

Maria Bogucka

MERCHANTS' PROFITS IN GDAŃSK FOREIGN TRADE IN THE FIRST HALF OF THE 17TH CENTURY

A lively dispute has recently arisen from the question of mercantile profits gained in the great Baltic trade. The thesis submitted by M. P. Lesnikov on the very low average profit rate, scarcely amounting to 5—6%, realized by the Hanseatic merchants in the 15th century¹ provoked immediate polemics. K. Fritze² from the German investigators questioned it, from the Russians N. M. Tihomirov³ and finally I. E. Klejnberg in his studies devoted to prices and profits obtained by trade intermediaries who dealt in goods exported from Russia in the 14th to 15th century.⁴ It is also worth recalling that the recently published investigations of H. Samsonowicz would indicate that the profits of the Gdańsk merchants in foreign trade amounted to 40% or even more with, as he estimates, an average of about 20% for the great exchanges.⁵ M. Małowist among others supported Samsonowicz's thesis.⁶ This matter is not an insignificant one for it is connected with the problem of the role and function of mercantile capital during the transitional

¹ M. P. Lesnikov, *Niederlandy i Wostočnaja Baltika v načale XV v. Iz istorii torgovyh snošeniĭ*, "Izvestia Ak. Nauk SSSR". Seria Istorii i Filosofii, vol. VIII, 1951, No. 5, p. 458, also, *Lubeck als Handelsplatz für Osteuropäische Ware im XV Jhr.*, "Hansische Studien", Berlin 1961, pp. 273 - 292.

² K. Fritze, *Tendenzten der Stagnation in Entwicklung der Hanse nach 1370*, "Wissenschaftliche Zeitschrift der Ernst-Moritz-Arndt-Universität Greifswald", 1963, No. 5/6, p. 521.

³ M. N. Tihomirov, *Srednevekovaja Rossija na meždunarodnyh putiach XIV - XV v.*, Moskva 1966, p. 97.

⁴ In the collective work entitled *Ekonomičeskije svjazi Pribaltiki z Rosijej*, Izd. Lot. Ak. Nauk, Riga 1968, pp. 32 - 43.

⁵ H. Samsonowicz, *Badania nad kapitałem mieszczańskim Gdańska w drugiej połowie XV w.* [Researches into the Bourgeois Gdańsk Capital in the Second Half of the 15th Cent.], Warszawa 1960, pp. 45 - 51.

⁶ M. Małowist, *Uwagi o roli kapitału kupieckiego w Europie Wschodniej w późnym średniowieczu* [Notes on the Role of Mercantile Capital in Eastern Europe in the Late Middle Ages], "Przegląd Historyczny," 1965, No. 2, p. 227.

period of feudalism into capitalism¹ as well as with a much discussed problem of the so called European economic crisis at the beginning of the 17th century.²

The object of this article is to analyze the profit rates obtained in Gdańsk foreign trade during the period of that town's exuberant growth in the first half of the 17th century. The profits of merchants exporting Polish goods from Gdańsk and importing to Gdańsk various articles from the West will be examined here on the examples of transactions carried out on two routes, where the existence of studies on the history of prices makes it possible for us to draw up tables. These two routes played a very important part in the Gdańsk trade during this period and so therefore on this basis a conclusion with a wider significance may be broached. I am referring to Gdańsk's connections with Spain and Amsterdam here.

The end of the 16th and the beginning of the 17th centuries were remarkable for the revival of direct contacts between Gdańsk and the countries of the Iberian Peninsula.³ This was particularly so in the period 1604 - 1607, when the price of corn started to fall in Amsterdam⁴, bringing a decrease of the Gdańsk exporters' profits on this route.⁵ The interest in the Spanish market started to rise for the price of corn, at that time, was very high there.⁶ This situation changed, however, after 1608, because the price of corn in Spain fell⁷ owing perhaps among others to the conclusion of an armistice with the North Netherlands. As a result some of the Gdańsk merchants suffered considerable losses⁸ and in any case the big gains of over 100% on this route were ended for a while. Simultaneously there was a price increase on the Amsterdam bourse⁹ which created in Gdańsk a new wave of interest in the Dutch market and attempts to displace in the trade with Spain the corn export by export of forest products.¹⁰ The price of corn in Spain and the

¹ Cf. J. Topolski, *Narodziny kapitalizmu w Europie XIV - XVII w.* [*The Birth of Capitalism in the 14th - 17th Century Europe*], Warszawa 1965, p. 20 ff.

² E. J. Hobsbawm, *The General Crisis of European Economy in the 17th Century*, "Past and Present", 1954, No. 5 as well as *The Crisis of the 17th Century*, "Past and Present", 1954, No. 6; H. Trevor-Roper, *The General Crisis of the 17th Century*, "Past and Present", 1959, No. 11; from Polish literature the article of A. Mączak, *O kryzysie i kryzysach XVII w.* [*About the Crisis and Crises of the 17th Cent.*], "Kwartalnik Historyczny", 1963, No. 1.

³ M. Bogucka, *Handel Gdańska z Półwyspem Iberyjskim w pierwszej połowie XVII wieku* [*Gdańsk Trade with the Iberian Peninsula in the First Half of the 17th Century*], "Przegląd Historyczny", 1969, No. 1, p. 1 ff.

⁴ Cf. N. W. Posthumus, *Nederlandsche Prijsgeschiedenis*, Leiden 1943, p. 578.

⁵ Cf. below, p. 74.

⁶ E. J. Hamilton, *The History of the Prices before 1750*; in: *XI Congrès International des Sciences Historiques*, Stockholm 1960, pp. 151 - 152.

⁷ Cf. E. J. Hamilton, *American Treasure and the Price Revolution in Spain, 1501 - 1650*, Cambridge 1934, pp. 358 - 383.

⁸ Cf. p. 71 below.

⁹ N. W. Posthumus, *Nederlandsche Prijsgeschiedenis*, p. 578.

¹⁰ Cf. M. Bogucka, *Handel Gdańska z Półwyspem Iberyjskim...* [*Gdańsk Trade with the Iberian Peninsula...*], p. 13.

Table 1. Wheat prices in Gdańsk and in Spain and the profits from the wheat trade on this route (in gm. of silver for one Gdańsk last)

Sources: The basis for Spain was the book of E. J. Hamilton, *American Treasure and the Price Revolution in Spain 1501 - 1650*, Cambridge 1934, pp. 358 - 383; for Gdańsk — Seatoll Registers called "palebooks" (*Pfahlbücher*) in the Wojewódzkie Archiwum Państwowe w Gdańsku (Voivodship State Archives in Gdańsk — further referred to as WAP Gdańsk), 300, 19/16 - 35, the so called "Spanish customs" notebook (*Spanische Collekten* — WAP Gdańsk 300, 19/13) as well as the customs tariffs (WAP 300, 19/45)

