *De Vier Heemskinderen* was to be loaded with 100 *last*² of salt and return to Amsterdam. The freight would cost 19 ^{3/4} *guilders* per *last* and should not take more than twenty one days.³ Albrecht Symenssen Jonckheijn signed a similar contract for Setubal. He hired skipper Wijnolt Pieterss, citizen of Medemblik to take the ship *Die Blaeuwe Haen* to Setubal and bring back to Amsterdam 95 *last* of salt. The freight would cost Jonckheijn 21 _ *guilders* per *last* salt.⁴

The second route involved contracts that demanded a tour around different Portuguese ports. In the case of Aveiro, the initial load was destined to one or serveral of the Portuguese Northwestern ports (Viana do Castelo, Vila do Conde or Porto). The return cargo, made up of salt was to be loaded at Aveiro. The same could happen for Setubal. The initial contract might be for another Portuguese port, usually Lisbon or the Southern Portuguese ports in the Algarve, and the return cargo would include salt from Setubal. This route can be illustrated by the contract signed on December 28, 1596 by Willem Mathijssen, Jan Visscher and Meijnert Adriaenss Craech. They hired skipper Pieter Janssen from Dungerdam. Janssen was to take De Drie Swaenen with 40 last of grain to Porto and Viana do Castelo, go to Aveiro and purchase a load of salt and then return to Amsterdam. The total price of the freight would reach 48 guilders per last of salt. The merchants allowed the skipper to stay in Portugal for no longer than thirty days.⁵ Another example of this route is the contract signed between Jan Persijn and Jan Boelsen, skipper of Enkhuizen. Boelsen was to take the ship Die Hoepe loaded with 130 last wooden materials to Lisbon, unload the wood, go to Setubal and fetch a return cargo of salt. The freight would cost Persijn 25 guilders per last of salt. The contract gave ten days to the skipper to unload his goods in Lisbon. After that, he would have to move on to Setubal and return to Amsterdam as soon as possible in order to avoid the icing of the North Sea.⁶

The third route can be seen as a port-to-port journey. A ship left Amsterdam bound for Aveiro or Setubal. In one of these ports salt would be loaded and instead of returning to Amsterdam, the skipper was to take the ship into the Baltic and unload the salt in one of the ports mentioned in the contract. The choice of the destination port in the Baltic could be done either by the skipper or by the merchant according to available information on the consumption market. The use of this routes reinforced contacts between Amsterdam, Aveiro and Setubal in Portugal, and the Baltic, where the salt was a vital product both for the fisheries and the daily use. Much of this trade was compensated in the return cargos with grain that would be later on re-exported to Portugal and to other destinations in Southern and Central Europe. A good example of this port-to-port route is the contract between Vincent and Hendrick van Bronckhorst and Adriaen Martssen, citizen of Winckel, dated February 4, 1597. Skipper Martssen was to take *Het Paert* to Aveiro, load 90 *last* of salt, and sail north. His final destination was the Baltic ports of Pommeren, Danzig, Koningsberg or Melving. Martssen would get 38 1/4 guilders for delivering the salt in one of the Baltic ports, when he would have only gotten 26 3/4 guilders in case the contract had been directly

- 3 Gemeentearchief Amsterdam (GAA), Notariele Archief (NA), 73, 80.
- 4 GAA, NA, 67, 83v.
- 5 GAA, NA, 76, 24v.

² One *last* weights 200 tons. 1 last = 200 tons.

⁶ GAA, NA, 67, 112.

to Amsterdam.⁷ Gerbrant Elbertsen Schilt closed a similar contract for Setubal on December 3, 1594. Schilt hired Jan Hardyssen, citizen of Buiksloot, to take 't Fortuijn to Setubal, load 65 *last* of salt. Hardyssen was to depart from Setubal directly to the Baltic, where he was to choose from Danzig, Koningsberg, Melving, Riga or Reval to unload the salt. The return cargo from the Baltic would have to be made of wheat, barley and rye to be directly transported to Amsterdam. The freight price was different according to the destination of the salt. If the skipper was to sell the salt at Danzig, Konigsberg or Melving, the freight price per *last* would not go above 32 _ guilders. If the salt was to be sold at Riga or Reval, the freight price would be as high as 34 guilders per *last*.⁸

The fourth and last route was the one that connected Aveiro and Setubal directly with the Baltic, though the original contracts would mention other Portuguese ports. Ships could be bound for some of the Portuguese ports, then have to collect return cargos from Aveiro and Setubal, heading as final destination to the Baltic. This was the case with the contract signed on June 9, 1598 by Vincent van Bronkhorst and Hendrick Adriaenss, citizen of Medemblik. Skipper Adriaenss should take Die Roos to Viana do Castelo, Porto or Lisbon with 70 last of merchandises. His return trip should include Aveiro, where he was to load salt and sail directly into the Baltic. Once there, he could sell the salt at Pommeren, Danzig, Koningsberg, Melving or Eeusel, load return cargos that should include cereals and woods, sail back to Portugal, sell his Baltic products at Viana do Castelo or Porto, gather a second return cargo of salt at Aveiro and return to Amsterdam. The total price of the freight for the salt left in the Baltic would amount to 65 guilders per last and Adriaenss should not stay longer than three weeks in the Baltic ports. To play it safe, Van Bronkhorst demanded that *Die Roos* be fitted with eight pieces of artillery.⁹ A similar example can be found for the case of Setubal. Quirijn Janssen Bugge hired Sijmon Janssen, citizen of Terschelling, to take the ship *Die Hoope* to Lisbon with different goods. Once he got there, Janssen was to go to Setubal buy 80 last of salt and take it directly to Danzig, Koningsberg or Riga, returning afterwards to Amsterdam. The freight price contemplated two possibilities. If the skipper unloaded the ship in Lisbon and then travelled to Setubal, the freight price for the salt would be 35 guilders per last. If the skipper would not take goods to Lisbon and sail directly from Setubal to the Baltic, the freight price would not go above 32 guilders per last salt sold at the destination ports.¹⁰

These four routes do not seem to have been a specific event in a particular moment in history. They co-existed and competed with each other for they served different economic circuits, trade routes, and commercial networks. Therefore, it seems impossible to describe which one would be the most important, though it seems that the Amsterdam-Northwestern Portuguese Ports-Aveiro-Amsterdam was the most popular for the Amsterdam merchants wanting to buy salt in Aveiro, whilst the most popular route for Setubal was the direct route Amsterdam-Setubal-Baltic. The reasons for this may be sought after in the nature of the salt trade from both ports. Aveiro produced less amounts of salt yearly than Setubal and therefore it was used as a top-up product on the return cargos coming from the Portuguese Northwestern ports. Si-

7 GAA, NA, 76, 61. 8 GAA, NA, 68, 95. 9 GAA, NA, 80, 89. 10 GAA, NA, 65, 149v. multaneously, if the Dutch ships bound for the Portuguese Northwestern ports could not fulfil the return cargos with the output of their urban markets and the markets of their hinterlands, Aveiro was essential for the survival and international contacts that these ports could afford with the outside world. Aveiro's salt was crucial for the profitability of the Portuguese Northwestern port system as a whole. Without the close network intertwined between these smaller ports, it would have been difficult for them to survive as international players.

