

Antwerp Sugar Prices from the Hundredth Penny Tax Records (1543-45)

Donald J. Harreld

Brigham Young University

Despite the fact that there existed a regularly published commodity price current in Antwerp as early as August 1540, determining prices for sugar on the Antwerp market during the sixteenth century has been a difficult task because no examples of the Antwerp price currents survive from this early period.¹ Economic historians have been forced to rely on secondary evidence for prices and price fluctuations during the period when Antwerp was at its zenith as the European entrepôt for an increasingly global trade. Herman van der Wee's older book on the Antwerp economy includes a study of prices based on institutional purchases of a variety of goods, including sugar.² Van der Wee surveyed the records of the prices paid by the Infirmary of the Beguinage at Brussels for its annual spice and sugar purchases each year at the Antwerp fairs. As a result, van der Wee offers a fairly long price series, but his data are based on a yearly purchase of only about twenty pounds of sugar, and at only one time of the year. John McCusker's as yet unpublished studies of Antwerp prices for Brazilian sugar during the second half of the sixteenth century form the basis of much of the more recent work on sugar prices in Antwerp for the late sixteenth century,³ but direct sources

¹ John J. McCusker and Cora Gravensteijn, *The Beginnings of Commercial and Financial Journalism: The Commodity Price Currents, Exchange Rate Currents, and Money Currents of Early Modern Europe*, (Amsterdam, 1991), 86-87.

² Wee, Herman van der. *The growth of the Antwerp market and the European economy (fourteenth-sixteenth centuries)*, (the Hague, 1963).

³ McCusker presented his initial conclusions at the conference: *Internationale Handel in de Nederlanden (14e-16e eeuw): Kooplieden, Organisatie en Infrastructuur*, Gent/Antwerp, 1997.

are lacking for price data in the earlier period of Antwerp's *Golden Age*. This essay analyzes some evidence for sugar prices in Antwerp for a thirty-month period between April 1543 and September 1545 culled from the entries in the registers of the Hundredth Penny Tax instituted by Charles V in order to finance one of his many wars.¹ The Hundredth Penny Tax was an export tax in the amount of one percent applied to all goods leaving the Habsburg Low Countries. While there were some exemptions to this tax, every overland export to the German towns was recorded. Since Germans likely either purchased the bulk of Antwerp's sugar or figured in some way in the transport of sugar to destinations farther east, these records provide a good basis for determining the wholesale prices for sugar leaving Antwerp at this early period. The right to collect the Hundredth Penny Tax was awarded to the Italian financier Gasparo Ducci, in exchange for an up-front payment of 200,000 *carolus gulden*. In order to safeguard his investment, Ducci made sure that meticulous records were kept. In the end, Ducci's investment was not very profitable, and he failed to break-even after subtracting his costs; but his records are a tremendous source for research in economic history. These tax records list the name of the merchant or factor responsible for the export, the destination of the goods, a list of the goods (often with their individual values broken-down), total value of the shipment, and the total amount of the tax.

Out of approximately 1380 identified instances of sugar being shipped to German lands during the thirty-month period of the tax (spanning much of 1543-1545), it was possible in 506 of these instances to determine the price per Antwerp pound (the equivalent of about 470 grams) of sugar with a reasonable degree of accuracy. The majority of the shipments in which sugar forms a part list only the total value of all goods; the values for the individual goods are not itemized. Some shipments list the number of barrels of sugar along with the total value of the barrel(s), but this information is of little use since Antwerp sugar exporters of the sixteenth century did not use a standard barrel size. In 1507, Portuguese merchants shipped fifty barrels of sugar and syrup from Madeira to Antwerp. The

¹ Algemeen Rijksarchief van België (ARA), Rekenkamer, 23357-23364.