Year	Average export price in Gdańsk	Average price in Spain ^a	Freight ^b	Other costs ^c	Profits ^d		Agio or disagio of a ducat ^e
	gm. of silver				gm. of silver	%	
1607	1 441.00	4 163.23	310.36	288.20	+2 123.67	+104.1	+46.0
1608	1 283.10	4 660.44	310.36	256.62	+2 810.36	+141.1	+61.0
1609	1 423.00	3 648.01	310.36	284.60	+1 630.05	+ 80.7	+57.0
1610	1 352.00	3 861.77	310.36	270.40	+1 929.01	+ 99.8	+54.0
1611	1 144.00	2 972.77	310.36	228.80	+1 289.61	+112.7	+52.2
1612	1 234.80	3 109.16	310.36	246.96	+1 317.04	+ 73.4	+52.4
1613	1 496.40	3 949.57	310.36	299.28	+1 843.53	+ 87.5	+50.4
1614	1 404.30	3 977.64	310.36	280.86	+1 982.05	+ 99.3	+50.9
1617	1 838.10	5 435.41	262.39	367.62	+2 967.30	+120.2	+55.1
1618	1 552.40	4 481.31	265.07	310.48	+2 353.36	+110.6	+58.0
1622	1 535.30	4 245.68	265.07	307.06	+2 138.25	+101.5	+10.4
1627	1 740.50	6 366.75	265.07	348.10	+4 013.08	+170.4	-10.8
1628	1 738.80	6 082.84	265.07	347.76	+3 731.21	+158.6	- 5.1
1629	1 887.80	5 565.82	265.07	377.56	+3 035.39	+119.9	+ 5.9
1630	3 159.00	5 232.28	265.07	630.18	+1 178.03	+ 29.0	+ 3.2
1631	2 754.00	5 425.17	265.07	550.80	+1 855.30	+ 51.9	+ 6.0
1632	1 863.00	5 386.86	265.07	372.60	+2 886.19	+115.4	+ 5.8
1633	1 701.00	4 221.35	265.07	340.20	+1 914.08	+ 83.0	+ 2.5
1634	1 620.00	4 178.33	265.07	324.00	+1 969.26	+ 89.1	- 0.5
1635	1 765.80	5 559.64	265.07	353.16	+3 175.61	+133.2	+ 1.8
1638	1 944.00	5 846.16	265.07	388.80	+3 248.29	+128.9	- 3.0
1639	1 863.00	4 117.69	265.07	372.60	+1 617.02	+ 64.6	- 0.1
1640	1 701.00	3 777.59	265.07	340.20	+1 471.32	+ 63.8	-10.7
1641	1 701.00	5 426.12	265.07	340.20	+3 119.85	+135.3	-20.3
1642	1 539.00	7 116.22	265.07	307.80	+5 004.35	+236.9	-38.5
1643	1 701.00	5 157.84	265.07	340.20	+2 851.57	+123.6	+ 4.1
1644	1 701.00	5 457.42	265.07	340.20	+3 151.15	+136.6	+ 4.6
1645	1 822.50	5 300.63	265.07	364.50	+2 318.47	+ 94.5	+ 1.2
1646	1 458.00	6 722.35	265.07	291.60	+4 707.68	+233.6	- 2.5
1647	1 620.00	10 520.42	265.07	324.00	+8 310.65	+376.1	- 0.3
1648	2 187.00	7 945.37	265.07	437.40	+5 055.90	+175.0	- 2.3
1649	2 187.00	5 983.51	265.07	437.40	+3 094.04	+107.9	- 4.0
1650	2 430.00	6 873.45	265.07	487.00	+3 692.38	+116.1	- 7.9

^a Drawing up the averages, I based on prices from Andalusia and Valencia omitting the prices from the interior of the country which were obviously higher than in the districts around the ports;

^b freight can only be calculated in approximation taking data from the years 1613, 1614, 1617, 1618 for the Netherland-Gdańsk-Spain or Portugal route and deducting from them the assumed cost of transport on the Netherlands-Gdańsk route. Cf. table No. 11, 12 and 13 on pp. 189 - 190 of the article of M. B o g u c k a, *Handel niderlandzko-gdański w latach 1597 - 1651* [*Netherlands-Gdańsk Trade, 1597 - 1651*], "Zapiski Historyczne," 1968, No. 3. This refers to the Dutch ships; transport on Gdańsk ships might have been much more expensive.

^c insurance amounting by the middle of the 17th cent. to 3.5% (compare, N. W. P o s t h u m u s, *Neder-*

merchants' profits started to rise again after 1617 but the Gdańsk merchants took a minimal advantage of this new boom.¹⁷

As shown in table 1, the profits drawn from the Gdańsk wheat trade with Spain were enormous — amounting to 100% or even at times over 300%. It should be borne in mind, however, that Spanish trade had a less attractive side for

Table 2. Prices of Iberian* salt and the profits (losses) from its trade on the Amsterdam-Gdańsk route (in gm. of silver for one last)

Sources: For Amsterdam the table is based on prices given by N.W. Posthumus, in: *Nederlandsche Prijsgeschiedenis ...*, pp. 215 - 218, table 92 - 94 and for Gdańsk on the customs tariffs (WAP Gdańsk 300, 19/45), Scatoll Registers called "palebooks" (WAP Gdańsk 300, 19/16 - 34) and on the minutes from municipality sessions in 1632 (WAP Gdańsk 300, 10/24, p. 289 b)

Year	Average price in Amsterdam ^a	Average purchase price in Gdańsk	Freight ^b	Other costs ^c	Profits or Losses	
					gm. of silver	%
1609	1 707.00	332.64	38.11	33.26	-1 445.73	-81.3
1631	1 179.72	1 620.00	46.26	162.00	+ 323.02	+16.7
1632	1 006.35	1 215.00	46.26	121.50	+ 40.89	+ 3.5
1634	788.58	891.00	46.26	89.10	- 32.94	- 3.5
1638	654.17	972.00	56.54	97.20	+ 164.09	+20.3
1640	826.77	810.00	61.68	81.00	- 159.45	-16.4
1641	797.37	810.00	71.96	81.00	- 140.33	-14.8
1643	528.60	739.00	56.06	73.90	+ 80.42	+12.3
1646	465.48	534.60	48.83	53.46	- 33.17	- 5.8
1648	467.94	534.60	41.12	53.46	- 27.92	- 4.9
				Average	- 132.15	- 7.4

* In the Gdańsk sources called "Spanish".

^a Average taken from the combined basis of prices for salt coming from Cadiz and S. Ubes.

^b Estimated on the basis of data published in the article of M. Bogucka, *Handel niderlandzko-gdański...* [*Netherland-Gdańsk Trade...*], pp. 186 - 187 as well as on additional material from Gemeente Archief in Amsterdam, Notarielle Archiefen, 132, 134, 640, 669, 761, 1525, 1526, 1587, 1588, 1623, 1989.

^c Sound tolls (A. E. Christensen, op. cit., p. 443) amounted for salt to 5% in 1605, to 3.3% in 1635; the Gdańsk "pale-customs" to over 1%, "culaga" to approx. 2% (cf. WAP Gdańsk 300, 10/24, p. 289 b), insurance (according to Posthumus, op. cit.) to approx. 2%. The sum total of all these costs together with port charges, etc. is estimated at about 10% of the Gdańsk price.

¹⁷ *Ibidem*, p. 8.

landsche Prijsgeschiedenis, Leiden 1943, p. LXVI). Customs: "pale-customs" — over 1%, the "Spanish customs" — approx. 0.1%, the "culaga" (if the exporter was a Gdańsk merchant) — approx. 2%, the tolls in Sound — 1.7 - 1.8% (according to A. E. Christensen, *Dutch Trade to the Baltic about 1600*, The Hague 1941, p. 443) and customs in Seville. Furthermore, there were passport and port charges, and by the end of the twenties there came also the Swedish customs. The sum total of these expenses is calculated at about 20% of the purchase price.