The situation was different with Setubal. Setubal produced large quantities of salt and was in itself a self-supporting port. The closest port to Setubal was Lisbon, and it was no match for the salt production. Although some of the ships would stop at Lisbon and then load salt at Setubal to sail back to the North of Europe, following closely the relationship established between Aveiro and the Northwestern ports, this route was almost negligible when compared to the direct route. Often the Amsterdam ships would only bring ballast in their bottoms and sail back loaded with salt that merchants could either sell directly in the urban markets of the Dutch Republic or re-export to other destinations in Europe, with particular emphasis for the Baltic region.¹¹

2. Shipping fluctuations

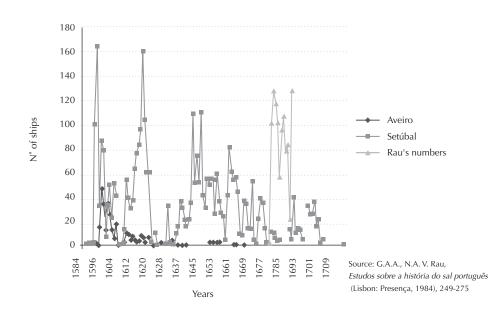
Fluctuations in shipping between Amsterdam, Aveiro and Setubal were examined for the period 1580-1715 to assess the relevance of trade between these three cities. The information contained in the following graphs has been gathered by a statistical study of the notarial documents contained in the municipal archive of Amsterdam and the contributions by Virginia Rau to the general understanding of the Portuguese salt trade.

We will analyse the following graphs and explain the context in which the oscillations in values of shipping were possible for the different ports. Subsequently, we will compare Aveiro with Setubal and suggest some possible interpretation for the data. Finally, we will compare the data of the Amsterdam notarial archive with the data collected by Virginia Rau. We hope to shed some light on the discrepancies between the information from both sources.

Graph 1 (*next page*) provides a general view of the shipping of salt from Setubal and Aveiro contracted in Amsterdam. The third set of data is the number of Dutch ships indexed by Virginia Rau as arriving at Setubal to load salt.¹² It is important to clarify that these were Dutch ships mentioned as coming from Holland, Lisbon (with Dutch skipper and crew), Middelburg, Rotterdam, Porto (with a Dutch skipper and crew), Amsterdam, Zealand and Hoorn. Rau's numbers represent, therefore, the to-tal of the Dutch import of salt at the port of Setubal for a decade.

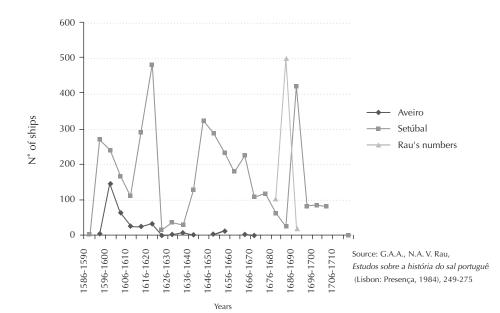
Graph 1 does not allow for a clear overview of the salt shipping from Setubal and Aveiro into Amsterdam. Based on its information, we have built graph 2, where we can clearly see the oscillations in shipping per decade. This will facilitate the reading of the continuities and changes of Setubal's and Aveiro's salt trade.

¹¹ M. van Tielhof, The 'mother of all trades'. The Baltic grain trade in Amsterdam from the late 16th to the early 19th century (Leiden: Brill, 2002).



Graph 1: Shipping between Amsterdam, Aveiro and Setúbal, 1584-1715

Graph 2: Shipping between Amsterdam, Aveiro and Setúbal, 1584-1715



Looking at graph 2 we notice that shipping levels between Amsterdam, Aveiro and Setubal started slowly to increase by the mid-1580s, if we look at the total of shipping provided by the Amsterdam notarial archives. The opened hostilities with Spain did not favour these relationships, but for Setubal, after 1609 the graph shows a clear recovery until 1621. After 1622, shipping levels drop dramatically and serious recovery can only be noted after 1640. The 1640s were a successful decade for the shipping from Setubal, but the 1650s witnessed a long-term decrease in the export of salt. The values of the 1640s were only reached by the 1690s, but the general trade declined steeply well into the eighteenth century.

The data of the Amsterdam notarial archives indicate a different pattern for the salt shipping departing from Aveiro. It seems that the salt exports from Aveiro started later than the ones from Setubal and it is when Setubal's shipping is declining by the turn of the seventeenth century, that Aveiro books her largest successes in the shipping into Amsterdam. After the middle of the 1610s, Aveiro's participation in the salt export to Amsterdam decreases drastically and after 1676 the notarial records stop giving any information on the exports of salt made from Aveiro into the Dutch Republic.

In order to understand the shifts represented above, we will have to start in the late 1560s when several of the Spanish provinces in the Northern Netherlands revolted against the might of Philip II. The revolt was a mix of economic uneasiness about the high taxes imposed on the cities of the provinces, as well as a deep disappointment with the political authorities in Madrid about the new majority of protestant believers living in these provinces.

What started as a local event rapidly extended into the seven most Northern Provinces of the Netherlands: Freesia, Holland, Zealand, Groningen, Utrecht, North Brabant and Overijssel. The revolt developed from an official protest by the representatives of the Spanish king in the provinces, the Stadholder, into an open war for complete separation of the Spanish Habsburg sway.

During the 1570s and the 1580s, the Northern Provinces were confronted with very serious difficulties, while the Southern Provinces, and especially Antwerp, prospered. However, in the beginning of the 1590s the most dangerous time of the revolt had passed and the Northern Provinces started to book important victories.