barrels contained varying quantities of sugar.⁵ Barrel sizes for sugar being shipped from Antwerp to German cities during the 1540s ranged from 300 to 1200 Antwerp pounds, with most barrels falling somewhere in the neighbourhood of 750 Antwerp pounds, or about 352.5 kilograms. References to "small" barrels containing weights between 100 and 400 Antwerp pounds are also found in the records. Relatively few of the entries in the tax record indicate directly the price per pound for the sugar. An entry from the registers provides a good example of the substance of the entries: "From Hans Rucker, the sum of 2£ 5s. 6d. for the reason of having sent to Augsburg two barrels of sugar of São Tomé and one cask of candy sugar valued together at 38£ *groot*⁶ for which the tax of one percent amounts to 2£ 5s. 6d."⁷ While these registers provide a wealth of information, there are several problems that cannot always be overcome. For instance, this entry does not indicate how much sugar is packed in a barrel or cask. Furthermore, there is no way to determine the individual values of the barrel or cask, because the tax record does not break them down. In just over five hundred instances, however, the price can be calculated; these entries list the weight of the sugar in Antwerp pounds and include the total value of the sugar as well.

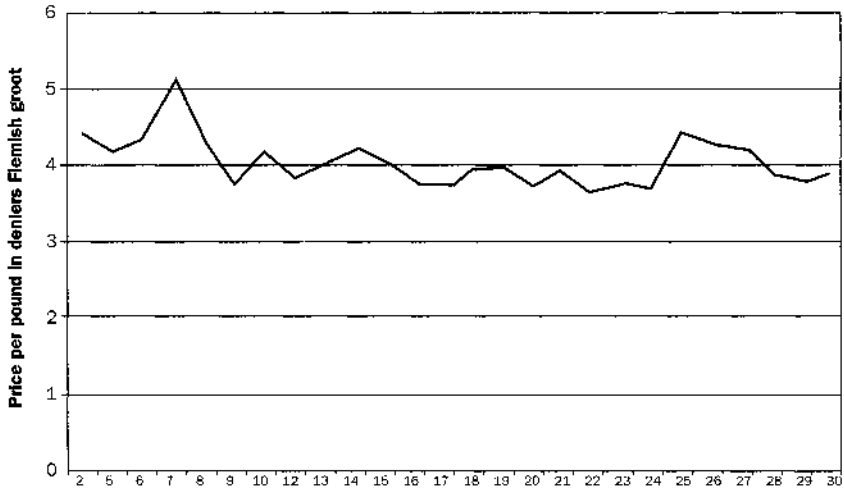
Figure 1 shows the average price for the sugar of São Tomé as reported by merchants shipping their sugar to Antwerp for the period of the Hundredth Penny Tax. On average, the price over this two and a half year period hovered around 4 d., with a slight decrease in the average price during 1544 and early in 1545. It is interesting to note that although the average prices for sugar from São Tomé tended to decrease slightly

⁵ Doehaerd, Renée, *Études anversoises; documents sur le commerce international à Anvers, 1488-1514, Ports, routes, et trafics 14*, (Paris, 1962).

⁶ Unless otherwise noted all values are in the Flemish *groot*, the money of account of Flanders. The Hundredth Penny tax records use the abbreviations: £ = pounds, s. = shillings, and d. = deniers or *groot* penny. In order to avoid confusion these abbreviations will be used in this essay despite the fact that various other abbreviations can be found in the other sources.