⁴ in fact, there were fairly frequent deviations from this average profit, such as in 1609 when certain merchants suffered some losses but the yearly scale of profits amounted in this year theoretically to about 80%.

⁵ Caused by the difference in exchange rates of a ducat and the difference of silver price in Gdańsk and Spain. The calculation is based on the comparison of the price of a ducat in Andalusia given by Hamilton (op. cit.) and the price of a ducat in Gdańsk, given by J. Pełc, *Ceny w Gdańsku w XVI i XVII wieku* [*Prices in Gdańsk in the 16th and 17th Cent.*], Lwów 1937, p. 2 - 6.

the merchants were forced to cover the cost of the return voyage with ballast or even risk the loss in the case of transport of salt. The corn trade was often tied up with the export of salt from the Iberian Peninsula which was not very profitable at that time because of the low price of salt in Gdańsk and the enormous customs duties (30%) levied on exports from Spain.¹⁸ The comparison (table 2) of the price of Iberian salt in Gdańsk with its price in Amsterdam throws some light on this matter.¹⁹

As can be seen from table 2, the trade with Iberian salt brought in certain, although not very great profits only during the period when in 1631 - 1632 salt prices were high on the Baltic owing to the war disorders. The years 1638 and 1643 were also advantageous ones for the salt merchants. The remaining years were characterized by a configuration of prices which was not at all advantageous to the salt importers causing smaller or greater losses, averaging 7—10% of the invested capital. The purposefulness of this trade in general would have been doubtful if it had not been for the fact that on its better side was the very profitable corn trade. The salt trade was not carried out separately but as a part of a much larger exchange operation in which Iberian salt acted not only as a merchandise but also as ballast and as such was a much safer cargo than any other cargo equivalent to corn (salt cargoes were less attractive to pirates than silver ore or coins). This was all the more important because in Spain the export of coins was strictly prohibited²⁰ and if these rules were disregarded the consequences were often grave.²¹ It is also worth remembering that in many cases a kind of transaction tied up with salt had taken place and salt was representing an obligatory element in the clearing. These were the reasons why the salt trade did not die out although the configuration of prices was not advantageous. The merchants took this into account in advance, making allowance for certain losses on the salt which, it is true, lessened their profits somewhat from global transactions but also lessened their risks.²²

There were times, however, when it was worth undertaking the transport of coins regardless of the risks. The last column in table 1 shows the development of the agio of ducat in Gdańsk at that time: in the first two decades of the 17th century it was enormously positive (over 50%), in the third decade it was slightly negative while in 1629 - 1635 it was again active. It was extremely negative from 1638 to 1642 but by 1643 - 1645 it was positive again. The following example will illustrate how these fluctuations affected the shaping of the merchants' profits. There was a certain Gdańsk exporter called Hans Schenck whose corn interests

¹⁸ *Ibidem*, p. 10.

¹⁹ Unfortunately, I cannot analyse the profitableness of the salt trade on the Iberian Peninsula-Gdańsk route because E. J. Hamilton gives only the prices of salt from Valencia which cannot serve as an indicator.

²⁰ Very characteristic is the report of the French Ambassador of September 1626 stating that Spain, until recently abounding in silver, was now in "burning need" of that metal (Paris, Archives Nationales, Affaires Étrangères, Sous-Série B7, 204, pp. 107 - 114).

²¹ For example, confiscations, cf. WAP Gdańsk 300, 5/87, p. 90 ab.

²² *Ibidem*.

in Spain were not prospering very well in 1609. His brother and factor in Amsterdam, Wessel Schenck, authorized a certain Jan Courtoijs to collect from a Jacques Niclaessen in Seville 33143 reals owned for the delivery of 64 lasts and 48 bushels of wheat.²³ The selling price of one last of wheat in Seville amounted to about 510 reals or 19125 marvedis, the equivalent of which in silver was 1836 gm.²⁴ In 1609, the export price in Gdańsk was equivalent to 1423 gm. of silver²⁵, freight amounted to at least 310.36 gm. while other costs are calculated at 284,60 gm. Therefore, we are led to understand that Schenck lost about 181.86 gm. of silver on each last, that is to say about 90% of the invested capital. In fact, however, it was not so bad thanks to the different exchange rates and silver prices in Spain and Gdańsk. If Schenck had collected his dues in ducats, counting 10 reals for 1 ducat and had brought that money to Gdańsk then for each 31 ducats representing 1 last of wheat he would have received 3524 Polish gros (grossi), that is 2170.84 gm. of silver²⁶ which in turn, would mean not a loss but a profit amounting to 152.88 gm. of silver on 1 last, that is to say about 7.5% of the invested capital. It was obviously not a big profit and that was probably why Schenck in the following years resigned from the wheat trade turning to the wood trade.²⁷

T a b l e 3. Sugar prices in Spain and in Gdańsk and the profits (losses) in the sugar trade on this route (in gm. of silver for one Gdańsk stone)

S o u r c e s : The data for Gdańsk were drawn from the "Spanish customs" records (WAP Gdańsk 300, 19/13); for Spain, the prices from Andalusia as given by E. J. H a m i l t o n, *American Treasure*, p. 358 ff.

Year	Average price in Spain	Average price in Gdańsk	Other costs ^a	Profits or losses	
	in gm. of silver			gm. of silver	%
1607	133.91	109.44	44.50	-68.97	-38.7
1608	138.30	109.44	46.05	-74.91	-45.0
1609	148.67	109.44	49.15	-88.38	-44.0
1610	119.94	142.32	41.16	-19.08	-11.8
1611	124.84	142.32	42.70	-25.70	-15.1
1613	146.88	142.32	49.52	-54.08	-27.5
1614	131.87	142.32	44.87	-34.42	-19.5
			Average	-52.15	-28.6

^a Customs duties in Spanish ports amounted to 30% + aprox. 1% Sound toll (cf. A. E. Christensen, *Dutch Trade...*, p. 443) = 31% of the purchase price. + aprox. 3% of the price in Gdańsk ("pale-customs", "Spanish customs"). Because the product was not important and it did not occupy much space, therefore the port charges and the freightage costs were not taken into account. Had they been added, the merchants' losses would have been much higher.

²³ Gemeente Archief in Amsterdam, Not. Arch. 118, p. 6.

²⁴ Calculated according to the exchange rates given by J. Pelc, *Ceny w Gdańsku w XVI i XVII wieku [Prices in Gdańsk in the 16 and 17th Cent.]* Lwów 1937, p. 2-6.

²⁵ Cf. *ibidem*, p. 2.

²⁶ Calculated according to the exchange rates given by J. Pelc, *op. cit.*

²⁷ M. B o g u ć k a, *Handel Gdańska z Półwyspem Iberyjskim... [Gdańsk Trade with the Iberian Peninsula...]*, p. 13.

Even so, this example shows how the play on the agio of a ducat could be profitable and it was a chance which the merchants certainly never failed to miss.

The import of coins and silver played such a big role because the import of the so-called colonial goods from Iberian Peninsula to Gdańsk was not profitable at that time. We show it on the examples of transactions with sugar and pepper, two of the most typical and important goods of colonial trade in the first half of the 17th century (table 3 and 4).

As we can see from table 3, even in those years when the price of sugar was obviously much lower in Spain than in Gdańsk, the high customs duties swallowed up the difference causing serious losses amounting to around 30% and more of the invested capital. Therefore it is not very surprising that the import of sugar to Gdańsk from Spain did not have greater importance. The Gdańsk market was abundantly supplied with sugar by Amsterdam.