By 1585, the situation of the Republic of the Seven United Provinces improved significantly. The siege of Antwerp by the Spanish troops as part of the war effort against the Northern Provinces and the expansion of Protestantism drove merchants and businessmen out of the city into a Diaspora around northern European cities like Hamburg and Lubeck. The growing stabilisation of the military and economic situation in the Northern provinces allied with the opening of the Northern urban hinterlands to the central German states, by reopening the inland waterways after 1588 was paramount to attract some of the Antwerp Diaspora into the ports of West Freesia, Holland and Zealand.

The opening of the inland connections and therefore the improvement of the hinterland capacity of the Dutch cities as well as the immigration of capital and skills into the Republic launched the Northern Provinces into a new age. The better economic position achieved by these developments helped to finance the war against Philip II in the land front, but also on the maritime front. Besides conquering valuable terrain to Philip II's troops, Dutch rebels were able to successfully control the Scheldt and the Ems rivers, imposing an effective blockade to the Flemish towns in Spanish hands.¹³

While Philip II was counting heavy losses in the North due to the loss of territories and commercial wealth generated in the Flemish towns, he was marking important progresses in south-western Europe. After claiming the Portuguese throne in 1580, he was able to bring under the same royal administration the two largest commercial empires at the time. Both Portuguese and Spanish colonies were now in the hands of the Habsburgs although these conquests had cost Philip II nothing.

The growth of Philip II's power in Iberia and overseas did not mean that he could afford a commercial war in two fronts. Madrid was confronted with a difficult decision. On the one hand, the maintenance of the embargo on Dutch ships and products as retaliation to the revolt of the Northern Provinces threatened the well-being of the Flemish cities, important sources of income due to commercial and industrial activities. On the other hand, the blockade imposed on English products and merchants drove Madrid into a double war front impossible to win.

Madrid faced the dilemma and chose to lift all restrictions on Dutch products, ships and merchants operating in and from Iberia, though keeping the immediate blockade and restrictions against the English. The beginning of the 1590s was therefore the turning point to the Northern Provinces of the Netherlands. In roughly 20 years time the seven renegade provinces of the northern Netherlands had become the Seven United Provinces of the Netherlands, also known as the Dutch Republic.

We may argue that Philip II's plan to intervene in France in 1590 allowed the Dutch enough room to commercially expand. They became the middlemen in the Mediterranean, the Western Atlantic ports, the Baltic and the White Sea areas.¹⁴ This Dutch success was met with little sympathy by the new Spanish king. Philip III decided that Iberia could not bear the burden of Dutch expansion any longer and in the beginning of his reign in 1598 decided to close all the Iberian ports to Dutch traders and products by imposing a whole new set of embargos. We can see the impact of this decision on the graph 2.

Philip III's decision was hill advised. Instead of forcing the Dutch back into their commercial outlets in northern Europe, the Habsburg monarchy gave an extra incentive to the Dutch Republic. Unable to fetch high value colonial products in the Iberian markets to balance the bulk trade in the North, the Republic was 'forced' into an expansion loop overseas.

The success of the Dutch expansion overseas played against the first intentions of the Spanish crown, who attempted to cut off the Dutch rich trade supplies by isolating Dutch businessmen from the Iberian ports. When direct imports by the Dutch through the VOC and private enterprise in the Atlantic was successful, there was little Philip III could do but try to stop Dutch expansion overseas. In his view, the best way of doing that was to reopen Iberian ports to Dutch interests and delay, as much as possible, the creation of a Dutch West India Company (WIC).

The Twelve Years Truce (1609-1621) was a prosperous period to the Dutch-Iber-

14 Van Tielhof, The 'mother of all trades'.

¹³ J. I. Israel, *Dutch primacy in the world trade, 1585-1740* (Oxford: Clarendon, 1989), 38-79. J. I. Israel, *Empires and entrepots: the Dutch, the Spanish monarchy and the Jews, 1585-1713* (London: Hambledon Press, 1990), 135-141. J. I. Israel, 'The "New History" versus "Traditional History" in interpreting Dutch world trade primacy' *Bijlagen en Mededelingen betreffend de Geschiedenis van Nederland* 106 (1991): 469-79.

ian relations, as reflected in graph 2. The end of the European embargos on Dutch business came to a halt and bilateral contacts were re-established all over Iberia. If this new phase was extremely positive to Dutch entrepreneurship in Europe, they lost most of their successes in the Atlantic, especially in the Caribbean. But those losses were easily compensated by the Dutch re-entering the Iberian markets and through even more competitive freight rates. The insurance rates had fallen once more due to the truce, on the one hand, and to the slow down on the privateering campaigns by Flemish ports against Dutch ships and products, on the other hand.¹⁵

The growth of the Dutch redistribution capacity to use its own ports as entrepôts aided the increase of exports throughout Iberia and more specifically in the Portuguese ports. The colonial products dealt by the Portuguese ports as well as local products were sent to central and northern European markets. The transport was in the hands of Dutch and Jewish Sephardim middlemen as was the lay out of the hinterland networks towards northern and central Europe. To a lesser or greater extent, Amsterdam businessmen brought production outlets, entrepôts and consumption markets closer together.

The hostilities between the Spanish Habsburg empire and the Republic resumed in 1621. The maritime blockades against Dutch business and entrepreneurs were again set in place and the Dutch returned to their policy of strict sealing of Flemish port activities. The situation was to remain tense until the end the Peace of Westphalia and the Congress of Munster (1648).

The crisis of the 1620s in Portugal remained until after the Restoration (1640). Amsterdam, though, recovered soon after the end of the decade. With the European trading networks made expensive and sometimes inaccessible to Dutch ships and products, Dutch entrepreneurs turned their attention to traditional commercial routes, especially the ones connecting the manufacturing and commercial centres of Holland and Zealand to the German hinterland.

The beginning of the 1640s opened a new window of opportunity to the relationship between Amsterdam and Setubal. The regaining of the Portuguese independence from Madrid in December 1640 meant that Portugal was now an independent kingdom that would not be ruled according to the greater good of the Habsburg empire, but instead be governed in the interests of the kingdom. The period of prosperity started on January 21, 1641, when king John IV lifted all the embargoes on Dutch merchants, ships and goods, previously imposed by the Spanish administration. From that moment on, Dutch trade and traders were welcomed in all the Portuguese ports in Europe, where they were to pay regular taxes.¹⁶

This treaty also made sure that a truce of 10 years was signed, with reference to all the territories inside and outside of Europe and to the areas under the administration of the chartered companies. Both parties envisaged this truce as a window of time to solve disputes in South America, West Africa, and Asia, which had arisen after the VOC and the WIC had conquered overseas areas previously controlled by the Portuguese.¹⁷

17 IAN/TT, Núcleo Antigo, 897, Maço 3, no. 5, 8v. See also: E. Prestage, A embaixada de Tristão de Mendonça Furtado à Holanda em 1641: primeiras embaixadas de el-rei D. João IV com documentos eluci-

¹⁵ Israel, Dutch Primacy, 80-120.