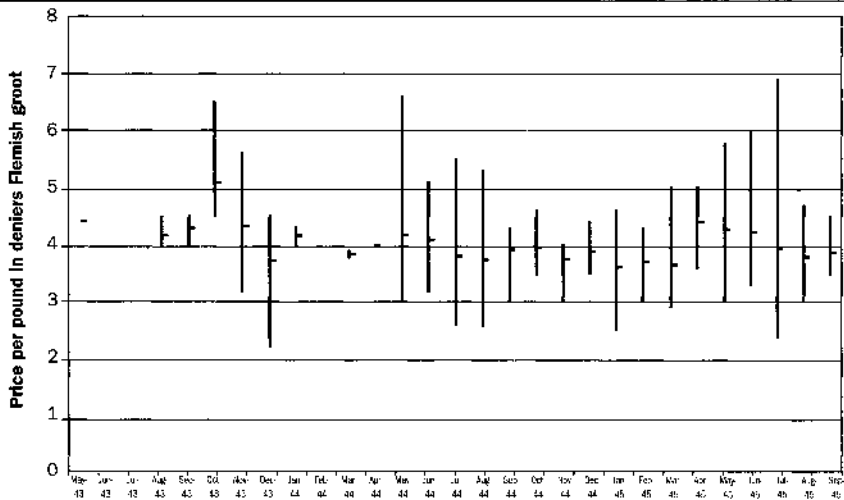
⁷ From ARA, Rekenkamer 23359, f^o 315. "De Hans Rucker la somme de deux livres cinqz slz six deniers, pour et a cause d'avoir chargé vere Augsburg deux tonneaux de sucre de St Thome et une casse de sucre candie valissons ensemble xxviii £ de grt dont pour ledict doit dung pour cent remont ladicte somme de: ii £ v s. vi d."

FIGURE 1 - Average Price Paid at Antwerp for São Tomé Sugar during the Thirty-Month Period of the Hundredth Penny Tax (April 1543 - September 1545)



Source: ARA, Rekenkamer 23357-23364

FIGURE 2 - High-Low Price Series for São Tomé Sugar after the Hundredth Penny Tax Records, April 1543 - September 1545



Source: ARA, Rekenkamer 23357-23364

over this period, the range of prices fluctuated wildly. For instance in July 1545 the price ranged from a low of 2.4 d. to a high of nearly 7 d. (See figure 2). While one might suspect a merchant of deflating the reported price of the sugar in order to lessen the tax burden (the tax, of course, would have been passed on to the consumer), the fact that Gasparo Ducci was a merchant himself and was likely well aware of the usual prices of various goods (and he probably made sure his collectors were equally aware of the current prices) suggests that widespread cheating would have been only a remote possibility. By the period of the tax, the regular price currents were already being published, resulting in widespread knowledge of the prices for sugar. It is quite likely that quality was a greater indicator of price than any other variable, since volume shipped seems to have made little difference in the price per pound. The quality of São Tomé sugar was considered to be lower than that of the sugars from the other Atlantic islands, but prices fluctuated within all categories of sugar, perhaps evidence that quality was a constant concern and price determinant in Antwerp. The Augsburg firm of Bartolomeo Welser and Cie. found it necessary to file a statement attesting to the good quality of a sugar shipment it delivered in 1542.⁸ One of the largest shipments of sugar from Antwerp to Germany was made by Erasmus Schetz by way of the port of Amsterdam in 1543. It consisted of nine barrels and amounted to 11,000 Antwerp pounds (about 5 tons). Despite the size of the shipment, the price per pound amounts to 8.5 d.⁹

The prices for other types of sugar on the Antwerp market are more difficult to determine with any degree of accuracy, particularly over time. Data for indentifying prices of sugar from the Canaries (a Spanish possession) on the Antwerp market over the course of the Hundredth Penny Tax are sketchy at best. Sugar from the Canaries seems to have been most available during the summer months of July and August. From the little data that are available, we find that prices declined to a low of about 5 d. in early August 1544 and then climbed again to a high of 11 d. about one year later, in July 1545. The average price (of those transactions for which a price per pound can be calculated) for the thirty-month period of the Hundredth Penny Tax is 7.5 d. Barrel sizes into which Canaries sugar was packed ranged from 300 Antwerp pounds to over

1000 Antwerp pounds. The barrels identified as "small," contained quantities ranging from 120 to 400 Antwerp pounds. In only one instance was Canaries sugar packed in a cask rather than a barrel.