Table 4. Pepper prices in Spain and Gdańsk and the profits (losses) in the pepper trade on this route (in gm. of silver for one Gdańsk stone)

Sources: Spanish prices on the basis of the data from Andalusia, given by Hamilton, *American Treasure...*, p. 358 ff.; the Gdańsk prices on the basis of the "Spanish customs" records (WAP Gdańsk, 19/13)

Year	Average price in Spain	Average price in Gdańsk	Other costs ^a	Profits or losses	
	gm. of silver			gm. of silver	%
1607	591.13	218.88	189.75	-562.00	-72.0
1608	597.26	183.30	190.56	-604.52	-76.8
1609	591.13	184.80	188.73	-595.64	-76.3
1611	541.77	184.80	173.23	-530.20	-74.1
			Average	-573.09	-74.8

^a 30% customs in Spain + approx. 1% in Sound (according to A. E. Christensen, *Dutch Trade...*, p. 442) + approx. 3% in Gdańsk ("pale-customs" and "Spanish customs"). Port charges and freightage were not taken into account for in the import of pepper they must have been insignificant. On the whole, merchants' costs are estimated at 31% of the purchase price + 3% of the Gdańsk price.

As can be seen from table 4 pepper was more expensive in Spain than in Gdańsk; the configuration of prices and the high customs duties made import of pepper from Spain to Gdańsk to be a highly unprofitable one. After some attempts it was completely abandoned. Gdańsk was also well supplied with pepper by Amsterdam, where at this time an enormous import of spice caused a marked fall in their prices.²⁸

There seems to be no doubt that only corn trade between Gdańsk and Spain brought big gains. At the beginning of the 17th century profits in this field often reached over 100% of the invested capital (with the cheap Dutch transportation;

²⁸ Cf. M. Bogucka, *Handel Gdańska z Półwyspem Iberyjskim... [Gdańsk Trade with the Iberian Peninsula...]*, p. 21.

the transport on Gdańsk ships would be obviously more expensive). These profits after a temporary and comparatively small decrease in 1609 - 1614 started to rise again, reaching theoretically over 200% and even over 300% in 1640 - 1650. However, in practice, it had become impossible to continue this trade. The agio of a ducat, so positive as we have seen in the first two decades of the 17th century, decreased to such an extent that it even changed into a disagio by the thirties and forties of that century. It was connected with the serious lack of silver which was beginning to be felt in Spain.²⁹ This fact put an end to the previous great difference in the price of silver between the Iberian Peninsula and Gdańsk (it should be remembered that the Dutch were exporting a large amount of silver to Gdańsk at that time). The additional merchants' profit (in spite of the risk of this procedure) from the import of Iberian coins and silver to Gdańsk, had come to an end. The import of Spanish goods, not only salt, but also the so called colonial goods was abandoned because heavy customs duties and insufficient difference in the prices had made them highly unprofitable. The Gdańsk merchants found no difficulty in replacing the Spanish goods with imports from Amsterdam (colonial goods) and France (salt).³⁰ Therefore, when the import of silver and coins had become questionable from the point of view of the merchants' profits, all the Gdańsk-Spain exchanges were interrupted although the price of grain continued to be very high in the Iberian Peninsula. There was simply nothing that could be taken in exchange for the corn. This would seem to be the most valid explanation for the breaking off of direct contacts between Gdańsk and the Iberian Peninsula in the second quarter of the 17th century.³¹

It is clear that the exchange with Amsterdam had a fundamental significance in Gdańsk trade at that time. Many elements concerning the trade on this route are at our disposal enabling us to calculate the merchants' profits. Table 5 presents this question in connection with the rye trade which was one of the principal products exported from Gdańsk. As shown in table 5, the rye exporters' profits were characterized by numerous fluctuations: from barely 5 gm. of silver for 1 last (that is 0.3% of the invested capital) to 1210.28 gm of silver (that is 73% of the invested capital).³² Even so, these fluctuations were not so great as in the trade with Spain for the exchanges with Amsterdam were much more stable in character. It is also worth bearing in mind that not one of the years illustrated in the table 5 shows a loss; the smallest profit, practically a negligible one (0.3%) took place at the beginning of the thirties, when corn prices were very high in Gdańsk, owing to the war with Sweden and the bad harvest in Poland.³³ There came a moment

²⁹ Cf. above n. 20.

³⁰ Cf. N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. 573 ff.

³¹ M. Bogućka, *Handel Gdańska z Półwyspem Iberyjskim...*, [*Gdańsk Trade with the Iberian Peninsula...*], p. 6 ff.

³² The profits from 1600 - 1606 are not taken into consideration because they are based on the data from the retail trade.

³³ This subject is comprehensively dealt with in the work of M. Bogućka, *Handel zagraniczny Gdańska w pierwszej połowie XVII wieku* [*Gdańsk Foreign Trade in the First Half of the 17th Century*], Wrocław 1970, p. 20 ff.

Table 5. The profits of the merchants exporting rye from Gdańsk to Amsterdam (in gm. of silver for one last)

Sources: Amsterdam prices and their equivalent in silver according to N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, pp. XIX-XX and 573-574. It has been established in this table that 1 Gdańsk last = 1 Amsterdam last according to Z. Binerowski, *Gdańskie miary zbożowe w XVII i XVIII wieku [Gdańsk Corn Measures in the 16th and 17th Cent.]*, "Zapiski Historyczne," 1957, No. 1-3, p. 67. The prices for Gdańsk are based on the "Spanish customs" records (WAP Gdańsk 300, 19/13), the "palebooks" (WAP Gdańsk 300, 19/16-34) as well as the customs tariffs (WAP Gdańsk 300, 19/45)

Year	Average export price in Gdańsk		Average price in Amsterdam		Freight ^a		Other costs ^b	Profits	
	A	B	C	B	D	B	B	B	%
1600	55	1 098.9	140.05 ^c	2 187.36	10.00	111.70	109.89	+ 866.87	+67.7
1606	22	420.4	71.37 ^c	1 093.10	10.00	109.40	42.04	+ 521.26	+91.1
1607	30	547.2	56.00 ^d	852.99	10.00	108.90	54.70	+ 142.19	+20.0
1609	65	1 201.2	127.40	1 940.56	10.00	108.90	120.12	+ 510.34	+35.6
1614	50	873.0	102.49 ^e	1 535.30	4.50	48.20	87.30	+ 526.80	+52.2
1617	70	1 169.7	127.93 ^e	1 916.40	5.00	53.60	116.90	+ 576.20	+43.0
1618	55	898.0	111.18 ^e	1 665.50	5.25	56.20	89.80	+ 621.50	+59.5
1628	170	1 407.6	163.00	2 345.90	9.00	97.01	211.14	+ 630.10	+36.7
1630	305	2 470.5	219.80	3 163.36	8.75	95.29	370.57	+ 227.00	+ 7.7
1631	290	2 359.0	269.56	3 878.64	8.75	95.29	353.85	+1 070.50	+38.1
1632	170	1 377.0	117.00 ^e	1 683.86	8.75	95.29	206.55	+ 5.00	+ 0.3
1633	180	1 458.0	125.19	1 801.73	8.75	95.29	218.70	+ 29.74	+ 1.6
1634	119	963.9	120.00 ^f	1 727.04	6.00	61.70	144.58	+ 567.46	+48.5
1636	130	1 053.0	122.53 ^g	1 763.02	7.50	77.10	157.95	+ 474.97	+36.8
1640	120	972.0	128.34	1 847.07	10.00	102.80	145.80	+ 626.41	+51.3
1641	120	972.0	126.47	1 820.16	10.00	102.80	145.80	+ 599.54	+49.1
1643	112	891.0	126.00	1 813.39	10.00	102.80	133.65	+ 685.94	+60.8
1645	120	972.0	128.45	1 848.65	10.85	111.50	145.80	+ 619.35	+50.8
1646	119	963.9	101.32	1 458.20	11.00	113.08	144.57	+ 236.65	+19.2
1648	160	1 296.0	175.00	2 518.60	7.25	74.53	194.40	+ 953.67	+60.9
1649	170	1 377.0	199.74	2 868.36	7.25	74.53	206.55	+1 210.28	+73.0
1650	220	1 782.0	224.84	3 235.90	7.25	74.53	267.30	+1 112.07	+53.2