¹⁶ Nationaal Archief (NA), Archief van de Staten Generaal, Lias Portugal, 7010-1, received in The Hague on April 12, 1641. See also: J. F. B. de Castro, *Collecção dos tratados, convenções, contratos e actos públicos entre a coroa de Portugal e as mais potencias desde 1640 até ao presente,* vol. 1 (Lisbon : Imprensa Nacional, 1856), 115-116.

This diplomatic treaty had immediate economic repercussions. As we can see in the data showed in graph 2, Dutch ships arrived in large numbers at Setubal and the import of salt from Amsterdam resumed, growing consistently throughout the 1640s. But things did not always go smoothly. For example, on August 7, 1647, Pieter Cornelisz., representative of the States General and a merchant in Lisbon wrote to The Hague complaining about the mayor of Setubal. This official had asked the king to fix the prices of salt and to determine the amount of salt to be traded per ship. He argued with the States General that this was obviously against the freedom of trade recognised to the Dutch by the treaty of 1641.¹⁸

John IV was not at all amused with Cornelisz. objections to the way he tried to interfere with Dutch economic interests in his kingdom. He wrote angrily to the States General on October 20, 1647, explaining that if he was thinking on taking any measures against the salt trade in Setubal, it was because Dutch skippers arriving there had requested that course of action. According to the king, even though Dutch merchants and businessmen in Lisbon and Setubal were very interested in keeping the salt trade free, the skippers of the ships were not. Free trade meant that they had to stay longer in Setubal to load their cargos and time meant money.¹⁹

The Dutch-Portuguese relations during the 1640s became increasingly difficult because of mutual aggressions overseas. In Brazil, the Portuguese under the WIC rule organized a revolt and started what they saw as the liberation of Brazil from Dutch occupation. In Asia, the Dutch expanded their interests in Ceylon by threatening all the territories in the vicinity of the fortress of Gallé. In the meanwhile, the WIC had also taken Angola from the Portuguese putting pressure on the sources of labour for the Portuguese sugar plantations in Brazil.

The 1650s was a difficult decade for the Portuguese-Dutch economic and diplomatic relations. However, there was never a full-scale war between both parties. Although some factions on both sides were more willing than others to go to war and pay dearly for it, the factions defending peace were able to win and create some common ground for a peaceful arrangement during the 1660s.

By 1661, the situation was still quite volatile, but it showed signs of rapid improvement. On May 23, 1661, Henrique de Sousa Tavares, Count of Miranda and Portuguese ambassador in The Hague, presented a new proposal to the States General for a settlement over Brazil. This settlement aimed at solving the most poignant differences between both parties in order to open a new road for universal peace. The Portuguese proposition had a diplomatic character, but the offer presented to the States General was of an economic nature. The Count of Miranda offered the States General the payment of damages for the Portuguese intervention against Dutch Brazil up to a total of four million *cruzados*, to be paid in cash, sugar, tobacco and salt. To be able to pay a part of this amount in salt, he offered Dutch merchants a monopoly over the salt of Setubal, as well as free access to all the Portuguese ports in Europe and overseas. Portugal was willing to offer one of the largest sources of its national

dativos, Separata *O Instituto*, no. 67 (Coimbra: Imprensa da Universidade, 1920), 69-84. See also: IAN/TT, Gavetas, 18, Maço 2, no. 3. See also: IAN/TT, Gavetas, 18, Maço 1, no. 7. A copy of this document also appears in IAN/TT, Gavetas, Maço 3, no. 3, with a translation in Latin.

¹⁸ NA, Archief van de Staten Generaal, Lias Portugal, 7011-1, August 7, 1647 (received September 30, 1647).

¹⁹ NA, Archief van de Staten Generaal, Lias Portugal, 7011-1, October 20, 1647 (received December 21, 1647).

income together with the freedom of trade throughout the empire to obtain peace with the Dutch. $^{\rm 20}$

The States General could not resist the ambassador's attractive offer. On August 6, 1661 a peace treaty between Afonso VI and the States General was signed in The Hague by the Count of Miranda and the States General, and ratified in Lisbon by the Queen regent on May 24, 1662. This treaty had two parts. The first part was purely diplomatic and aimed at securing the basis for future cooperation and agreement. In the first place, Portugal would satisfy the WIC demands on all the artillery that had been taken from the company when the Portuguese took over Dutch Brazil. All the pieces would be returned to the company and all the property in Brazil, as well as in Asia would remain in the hands of the people who owned it at the moment of the signing of the treaty. All the hostilities between Dutch and Portuguese would stop within a period of two months in Europe and slowly, but surely peace would spread out to the rest of both empires. Last but not least, all the prisoners of war on both sides would be set free without further delay.²¹

The treaty of 1661 had a second part, with the settlement for economic compensation and further details for future economic contacts. The first point was an agreement for the payment of damages to the WIC for all the losses in Brazil. The States General took the proposal by the Count of Miranda of May 1661, and accepted four million *cruzados* of compensation. These four million *cruzados* would be accounted at the rate of one *cruzado* per two *guilders*, to be paid in sugar, tobacco, salt and cash. If by any chance there would be an insufficient supply of some of these products, the Portuguese authorities could always replace these products by others. The amount of money to be paid in cash would be collected from the taxes paid over the salt exports. The States General would have to appoint two people, one in Lisbon and the other one in Setubal, who would be responsible for collecting the payments. The Dutch could get more than part of the taxes over the salt. They could get their damages compensated by collecting salt from Setubal at a fixed price, as much as they would be able to ship.²²

The opening of the ports of the Portuguese empire to the Dutch was not a novelty in itself. The English had been granted the same privilege in the treaty of 1654. Nonetheless, this was an important concession to the Dutch not only because they would have the same rights and privileges as the English, who were slowly taking over Dutch traditional routes all over Europe and who competed strongly with Dutch maritime and territorial power overseas, but also because it opened new opportunities for the Dutch trade in the Atlantic.²³ These diplomatic developments recognised the growing influence of diplomats, consuls and representatives in the Republic and in Portugal. Caspar Barlaeus is a good example of this new trend. Barlaeus, Dutch consul in Lisbon and Setubal achieved two main goals. In the first place, he was able to delay the payment of damages to the WIC by explaining apologetically to the States General the difficult financial situation in which the Portuguese found themselves due

²⁰ NA, Archief van de Staten Generaal, Lias Portugal, 7011-2, 23 May 1661.