Very little information is available from the Hundredth Penny registers to provide for an accurate picture of the prices for sugar from Madeira. From what little evidence we have, it is clear that Madeira sugar was priced higher than the other most common varieties of sugar available at Antwerp. The average price calculated from a very small sample of only twenty entries spanning the entire thirty-month period is 7.5 d. The high price was 11 d. in January 1545, the low price recorded in March 1545 at 5.25 d. Prices for the sugar of São Tomé were also fairly low in March 1545, instances of prices around 3 d. being fairly common, before falling even further in the summer of 1545.

The origin of a great deal of the sugar sold on the Antwerp market was not specified in the records. Four hundred instances of sugar without any other designation are enumerated in the Hundredth Penny Tax registers. Of these, only forty-eight list both the weight and the price of the sugar. Not surprisingly, prices for sugar without an origin designated exhibited greater price fluctuations. The average price of 5.66 d. was comparable to that of sugars identified by place of origin, somewhat higher than the sugar of São Tomé, and somewhat lower than the sugars of Madeira and the Canaries. The high price for the period was 14.4 d. in August 1544. The lowest price listed was 2.64 d., recorded in January 1545. Sugar of unspecified origin was shipped out of Antwerp in a wider variety of containers than other sugars. While primarily packed in barrels and casks, sugar was also shipped in coffers, packs, baskets, and pipes.

Two other sugar types are also found in the Hundredth Penny Tax registers: candy sugar and powder sugar. Candy sugar (*sucre candi*) averaged just over 6 d. during the Hundredth Penny Tax period. Prices for candy sugar fluctuated only slightly; tending to remain more or less constant during the entire period. Although the data are based on a fairly small sample, the average price for powder sugar during this period was 2.96 d. The high price was 4.8 d. in August, 1545, the low price 2.16 d. in January, 1544. Despite the fact that the low price was recorded in January, 1544, average prices were somewhat higher for 1543-44 and

decreased slightly around October, 1544 through the summer of 1545.

Comparing these data to the series compiled by van der Wee yields a much clearer picture of price variation at Antwerp during the middle years of the sixteenth century. While the limited sample van der Wee gathered is still very useful, his data can only offer a year-by-year indication of prices. As a result, these records of the Infirmary of the Beguinage do not show the kinds of price fluctuations that were more common in Antwerp's markets. The data from the Hundredth Penny Tax records, on the other hand, indicate that prices were much more variable. This should come as no surprise since van der Wee's data measured a single purchase once each year. Furthermore, the data reported by van der Wee do not indicate any price variation during the period of the Hundredth Penny Tax.

The object of this short essay has been to bring to light evidence for a better understanding of sugar prices in the first half of the sixteenth century. While it is quite clear that the Hundredth Penny Tax records were not intended to track prices, they provide sufficient data to track sugar prices at the Antwerp market from about February 1543 through August 1545. Some important considerations need to be borne in mind. The first few decades of the sixteenth century witnessed significant increases in the quantities of sugar coming in to Europe from the Portuguese and Spanish possessions in the Atlantic. Under these circumstances, prices were understandably fairly low, as they had been, on average, since Atlantic sugar had begun to be sent to Europe in large amounts since the late fifteenth century.¹⁰ While supply increased by leaps and bounds, consumption patterns were much slower to change.¹¹ Strong supply and low initial demand probably kept prices low before the second half of the sixteenth century.

* Stadsarchief Antwerpen, *Certificatieboek* 5, 1542, f° 26 verso

⁹ ARA, *Rekenkamer* 23357, 1543, f° 234 verso

¹⁰ J. H. Galloway, *The Sugar Cane Industry: An historical geography from its origins to 1914*. (Cambridge, 1989), 50.

¹¹ E. Schokkaert and H. van der Wee, "A Quantitative Study of Food Consumption in the Low Countries during the Sixteenth Century," *Journal of European Economic History* 17 (1988): 142-143.