A = in Polish zlotys (florins) for one last; B = in gm. of silver for one last; C = in gold guildens for one last; D = in carolus guildens for one last.

^a Based on the $\frac{1}{2}$ average freight paid for the transport of rye on the Amsterdam-Gdańsk-Amsterdam route, cf. table no. 13, in: M. B o g u c k a, *Handel niderlandzko-gdański...* [*Netherlands-Gdańsk Trade...*], p. 190. This concern Dutch ships; cost of transport on other ships would have been higher.

^b Customs duties and port charges in Gdańsk and Sound (according to A. E. Christensen, *Dutch Trade...*, p. 443) amounted to approx. 2 $\frac{1}{2}$ %; in Amsterdam in the thirties and forties of the 17th cent. they amounted to approx. 20-24 stuivers for 1 last (cf. Gemeente Archief in Amsterdam, Vroed. Resolutien 16, p. 130 and 138 as well as Recht Archiefen, 2064, note from 16 XI 1645), insurance (according to N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. LXIV) amounted to 2 $\frac{1}{2}$ %. On the whole estimated at approx. 10% of the purchase price at the beginning of the 17th cent.; by 1628 there were the Swedish customs increasing it to about 15% of the purchase price.

^c The price from the corn-bourse, than the selling price for smaller merchants, bakers, etc. Therefore a little higher than in the wholesale trade, N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, pp. 569-571.

^d On the bourse in 1607, the yearly average amounted to 80, 73 gold guildens. Having found notarial protocol from that year (August) about the sale of Gdańsk rye in Amsterdam for about 17.7 talars, i.e., approx. for 32 guildens for 1 last, I am able to accept the yearly average of 56 gold guildens as being the nearest figure (Gemeente Archief Amsterdam, Not. Arch. 253, p. 31).

^e N. W. Posthumus calculating on the basis of prices in February, June and July for this yearly average gives 146, 22 gold guildens, whereas in December 1632 possibly because of the arrival of ships with corn

when the prices in Amsterdam dropped suddenly because supplies of corn had arrived from other countries (Russia);³⁴ the tradespeople exporting rye from Gdańsk, where prices were artificially held high by the town authorities in order to protect local merchants,³⁵ suddenly found themselves in a difficult situation.³⁶ It appeared that the export of corn had become unprofitable for the average profit margin fell to 0.3 - 1.6% of the invested capital. However, by 1634 the export price of grain in Gdańsk was lowered and the profits of merchants exporting rye were stabilized up to quite a high limit, frequently reaching more than 50%. The average rate for the whole of the first half of the 17th century calculated on the basis of the table 5 would appear to be not very much lower — 43.4%. On the whole we can assume that the corn export from Gdańsk to Amsterdam was very profitable, and the profits made out of this kind of activity were facilitating the quick accumulation of capital. It will not be out of place to recall at this moment that the merchants received additional premium amounting to about 50 - 200 kg. of corn on each last because of the difference in measures in Gdańsk and Amsterdam.³⁷

In tables 6 and 7 we show examples of profits realized in the overseas trade of forest products.

Passing over the unfavourable years of 1641 - 1643, when the price of potash fell in Amsterdam but the local merchants continued to maintain the high price level in Gdańsk, it can be seen that the potash export from Gdańsk brought big returns. In spite of the considerable yearly fluctuations, the average rate of profit was somewhat higher than it was with rye export — 45.1% of invested capital.

Profits from the export of wax do not show any great fluctuations. The average profit is not very high amounting to about 15% of the invested capital. In Gdańsk

³⁴ M. Bogucka, *Zboże rosyjskie na rynku amsterdamskim w pierwszej połowie XVII w.* [*Russian Corn on the Amsterdam Market in the First Half of the 17th Century*], "Przegląd Historyczny," 1962, No. 4, p. 611 ff.

³⁵ Cf. above n. 33.

³⁶ *Ibidem*, p. 149.

³⁷ Z. Binerowski establishes on the basis of Hanow work from 18th century that the Gdańsk last and the Amsterdam last were equal (Z. Binerowski, *Gdańskie miary zbożowe...* [*Gdańsk Corn Measures...*], p. 67). At the same time Posthumus throws a different light on this matter for this Dutch scientist estimates 1 last of rye in Amsterdam at 4000 - 4200 pounds (N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. LV), which with the Amsterdam pound amounting to 494 gm. would represent 1976 - 2075 kg. At the same time the Gdańsk last of rye amounted to 2031 - 2344 kg. (Z. Binerowski, *op. cit.*, p. 78). The difference is obvious and considerable.

from Russia, the price of the Prussian rye fell to about 80 gold guildens (Gemeente Archief in Amsterdam Not. Arch. 673). For this reason I am inclined to accept 117 gold guildens as being the yearly average.

¹ Posthumus (*Nederlandsche Prijsgeschiedenis...*, p. 19) gives one price for rye in 1634 (from February only) of 155.87 gold guildens for the last but I have at my disposal the Amsterdam wholesale prices in September of that same year, when the price of rye fell to 92 - 95 gold guildens with the arrival of ships from Russia (Gemeente Archief in Amsterdam, Not. Arch. 669, No. 31, p. 164 - 166, 175, 181 - 182, 195 - 196; 761, p. 487). I have introduced this information in order to give a truer picture of the yearly average.

² Gabriel Marselis once again in December 1636 was selling rye at lower prices at 102 - 103 gold guildens for the last, getting his supplies this time from Królewiec (Gemeente Archief in Amsterdam, Not. Arch. 695, no. 76, note from 24/XII - 1636).

Table 6. Prices of potash in Gdańsk and in Amsterdam and profits (losses) of the potash exporters (in gm. of silver for 1 last)

Sources: Prices for Amsterdam on the basis of N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, pp. 458-459, for Gdańsk on the basis of the customs tariffs (WAP Gdańsk 300, 19/45 as well as the "palebooks" (WAP Gdańsk 300, 19/16-34)

Year	Average export price in Gdańsk	Average price in Amsterdam	Freight ^a	Other costs ^b	Profits or losses	
	in gm. of silver				gm. of silver	%
1634	3 402.00	7 119.41	61.70	408.24	+3 234.47	+ 83.5
1640	3 888.00	4 809.19	102.80	466.56	+ 351.83	+ 7.0
1641	3 888.00	4 588.00	102.80	466.56	+ 130.64	+ 2.9
1642	3 788.00	4 380.51	102.80	466.56	- 66.86	- 1.5
1643	3 499.20	3 691.55	102.80	429.90	- 340.35	- 8.4
1645	2 916.00	4 338.67	113.80	349.92	+ 958.95	+ 28.3
1646	3 374.00	5 096.53	93.10	404.88	+1 224.55	+ 31.6
1648	5 832.00	19 515.55	71.96	699.84	+1 291.75	+197.0
				Average	+2 402.40	+ 45.1

^a Estimated in approximation on the freightage paid for corn. M. Bogucka, *Handel niderlandzko-gdański...* [*Netherlands-Gdańsk Trade...*], p. 190.