²¹ IAN/TT, Núcleo Antigo, 897, Maço 3, no.5, 9. See also: J. F. B. de Castro, *Collecção dos tratados*, vol. 1, 260-293.

²² IAN/TT, Núcleo Antigo, 897, Maço 3, no.5, 9. See also: J. F. B. de Castro, *Collecção dos tratados*, vol. 1, 260-293.

²³ IAN/TT, Núcleo Antigo, 897, Maço 3, no.5, 9. See also: J. F. B. de Castro, *Collecção dos tratados*, vol. 1, 260-293.

to the war with Spain. Due to his intervention, the States General was willing to wait for the payments promised in 1661.²⁴ In the second place, after the official nomination of Peter (future king Peter II) as Regent of the kingdom, Barlaeus was able to strike a deal with the new authorities in Lisbon, according to which the Portuguese would give up on their claims on Cochin and Cananor and would begin with the payments settled at the beginning of the 1660s.²⁵

Barlaeus settlement with the Portuguese regency was put to paper on July 30, 1669. It had a broad basis to satisfy the WIC by paying for the damages caused by the losses in Brazil.²⁶ The benchmark on Barlaeus' intervention was the negotiation and settlement of the treaty of 1669 with Peter II. The WIC was to refuse any payment of damages beyond 500.000 *cruzados* to be paid in salt at Setubal. Those 500.000 *cruzados* would be calculated by the following rules:

25 $moios^{27}$ of salt = 74 cruzados 168.919 moios of salt = 500.000 cruzados.²⁸

The total of the damages promised by the treaty of 1661 did not speak of 500.000 *cruzados*, but of four million *cruzados*. On top of the 500.000 *cruzados* to be paid in salt, the Dutch would still get 250.000 *cruzados* by collecting the royal taxes on the salt of Setubal. This would pay the Dutch 700 *réis*²⁹ per *moio* of salt sold at Setubal. This concession of the tax would be given for a period of 20 years, in which the Dutch would still be able to trade 107.143 *moios* extra per year, and claim the missing amount of salt or taxes on a yearly basis. This shortage would be compensated in the beginning of every new year. But the Portuguese would only accept this yearly shortage if it depended on their responsibility. For example, if in case of war the Dutch would not be able to send enough ships to Setubal to collect the salt and the salt taxes, then the Portuguese authorities would refuse any further payments concerning that year.³⁰

The salt from Setubal became the means of payment for a diplomatic agreement. But the salt from Aveiro and other Portuguese ports was not mentioned in the treaty, and therefore could be freely traded with private entrepreneurs, whose business did not include the freighting of ships to get the damages owed to the WIC to the Republic. After the signing of the treaty of 1669, Barlaeus sent a complete list of the Dutch ships that had fetched salt at Setubal between 1659 and 1668.

²⁴ NA, Archief van de Staten Generaal, Lias Portugal, 7012-2, February 3, 1665 (received April 1).

²⁵ J. F. B. de Castro, Collecção dos tratados, vol. 1, 444-471.

²⁶ NA, Archief van de Staten Generaal, Lias Portugal, 7013-1, October 24, 1666 (received November 24). See also: NA, Archief van de Staten Generaal, Lias Portugal, 7013-1, November 28, 1666 (received February 19, 1667).

²⁷ One moio equals 60 kilograms. 1 moio = 60 kg.

²⁸ J. F. B. de Castro, *Collecção dos tratados*, vol. 1, 444-471. One cruzado was worth two guilders. 500.000 cruzados = 1 million guilders.

^{29 400} réis were worth one cruzado. 400 réis = 1 cruzado.

³⁰ J. F. B. de Castro, Collecção dos tratados, vol. 1, 444-471.

 Table 1. Dutch ships collecting salt at Setubal between 1659 and 1668, according to a report by Caspar Barlaeus.

Year	Number of Ships	<i>Moios</i> of salt	Average moios of salt per ship
1659 1660 1661 1662 1663 1664 1665 1667			

Source: NA, Archief van de Staten Generaal, Lias Portugal, 7013-2, November 14, 1669 (received March 31, 1670).

Barlaeus continued his mission as the Dutch consul in Lisbon and the successes he achieved during the 1660s were to be repeated during the 1670s. His main function became the supervision of the way in which the salt taxes were being handed over to the Dutch. For example, on February 24, 1670 he sent a letter to the States General informing them that the treasury at Setubal had collected 200.000 *cruzados* from the sale of salt and the collection of royal taxes. This amount of money had been acquired by the supply of 60 ships, of which 40 were Dutch.³¹

In the year after that, at the end of 1671, Barlaeus informed the States General of the accounts of the salt trade taxes paid to each of the Chambers of the WIC. Table 2 shows Barlaeus detailed information to the States General and his interest in keeping the accounts as organised as possible to avoid any misunderstandings in The Hague or Lisbon.

Table 2. Salt collected by the Chambers of the WIC, 1670-1671.

ChamberYear	Number of Ships
Total	

Source: NA, Archief van de Staten Generaal, Lias Portugal, 7013-2, December 1671.

Barlaeus was an excellent example of dedication to the States General. He also maintained his commitment for peace with Portugal, a country he had adopted not only to live in but also to do business with. He died on May 1673, after a life-long devotion as a service career, as a good businessman, and peacekeeper. His son symbolically took his place for a brief period. He only appears again, at the end of the 1670s, receiving 12.836.500 *réis* of the salt taxes in October 31, 1679. At that time, he warned the States General that the king had kept 2.400.000 *réis* for his own benefit, which he used to maintain the Portuguese fortifications in Europe and overseas,

as well as 1.200.000 that he donated to a monastery.³²

Johan Wolfzen, who arrived in Lisbon on June 18, 1675 continued Barlaeus work.³³ Wolfzen's real function had an economic nature. He was responsible for the collection of the salt payments presented at Setubal by the Portuguese authorities. On December 1677, in a letter to the States General, Wolfzen sent the total accounts of the salt fetched by the Dutch at Setubal in the years 1676 and 1677.

Year	Salt fetched by Dutch ships	Salt fetched by foreign ships	Salt that was not fetched
M	oios Cruzados	MoiosCruzados	MoiosCruzados
1677	.56363.985,25		
Source: NA, Archief van de Staten Generaal, Lias Portugal, 7014-1, December 1677.			

Table 3. Salt collected at Setubal in 1676 and 1677.

The actions of the Dutch consul as an economic agent did not prevent the confusion in the way the salt payments were collected and paid at Setubal. On the Dutch side, there were always arguments that the king kept too much of the salt taxes for his own expenses. On the Portuguese side, the argument was that the Dutch did not send enough ships each year to fetch the amounts of salt agreed on at first in the treaty of 1661 and afterwards clarified by the treaty of 1669. Both arguments were reasonable. The Portuguese restoration wars only ended in 1668 after the signing of the peace treaty between Portugal and Spain. The weight of 28 years of war on the defensive network of the whole kingdom had been enormous and it was only natural that the king would want to invest heavily in the recovery of those defences. After all, diplomatic issues in Europe were far from being solved. On the other hand, the Portuguese argument was also more than valid. There was a clear reluctance on the part of Dutch businessmen to invest in trade. The war with France and the continuous risks at sea due to actions of privateering and piracy, by the French or their allies was a valid reason to freight fewer ships or reduce the number of transports without a convoy.

During the 1670s, the Dutch resident in Lisbon, Johan Wolfzen was finally able to collect, on average twice a year, for the whole decade, the salt payments owed by the Portuguese to the WIC.

32 NA, Archief van de Staten Generaal, Lias Portugal, 7013-2, May 1673. See also: NA, Archief van de Staten Generaal, Lias Portugal, 7014-2, October 31, 1679 (received December 5).

	• /	0	,
Date		Réis	Cruzados
15-04-1681 13-05-1681 27-04-1683 20-07-1683 06-10-1683 26-09-1684 04-06-1686 11-02-1687	34	.20.402.600 .23.294.500 298.600.000 .10.182.700 .15.010.000 .14.351.000 .31.803.618 .14.048.500	
23-04-1687		.15.483.040	
14-07-1687 20-04-1688 12-11-1688	3	.10.617.849 5.468.500 6.245.680	
03-05-1689		1.972.575	
T (1		170 100 500	107.0.12

Table 4. Salt payments given to Johan Wolfzen by the Portuguese authorities during the 1680s.

Source: NA, Archief van de Staten Generaal, Lias Portugal, 7014-2, April 15, 1681 (received May 9), May 13, 1681 (received June 15), April 27, 1683 (received May 29), July 20, 1683 (received August 21), October 6, 1683 (received November 29). NA, Archief van de Staten Generaal, Lias Portugal, 7015-1, September 26, 1684 (received October 30), June 4, 1686 (received July 8), February 11, 1687 (received April 11), April 23, 1687 (received May 23), July 14, 1687 (received August 15). NA, Archief van de Staten Generaal, Lias Portugal, 7015-2, April 20, 1688 (received May 21), November 12, 1688 (received December 20), May 3, 1689 (received May 6), October 8, 1689 (received November 19).

Wofzen is not the only source we have on the importance of the salt exports from Setubal to the Republic. These exports were also very important for the balance of trade in the intra-European networks, since after the treaties of 1661 and 1669 the Dutch had become the largest salt traders on the continent. Even during the Nine Years War Johan Wolfzen, Caspar Barlaeus jr., Abraham van Eschwiller and Jacob Daniel de Famars used their diplomatic positions to defend the Dutch interests in the court in Lisbon, as well as in the salt payments coming from Setubal.

Date	ReisCruzados
24-01-1690J. Wolfzen .	
14-11-1690J. Wolfzen	5.610.526 + 3.000.000 (extra)
28-11-1690J. Wolfzen .	
17-04-1691J. Wolfzen .	
15-05-1691J. Wolfzen .	
29-04-1692J. Wolfzen .	
11-02-1693J. Wolfzen	\dots .104.838.762 (44.838.762) ³⁷ \dots .262.096 (112.097)
04-08-1693J. Wolfzen .	
31-08-1694J. Wolfzen .	
26-10-1694J. Wolfzen .	
26-04-1695J. Wolfzen .	
08-11-1695 C. Barlaeus jr	
28-10-1698 J. D. de Famars .	
Total	

Table 5. Collection of the salt taxes at Setubal during the 1690s.³⁶

Source: NA, Archief van de Staten Generaal, Lias Portugal, 7015-2, January 24, 1690 (received February 24), November 14, 1690 (received December 11), November 28, 1690 (received January 2, 1691), April

34 On the date of this collection, the regent set 1.127.400 reis aside for his own expenses.

35 This payment was an extra payment given by the king to compensate the occasions when he had taken some of the payments to keep his fortresses.

36 The 'blanco' spaces in the table indicate that the consul did not mention the correspondence between réis and cruzados.

37 From this total, the Portuguese authorities took 80.000 *rijksdaalders* for the payment of the damages provoked by privateers from Zealand on Portuguese commercial ships. Wolfzen points out that 1 *rijks*-

17, 1691 (received May 21), May 15, 1691 (received June 15). NA, Archief van de Staten Generaal, Lias Portugal, 7016-1, April 29, 1692 (received June 2), February 17, 1693 (received March 24), August 4, 1693 (received September 7), August 31, 1694 (received October 4), October 26, 1694 (received November 30). NA, Archief van de Staten Generaal, Lias Portugal, 7016-2, April 26, 1695 (received May 30), November 8, 1695 (received December 13). NA, Archief van de Staten Generaal, Lias Portugal, 7017-1, October 28, 1698 (received November 25), January 6, 1699 (received February 7).