^b Port charges, customs and passport charges in Gdańsk — 7% (cf. Allg. Rijksarchief Haag, St. Gen 6578), Sound toll approx. 0.7% (according to A. E. Christensen, *Dutch Trade...*, p. 442), insurance 2%, charges in Amsterdam approx. 1% — on the whole estimated at 12% of the purchase price.

Table 7. Wax prices in Gdańsk and in Amsterdam and the profits of the wax exporters (in gm. of silver for 1 shippound)

Sources: The prices for Amsterdam according to N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. 242; for Gdańsk according to the customs tariffs (WAP Gdańsk 300, 19/45) and "palebooks" (WAP Gdańsk 300, 19/16-34)

Year	Average export price in Gdańsk	Average price in Amsterdam	Other costs ^a	Profits	
	gm. of silver			gm. of silver	%
1618/19	1 958.40	2 469.41	195.80	+315.21	+14.6
1632	1 458.00	2 083.65	218.70	+406.95	+24.2
1638	1 668.60	2 145.64	250.20	+226.84	+11.7
1640	1 701.00	2 215.34	255.15	+259.19	+13.2
1641	1 701.00	2 122.41	255.15	+166.26	+ 8.5
1643	1 458.00	1 937.37	218.70	+260.67	+15.5
1646	1 620.00	2 150.88	243.00	+287.88	+15.4
1648	1 782.00	2 509.66	267.30	+460.36	+13.0
			Average	+297.90	+14.5

^a Customs in Gdańsk in 1618-1619 approx. 3%, in Sound approx. 1.5% (A. E. Christensen, *Dutch Trade...*, p. 443), other costs + freight are estimated at 5.5% therefore totalling about 10% of the Gdańsk price. In the thirties and forties this sum increased to 15% because the customs duties rose in Gdańsk.

in the 17th century the wax trade was only a marginal activity of the great merchants. The demand for wax in the West countries was smaller than it was in previous centuries. This was chiefly due to Reformation, for in the Middle Ages the Church was the great wax consumer. The other important cause of the decline of wax trade was the competition of other producers (Russia) and other Baltic ports (Riga) exporting wax. In any case, however, the wax export from Gdańsk brought in profits although not very high ones, but without any losses, in any of the years, as shown in table 7.

The export of Polish products by Gdańsk made only one side of the great foreign trade concentrated here in the 17th century. Questions concerning the profits realized from exports should be considered, therefore, together with problems concerning gains procured from import of various goods to Gdańsk from Western Europe. The disadvantageous customs duties and price configuration for import goods put an end to, as we have seen, the trade between Gdańsk and Spain even though these exchanges had been very lively ones and the Polish corn fetched very good prices on the Iberian Peninsula at the beginning of the 17th century. How does this matter look on the sector of contacts with Amsterdam? There can be no

Table 8. Prices of herrings in Amsterdam and Gdańsk and the profits (losses) in the herring trade on that route (in gm. of silver for one last)

Sources: Prices for Amsterdam according to N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, pp. 85 - 90; for Gdańsk according to the customs tariffs (WAP Gdańsk 300, 19/45), "palebooks" (WAP Gdańsk 300, 19/16 - 34) and the minutes from municipality sessions in 1632 (WAP Gdańsk 300, 10/24, p. 289). The table deals with the most expensive Flemish herrings and herrings from Scandinavia for which we have adequate information.

Year	Average price in Amsterdam	Freight ^a	Other costs ^b	Average price in Gdańsk	Profits (losses)	
	gm. of silver				gm. of silver	%
1631	1 264.44	92.52	214.96	2 025.00	+453.08	+28.8
1632	1 252.41	92.52	231.52	2 268.00	+691.55	+43.9
1634	1 644.80	61.68	249.20	2 293.20	+337.52	+17.2
1638	1 634.52	66.82	234.28	2 349.00	+413.38	+21.3
1640	1 215.89	102.80	216.52	2 349.00	+813.79	+53.2
1641	1 661.45	102.80	221.96	1 944.00	- 42.21	- 2.1
1643	1 491.03	102.80	221.64	2 025.00	+209.97	+11.5
1645	1 230.10	113.08	211.20	2 025.00	+470.62	+30.3
1646	1 140.36	113.08	168.72	1 539.00	+116.84	+ 8.2
1648	1 038.28	77.10	132.24	1 134.00	-113.62	- 9.2
				Average	+335.11	+18.3

^a Estimated on corn freightage: cf. M. Bogućka, *Handel niderlandzko-gdański... [Netherlands Gdańsk Trade...]*, p. 190.

^b Charges in Amsterdam approx. 1.5%, Sound toll approx. 2.5% (A. E. Christensen, *Dutch Trade...*, p. 442), customs and charges in Gdańsk approx. 8% (cf. Allg. Rijksarchief Haag St. Gen. 6578) totalling 4% of the purchase price + 8% of the selling price.

doubt at all that the profits driven from the import of goods from Western Europe were considerably lower than those gained in the export operations. The trade in herrings was perhaps the most profitable; they were one of the few not luxurious goods to appear in the imports to Gdańsk at that time (table 8).

The profitability of the import of such goods as raisins, almonds or pepper was small. The details are given in tables 9, 10 and 11.

Table 9. Prices of raisins (long) in Amsterdam and in Gdańsk and the profits (losses) in their trade (in gm. of silver for one stone)

Sources: Prices for Amsterdam according to N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. 109, table 54; for Gdańsk according to the customs tariffs (WAP Gdańsk 300, 19/45) and "palebooks" (WAP Gdańsk 300, 19/16 - 34)

Year	Average price in Amsterdam	Average price in Gdańsk	Other costs ^a	Profits or losses	
	gm. of silver			gm. of silver	%
1632	36.60	56.70	5.67	+14.43	+34.5
1634	42.25	48.60	3.98	+ 2.37	+ 5.2
1640	49.34	48.60	4.19	- 4.93	- 9
1641	32.48	48.60	3.68	+12.44	+34.6
1643	29.91	32.40	3.46	- 0.03	-0.09
1646	37.42	40.50	4.41	- 7.49	-17
1648	43.99	40.50	4.53	- 8.01	-16.5
			Average	+ 1.25	+ 4.5

^a Port charges and customs duties in Gdańsk estimated at 8% of the Gdańsk price, Sound toll at approx. 1% of the Amsterdam price (A. E. Christensen, *Dutch Trade...*, p. 443), insurance at approx. 2% of the Amsterdam price. Freightage costs were minimal and so were not taken into consideration.