The changes after the end of the Nine Years War left the Amsterdam-Setubal relationship waiting for a new wave of diplomatic settlements. Francisco de Sousa Pacheco, Portuguese ambassador at The Hague managed to negotiate the inclusion of Portugal in the partition treaty of the Spanish monarchy, between Louis XIV (King of France), William III (King of England and Stadholder of the Republic), and the States General. This treaty was signed at London on March 3, 1699, in The Hague on March 15, 1700 and in Lisbon on October 15, 1700. By this treaty, the parties agreed to respect the peace signed at Rijswijk. The essential question was how Europe would react to the death of the King of Spain, who had no natural heir. In his name and in the name of the Dauphin, Louis XIV accepted to settle for the kingdom of Naples and Sicily, the cities on the coast of Tuscany and Final, the Duchy of Lorraine, the cities of Fuenterrabia and San Sebastian, and the province of Guipuzcoa. To avoid any objections that the Duke of Lorraine might have against this plan, he would be given the Duchy of Milan. All the routes in the Pyrenees between France and Spain would be fully respected and free passage would be guaranteed to both sides. The rest of the Spanish possessions in Europe and overseas would be given to Archduke Charles, second son of the Holy Roman Emperor. The future possession of Archduke Charles would be placed under the protection of William III, king of England and Stadholder of the United Provinces, with the full support of the States General, until he would reach adulthood.38

If Francisco de Sousa Pacheco thought the Portuguese involvement in the war was inevitable, Peter II did not. Neutrality during the Nine Years' War had served him well. His harbours had prospered with exception of a few incidents; ships coming to and from Portugal were able to sail freely in Europe and overseas. So it is understandable that he would try the same approach to the problems now posed by the fact that the king of Spain was about to die childless, threatening to involve all European powers in fighting for their alleged rights of succession. Therefore Peter II decided to participate in the peace treaty signed between William III, king of England and Stadholder of the United Provinces, Louis XIV and the States General, ratified on October 15, 1700, but signed effectively on March 3, 1699.³⁹

Peter II's tactics failed. The contenders were hardly inclined to negotiating, and William III was too eager to protect Archduke Charles' rights in continental Europe. Not even the death of the Dutch-English king stopped the course of events that were leading towards a full-scale war. This compelled Portugal to arm itself and get ready to face war, either as a neutral power or as part of the dispute. The strategic position of the kingdom was clear. The French wanted to avoid any possibility of an overland operation across the Portuguese border, and therefore offered to accept Portuguese neutrality. The ports would profit from this situation because they would be able to

daalder equalled 750 *réis,* which means that of the 104.838.762 *réis,* the Portuguese authorities took 60.000.000 *réis.* In the end Wolfzen only kept 44.838.762 *réis.*

38 J. F. B. de Castro, Collecção dos tratados, vol. 2, s/p.

39 IAN/TT, Gavetas, 16, Maço 5, no. 10, doc. 6. This treaty is writen in Latin. See also: J. F. B. de Castro, *Collecção dos tratados*, vol. 2, s/p.

harbour not only the war fleets of both sides during the winter, but they would also be allowed to be kept open for normal trade.

The Dutch-English alliance recognised Portugal's strategic value. Because they were cut off from all the possible invading routes into Spanish territory, the only way they could get access was via Portugal. The question remained how to make sure that Peter II would 'cooperate'. The first argument the allies used was the Portuguese overseas territories. It was well known that neither French nor Spanish war fleets would have the capacity to defend the Portuguese territories overseas from possible English and Dutch attacks. Therefore, the allies offered to provide that protection, in a first moment, as long as Peter II was neutral, and in a second moment, as long as Peter II would join the alliance by allowing foreign troops on to his territory. The second argument to persuade the reluctant king was of an economic nature. The English tried through John Methuen to offer different economic advantages to the Portuguese, including proposals concerning the trade of wine and textiles. The English would be able to export as much textiles as they would like to Portugal and overseas (the treaty of 1654 already given them access to the overseas ports under Portuguese control), and the Portuguese wine would be accepted in England together with the French wines, but the Portuguese wines would benefit from a much lower tax rate on imports (one third less). The advantages for both parties were obvious.⁴⁰

John Methuen made a successful contribution to call Peter II to the ranks of the alliance, but he was not the first to do so. Before he arrived in Lisbon, Francisco de Schonenberg, Dutch plenipotentiary minister, had already started negotiations on behalf of the States General. If the English were to swap textiles for wine some months later, the Dutch were willing to provide useful passports for weaponry, shipbuilding materials, grain and war specialists, which could not be refused in those circumstances. Implicitly, the States General was sending the message to Peter II that if he would not join the alliance, the largest weapons' production outlet in Europe would close its doors to Portuguese imports. After a secret assessment by Francisco de Schonenberg on the capacity of the Portuguese army and navy, the States General knew that this was an offer that Peter II could not possibly refuse.

But the States General was not at all satisfied with signing of the treaty with Methuen (1703). In the third quarter of the seventeenth century it had already been difficult for the Dutch to hold on to their trade networks all over the world. They had been ferociously attacked by a growing English participation in commerce and they were obviously starting to lose ground. The States General was not willing to accept that the same would happen with to Portuguese markets. Therefore, after giving up on further claims on the salt payments agreed on the 1660s as damages payments to the WIC after the loss of Brazil, the States General decided to demand from the Portuguese a similar treaty as the one they had signed with Methuen in 1703, to make sure that the access to the Portuguese continental and intercontinental markets would be divided equally between the English and the Dutch.

The treaty with the Dutch was not a good deal for the Portuguese. The trade of English and Dutch textiles would be competing on the Portuguese market, but the Portuguese wines would hardly be a success in the Republic. Francisco de Sousa Pacheco, after discussing the possible treaty with his business connections in Amsterdam, concluded that there was hardly any market for Portuguese wines in the Republic. In the first place, because the wine consumption in the Republic seems to have been perceived as much lower than the wine consumption in England. In the second place, the Dutch market preferred French wines, for their taste and colour. It was useless to put a discount of one third of the import taxes on a product that was in low demand on the consumption markets in the largest Dutch cities. Pacheco suggested that the agreement with the Dutch still could be made about other products with a higher acceptance, but Peter II and his advisers in Lisbon had already made up their minds.⁴¹

Besides the military/economic aid, commercial and economic advantages were offered to Peter II as well. The first issue to be settled was the end of the salt payments to the States General. It was agreed that if Peter II would pay another 850.000 *cruza-dos*, the Republic would consider the salt payments as finished and fulfilled. The second issue was the Portuguese participation in the European trade. Portuguese merchants were to be given as many rights in England and in the Republic as the English and Dutch merchants had in Portugal. Furthermore, the merchants from Lisbon would be able to import gunpowder, ammunition, weapons and shipbuilding materials at the same prices the allies would pay. There was still a third economic concession referring to the Portuguese ports overseas. Firstly, Portuguese ships would not have to pay any taxes in Malacca. This concession was likely to start a conflict between the States General and the VOC. Secondly, all the Asian ports would have to be closed to privateers and pirates, which implied that some of the English, Dutch and Portuguese ports in Asia would lose their rights to auction ships and goods captured from their opponents in the Indian Ocean.

3. The problems of the data

When looking at graph 2 two problems arise concerning the data. The first problem is the representatively of the shipping between Amsterdam and Aveiro, when compared to the shipping between Amsterdam and Setubal. The amount of ships involved in the Aveiro salt trade between 1584 and 1715 is considerably less than the one feeding the Amsterdam-Setubal trade. There are three possible explanations for this difference.