Table 10. Prices of almonds in Amsterdam and in Gdańsk and the profits (losses) in their trade (in gm. of silver for one stone)

Sources: Prices for Amsterdam according to N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. 106; prices for Gdańsk according to the customs tariffs (WAP Gdańsk 300, 19/45) and "palebooks" (WAP Gdańsk 300, 19/16 - 34)

Year	Average price in Amsterdam	Average price in Gdańsk	Other costs ^a	Profits or losses	
	gm. of silver			gm. of silver	%
1632	83.51	105.30	11.52	+10.27	+10.7
1642	74.83	113.40	12.04	+26.56	+30.5
1643	72.86	97.20	10.68	+13.86	+16.7
1648	71.58	81.00	9.31	+ 0.11	+ 0.1
1649	81.88	64.80	6.40	-23.48	-29.9
			Average	+5.28	+5.6

^a Customs and charges in Gdańsk approx. 8% of Gdańsk price, Sound toll approx. 2% of the Amsterdam price (A. E. Christensen, *Dutch Trade...*, p. 440), insurance approx. 2% of Amsterdam price. Freightage was minimal and is not taken into consideration.

Table 11. Prices of pepper in Amsterdam and in Gdańsk and the profits (losses) in this trade (in gm. of silver for one stone)

Sources: The table is based on data from N. W. Poathumus, *Nederlandsche Prijsgeschiedenis...*, pp. 73 - 74, the "Spanish customs" records (WAP Gdańsk 300, 19/13), customs tariffs (WAP Gdańsk 300, 19/45) and "palebooks" (WAP Gdańsk 300, 19/16 - 34)

Year	Average price in Amsterdam	Average price in Gdańsk	Other costs ^a	Profits or losses	
	gm. of silver			gm. of silver	%
1609	183.82	184.80	11.01	-10.3	- 5.1
1632	130.14	153.90	16.14	+ 7.62	+ 5.2
1634	151.84	178.20	18.80	+ 7.56	+ 4.9
1638	184.32	202.50	21.68	-3.5	- 1.7
1641	143.20	186.30	19.17	+23.93	+14.9
1643	151.84	178.20	18.77	+ 7.59	+ 4.4
1646	130.14	137.70	14.94	- 7.38	- 5
1648	123.57	145.80	15.37	+6.86	+ 4.9
			Average	+ 4.8	+ 2.8

^a Port charges and customs in Gdańsk in 1609 — 3%, afterwards approx. 8% of Gdańsk price. Port charges in Amsterdam, insurance — 2%, Sound toll approx. 0.7% (A. E. Christensen, *Dutch Trade...*, p. 442) — in all 3% of the Amsterdam price. Freightage has been excluded from the calculation.

As these tables have shown, the profits from the trade in colonial goods between Amsterdam and Gdańsk were not at all great. Of course the tables are based on rather lowered data; the average figure does not reflect short fluctuations and there were many of them within the period of one year in the market price allowing one merchant to make profits while another suffered losses. In 1641, for example, the price of pepper wavered in Gdańsk from 26 Polish zlotys to 62 Polish zlotys for 1 stone³⁸ allowing some of the importers to make over a 150% gain on certain transactions. However, even with only mediocre profits the import of colonial goods to Gdańsk was advantageous for Dutch merchants because there was such an abundance of these supplies in Amsterdam that each outlet was important.

The average profits realized in the import of French wine from Bordeaux present themselves in a somewhat better light. These profits are, of course, slightly lowered in table 12. In order to get a truer picture, the price of the wine in Bordeaux itself should be taken into consideration (it was from there that the Dutch merchants received their supplies), but I have not sufficient data at my disposal for estimation of profits on the route Bordeaux-Gdańsk.

A very interesting matter is the trade with French salt and the profits from it, particularly if they are compared with the figures from the Iberian salt trade. Unfortunately, I have all necessary elements relating only to three years: 1632, 1640, 1644 (table 13).

³⁸ WAP Gdańsk 300, 19/23 - 25.

Table 12. Prices of wine from Bordeaux in Amsterdam and in Gdańsk and the profits (losses) in wine trade (in gm. of silver for one pipe)

Sources: Prices for Amsterdam from N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, pp. 225 - 226, table 96; for Gdańsk from the customs tariffs (WAP Gdańsk 300, 19/45) and "palebooks" (WAP Gdańsk, 300, 19/16 - 34)

Year	Average price in Amsterdam	Average price in Gdańsk	Freight ^a	Other ^b costs	Profits or losses	
	gm. of silver				gm. of silver	%
1632	518.52	567	56.54	76.44	- 84.50	-12.9
1634	552.12	648	56.54	84.96	- 45.62	- 6.5
1638	488.21	567	38.55	74.64	- 34.40	- 5.7
1640	801.84	972	38.55	125.88	+ 5.73	+ 0.6
1641	771.00	1134	38.55	136.98	+187.47	+19.9
1642	582.88	648	38.55	86.76	- 60.19	- 8.5
1643	587.91	739	51.40	94.40	+ 5.29	+ 0.9
1645	487.76	739	61.68	88.40	+101.16	+15.9
1646	405.53	739	42.15	83.42	+207.90	+39.1
1648	609.09	648	42.15	88.38	- 91.62	-12.2
				Average	+ 19.12	+ 3.1

^a Freightage for 1 pipe of wine on the La Rochelle-Amsterdam route amounted in 1634 to 5 carolus guildens (Gemeente Archief in Amsterdam 668, no. 29, pp. 77 - 78), on the Nantes-Amsterdam route it amounted to 6 carolus guildens (as above pp. 78 - 79), that is 56.54 gm. of silver. This can be accepted as a certain simplification of the cost of transport of one pipe of wine on the Amsterdam-Gdańsk route. Freightage for 1 pipe of wine in 1635 on the Northern France-Amsterdam route amounted to 3.75 carolus guildens (Gemeente Archief in Amsterdam, Not. Arch. 670, no. 35, 12 (VII - 1635) that is to say 38.55 gm. of silver. This once again can be accepted for the Amsterdam-Gdańsk route. In 1643 freightage amounted to approx. 5 carolus guildens for 1 pipe (Gemeente Archief in Amsterdam, Not. Arch. 1588, pp. 390 - 391) that is to say approx. 51.40 gm. of silver. In 1644 freightage amounted to 6 carolus guildens already (Gemeente Archief in Amsterdam, Not. Arch. 1623, pp. 571 - 573), that is to say 61.68 gm. of silver. In 1646 freightage amounted to approx. 4.1 carolus guildens (Gemeente Archief in Amsterdam, Not. Arch. 1589, pp. 109 - 110), that is to say to approx. 42.15 gm. of silver.

^b Sound toll — approx. 2,5% (A. E. Christensen, *Dutch Trade...*, p. 443), insurance — approx. 2% (N. W. Posthumus, *Nederlandsche Prijsgeschiedenis...*, p. LXIV), customs and charges in Gdańsk — approx. 8%, the total sum estimated (together with port charges and costs in Amsterdam) at 6% of the purchase price in Amsterdam + 8% of the selling price in Gdańsk.

Table 13. Prices of French salt and the profits in its trade on the routes from the French ports to Gdańsk (in gm. of silver for one last)

Sources: French prices on the basis of M. Delafosse and Cl. Laveau, *Le Commerce du sel de Brouage aux XVII^e et XVIII^e s.*, Paris 1960, p. 104; Gdańsk prices on the basis of "palebooks" (WAP Gdańsk 300, 19/16 - 34) and customs tariffs (WAP Gdańsk 300, 19/45)

Year	Average price in France	Average price in Gdańsk	Freight ^a	Other costs ^b	Profits (losses)	
	gm. of silver				gm. of silver	%
1632	267.3	972	154.2	97.2	+453.3	+87.5
1640	139.2	486	154.2	48.6	+144	+42.1
1644	170.1	405	154.2	40.5	+ 40.2	+11

^a Cf. M. Bogucka, *Handel niderlandzko-gdański...* [Netherlands-Gdańsk Trade...], pp. 186 - 187.