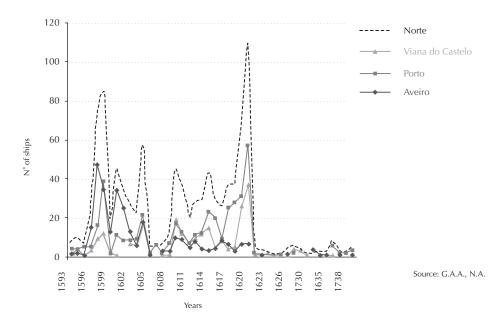
The first possible explanation is the difference in the quality of the salt produced in Aveiro and Setubal and therefore the levels of acceptance reached at the consumption markets in Northern Europe. We do not find any indication in the literature that the salt produced in Aveiro was of any lower quality than the one produced in Setubal. However, there are some speculations on the amount of the salt produced and therefore on the capacity and efficiency of the salt exports. That led us to conclude that although the salt from Aveiro and Setubal might have similar qualities, the amounts produced were difference. Large fleets would have the tendency to prefer Setubal to Aveiro if they were specialised on the salt trade. The second possible explanation for the discrepancy between the salt exports from Aveiro and Setubal to Amsterdam may rely on an environmental question. Studies have shown that Aveiro suffered from a chronic tendency to silt. The silting of the harbour and surrounding area made it increasingly difficult to safely sail the ships in and out of the harbour all year long. Furthermore, the increasing silting of Aveiro implied that lighter and less deep vessels had to be sent for the salt trade. The use of these smaller vessels indicates a lower volume of trade and an added risk to the voyage.⁴²

A third and last explanation for the low levels of salt shipping held by Aveiro when compared to Setubal is the position of Aveiro as port of call in a larger trading system. Both Aveiro and Setubal had a specialised function for the international trade. Salt was not produced anywhere else in the country in the quantities and with the quality of these ports, and therefore they became specialised on the supply of the international markets with salt. In the case of Setubal, as we have seen when discussing the maritime routes that supported the export of the salt into the Northern European markets direct trade between Setubal and the outside world seems to have been the rule. That is not to say that Setubal did not hold a function of top-up cargos to ships coming to Lisbon, but this port was able to maintain its own clients and business system.

In the case of Aveiro, that does not seem to have been the case. Aveiro was part of an integrated system that included the major Northwestern Portuguese ports, as was the case of Viana do Castelo, Vila do Conde and Porto. The majority of the ships coming to Aveiro did so via these Northerwestern ports or they would start their cargo in Aveiro and top it up with other products sold at the other Northerwestern ports. This cooperation between the Northwestern ports helped their projection in the international markets, though that was never enough to surplant neither Lisbon's preponderance in the international markets, or Setubal's overwhelming control of the Portuguese salt exports. Nonetheless, Aveiro's importance in this Northwestern complex is clear when compared to the shipping between these ports and Amsterdam in the first half of the seventeenth century (see graph 3).

When considering the possible explanations for the differences in shipping of salt between Aveiro and Setubal into the Northern European markets, I would claim that quantity, silting and specialisation together determined the position in which Aveiro and Setubal were left. Setubal was clearly exporting more salt than Aveiro, being because it produced more, did not have much environmental deterrents or was more able to get a degree of specialisation. Being as it may, the salt from Setubal was the stable currency found by the Portuguese kings to pay their diplomatic deals abroad. That implies that the supply of Setubal was not only perceived as being stable and constant, but also thought of as a hard currency in the international markets.

The second problem imposed by the data of graph 2 is the discrepancy between the data available through the notarial contracts held in the archives of Amsterdam and the data published by Virginia Rau about the salt exports from Setubal to the Dutch market. On the first sight, one might think that there is a misrepresentation of the sources. However, that is not the case. The figures collected through the notarial archives translate the amount of ships contracted in Amsterdam to travel to Setubal and back, through different routes, as it has been stated earlier. The figures by Rau



Graph 3. Shipping between Amsterdam and the Northwestern Portuguese ports, 1593-1639

show the amount of Dutch ships entering the port of Setubal in a 10-year frame. There is a clear difference between the number of ships leaving Amsterdam and the amount of Dutch ships arriving at Setubal. One possible explanation for this could be that the relevance of the volume of Amsterdam business in Setubal decreased and therefore, Rau's figures represent Dutch ships coming from other ports in the Dutch Republic. However, that does not seem to be the case. In Rau's figures, Amsterdam accounts for about 93% of the Dutch ships arriving in Setubal. So we will have to look for the answer somewhere else.⁴³

I believe that the difference between the notarial archives results and Rau's conclusions lie on the nature of the source of the trade. The notarial archives translate the reality of private shipping. Private entrepreneurs hired private skippers with private owned ships to operate the route Amsterdam-Setubal. After the treaty of 1661 and the later settlement of 1669, it is the States General and the WIC that come to fetch the salt from Setubal in order to fulfil the agreements stated in the treaty. That is not to say that Rau's figures show other ships than the ones appearing in the contracts before. The ships are the same as are the entrepreneurs and the skippers. The difference lies on the fact that the private entrepreneur that hired ship and skipper privately through a notarial contract, is after 1669 asking for specific permissions, also known as passports, directly to the States General or via the WIC. So, there is a replacement in the juridical form of the contracts to fetch salt, but there is little difference in the actors and system behind it.

4. Conclusion

We were able to see that Portuguese salt imported via Aveiro and Setubal made a significant part of the relationship between Amsterdam and these specialised ports. The routes connecting the Western European salt routes, Northern Europe, the Baltic and Scandinavia were paramount for the survival of local industries and other commercial circuits.

The previous assessment shows that although Aveiro and Setubal were similar ports, mainly specialised on the export of salt, they belong to two categories of ports. Aveiro was part of the Northwestern Portuguese port system and within that system it played a crucial role in the international projection of all the ports within that system. Setubal did not belong to a particular port system. It stood on itself and relied on the amount, specialisation and prosperous environmental situation to profit from a trade that due to its impact in the Portuguese economy was used as hard currency in the international markets.

We may also state that war, peace and political events influenced the shipping levels of salt into Amsterdam and therefore, the changes in the salt trade depended on the context of the time. On the other hand, the variations in the salt trade determined the performance of other trading routes and other commercial systems. However, we cannot deny the importance of the salt exports to both the Dutch and the Portuguese economies at the time.§