^b Estimated on 10% of the Gdańsk price.

As is shown in table 13, in 1632 the importers of French salt to Gdańsk, took advantage of the high prices in Baltic countries at that time and were able to draw considerable profits up to over 80% of their invested capitals. It was due to this favourable boom that the idea was conceived to interest the ever needy French Court in these transactions. They did not, however, prove to be so advantageous as was anticipated.³⁹ Somehow, as the table shows, the profitability of the French salt trade dwindled, especially by the forties. Even so, this trade was more profitable than bringing in salt to Gdańsk from the Iberian Peninsula and was the reason for the Dutch merchants very clear preference for French salt in the second quarter of the 17th century.⁴⁰

The above mentioned data and materials do not show the entire assortment of merchandise figuring in Gdańsk trade at that time. The many varieties in the qualities of textiles and the complicate methods of measure do not allow us, for example, to calculate the profits gained from the trade in cloth and other materials forming an important part of the Gdańsk turnover. As far as many of other articles are concerned, because of the lack of informations of prices, it is impossible to draw any conclusions about merchants' profits. We should remember too, that the figures appearing in our tables, are to a greater extent based on tariffs; it means of course the simplification of the question (it prevents us, for example, from taking the considerable fluctuations within one year into consideration). They must, therefore, be treated only as indicators. In the case of imported goods, most part of the tables give informations about the different prices in Gdańsk and Amsterdam and about the profits on this route. Most of the products imported to Gdańsk, however, came by way of Amsterdam having been purchased more cheap in the place of their origin (colonial goods in America and India, wine in Bordeaux etc.). Therefore, the profits gained from their import to the Baltic ports should have been higher than is apparent from our tables. Nevertheless, the tables support the drawing of the following conclusions: the most profitable side of overseas trade was export from Gdańsk, with rye export, in particular, assuring large and certain profits. Considerably less profitable was the import of goods from the West, and it was probably regarded by big foreign merchants as a supplement to the export. It was a matter of the utmost concern to the intermediaires, local merchants in Gdańsk making good gains out of the sale of imported goods⁴¹ that at least a part of the equivalent for corn should be returned in merchandise. On the other hand, in a majority of cases, it was advantageous for the foreign mer-

³⁹ M. Komaczyński, *Transakcja solą dworu francuskiego w Gdańsku 1636 - 1637* [*The Salt Transaction of the French Court in Gdańsk, 1636 - 1637*], "Roczniki Dziejów Społecznych i Gospodarczych," vol. XXIV, 1962, pp. 89 - 115.

⁴⁰ Cf. M. Bogucka, *Sól w handlu bałtyckim pierwszej połowy XVII wieku* [*Salt in the Baltic Trade in the First Half of the 17th Century*], "Zapiski Historyczne" (in print).

⁴¹ More widely deals with this subject: M. Bogucka, *Handel zagraniczny Gdańska w pierwszej połowie XVII wieku* [*Gdańsk Foreign Trade in the First Half of the 17th Century*], p. 140 ff.

chants to pay in silver for the Gdańsk corn because the prices of silver were higher in the Baltic countries than in the Western countries. Table 14 presents this problem.

As this table shows, the different exchange rate of the Polish zloty and the different price of silver in Amsterdam and Gdańsk at that time created an extra premium (on average 9.7%) for the Dutch merchants trading with Gdańsk, if they paid for Polish goods in coins or in silver. Judging by the positive balance of Gdańsk trade ⁴², great part of its turnover must have been accomplished in this way.

T a b l e 14. Rate of the Polish zloty (florin) in Amsterdam and in Gdańsk at the turn of 16th-17th century

S o u r c e s : The table is based on the data from "Economisch Historisch Jaarboek," S. Graenhage 1906, vol. III, pp. 277, 279 as well as Gemeente Archief in Amsterdam, Not. Arch. 132, p. 215; 150, pp. 10 - 12, 33; 151, p. 127; 153, pp. 64, 79

Year	Price of the Polish zloty in Dutch stuivers	Equivalent of the Polish zloty in gm. of silver	
		in Amsterdam	in Gdańsk
1595	40	22.88	20.85
1613	36	19.47	17.40
1617	34	18.36	16.71
1618	32—33	17.55	16.32

Taking all into consideration it can be said, that in spite of the fact that often high and rigid export prices were fixed in Gdańsk by the town authorities ⁴³, the participation in foreign trade of Gdańsk was very profitable. The great sea trade demanded considerable capital investments but, at the same time, the profit margins were big and the possibilities for the accumulation of capital — wide. It is true that this trade was burdened by rather heavy customs duties in the thirties and forties of the 17th century ⁴⁴, but the risks connected with operations were not

⁴² M. B o g u c k a, *Handel bałtycki a bilans handlowy Polski w pierwszej połowie XVII wieku [Baltic Trade and the Polish Trade Balance in the First Half of the 17th Century]*, "Przegląd Historyczny," 1968, No. 2, p. 245.

⁴³ More widely deals with this subject: M. B o g u c k a, *Handel zagraniczny Gdańska w pierwszej połowie XVII wieku [Gdańsk Foreign Trade in the First Half of the 17th Century]*, p. 14 ff.

⁴⁴ First introduced during the war by the Swedes these customs were maintained at the high rate of 5.5% up to 1635. Later in 1637/8 Polish King, Ladislaus IV attempted to introduce customs of 4.5%. In 1638 and 1645 the Dutch estimated the customs and other charges in Gdańsk at approx. 7 - 8% (Allg. Rijksarchief Haag St. Gen. 6578 as well as Gemeente Archief in Amsterdam, Archief der Burgermeestern Dipl. Miss 106). The closures of Sound and increase of Sound toll also played a big role here. Cf. G. W. K e r n k a m p, *De Sleutels van de Sont*, S' Haga 1890.

high at that time⁴⁵, which, in its turn, had no small meaning for the development of Baltic navigation and exchange. Although the revolution of prices had been slowed down at the beginning of the 17th century, with the fluctuations of the conjuncture, making themselves felt in European trade, and terms of trade deteriorating, the export of agricultural and forestry goods from Poland and the import of colonial and industrial goods, connected with silver- and coins-operations, created occasions for considerable gains. With the elimination of the Gdańsk merchants from overseas trade, these profits, in an increasingly greater degree were grasped by foreign merchants, especially by the Dutch.

(Translated by D. Heaton-Potworowska)

⁴⁵ It is true that there were numerous complaints about the pirates from Dunkirk (cf. Gemeente Archief in Amsterdam, Not. Arch. 695, no. 68, 69), the English capers (cf. Paris, Archives Nationales, Affaires Étrangères, Sous-Série B 7 204, pp. 78-88) as well as the disturbances on the Baltic sea in general (cf. WAP Gdańsk 300, 10/24, p. 429 ff). Even so, the insurance of only 2% for Baltic travel (N. W. P o s t h u m u s, *Nederlandsche Prijsge-schiedenis...*, p. LXIV) was not so very high, proving that the level of the navigation ability and technique of the 17th-century fleets was so high that the risks were considerably smaller than in the Middle Ages.