

Marsilio, Claudio

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Genoese financiers and the redistribution of Spanish bullion: The “Mediterranean Road” (1630-1700)*

Claudio Marsilio

*Research Unit in Economic & Social History (GHES)
Management & Social Sciences Research Centre (CSG)
Lisbon School of Economics & Management (ISEG)
University of Lisbon*

ABSTRACT

Classical historiography treats the years 1650-1700 as pivotal in the movement of the centre of international finance first to Amsterdam and then, at the beginning of the 18th century, to London. The Mediterranean Sea, as theorised by Fernand Braudel's "world-economy" model, was relegated to a secondary role, while the destiny of the international economy was decided in northern Europe. Many works have examined the role of the Genoese bankers in a previous period (1550-1650). After the bankruptcy of Phillip IV (1627), however, we get the impression that Genoa disappeared from the map of European finance. What happened to the Genoese brokers between 1650 and 1700? Their proverbial expertise and financial intuition allowed them rapidly to change course and undertake a strategy which took the form of an intelligent and utilitarian "reconversion." Starting from the 1630s, the Genoese bankers sought to obtain repayment in silver of the capital they had invested in Madrid. This fresh inflow of capital gave the new generation of Genoese bankers the opportunity for a radical change of perspective. They would no longer be active in the market for Spanish public debt and loans (*asientos*); instead, they would manage financial services and the international bullion market. This article shows how the Genoese bankers played a pre-eminent role on the bullion market throughout the second half of the 17th century.

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Introduction

Classical historiography treats the years 1650-1700 as the pivotal period of the movement of the centre of international finance first to Amsterdam and then, at the beginning of the 18th century, to London. The Mediterranean Sea, as theorised by Fernand Braudel's "world-economy" model, was relegated to a secondary role, while the destiny of the international economy was decided in northern Europe. Classical historiography has focused on the role of the Genoese in the period 1550-1650. After the quiebra (bankruptcy) of Phillip IV (1627), however, we get the impression that Genoa disappeared from the map of European finance.

What happened to the Genoese between 1650 and 1700? Giuseppe Felloni has underscored the presence of Genoese capital in the public debt of several European countries at the beginning of the eighteenth century.¹ How did the Genoese operators regain their role atop the European financial market? Their proverbial expertise and financial intuition allowed them rapidly to change course and to undertake a strategy which took the form of an intelligent and utilitarian "reconversion": starting from the 1630s, they concluded that they had better pull out of the Iberian Peninsula, because they considered the Spanish public debt an unstable and increasingly dangerous investment. Thus, the Genoese bankers changed strategy and sought to obtain repayment in silver of the capital they had invested in Madrid. This capital inflow gave the new generation of Genoese bankers the opportunity for a radical change of perspective. They would no longer invest in public debt and loans to the Spanish crown, but, rather, in financial services and bullion markets. It was essential for them to free themselves from the role of financiers of Spain, in order to have at their disposal fresh capital for investment in other public debt – for example, starting from the 1640s, that of the Republic of Venice.

¹ G. Felloni, *Gli investimenti finanziari genovesi in Europa tra il Seicento e la Restaurazione*, Milan, 1971.

This article presents new archival material that calls into question the traditional interpretation of the redistribution of Spanish silver in Europe. Failure to evaluate the role of the Mediterranean region and to include its bullion trade in the European monetary market can produce a distorted reading of the international redistributive circuit. This article aims to show that the Genoese bankers played a pre-eminent role on the bullion market throughout the 17th century. Section 1 examines the new role of the Genoese bankers in the European financial market. Classical historiography, as we shall see in section 2, has focused on the production of precious metals in the Spanish colonies, without investigating in depth the logic of the distribution of bullion.² Section 3 analyses the role of Genoese financial operators in the redistribution of Spanish bullion, particularly in the Mediterranean basin. Section 4 analyses in detail a dataset which gathers together previously unpublished archival data concerning the quantities of silver negotiated in the Genoese exchange fairs in the period 1630-1700, while section 5, lastly, deals with the silver outputs of the mint of Genoa for the same period.

1. The Genoese bankers: Shifting from the credit to the bullion market

What alchemy enabled the Genoese merchant-bankers to dominate the Spanish money market in the 16th and 17th centuries? Their know-how came from far back. Genoese merchants were present in several places in the Mediterranean basin from the 12th century onward. In the following century, they began to show up in the most active centres of the Black Sea, where they established new commercial colonies that permitted them to control the flow of trade between the Near East and Europe until the 15th century, when the

³ P. Nogues-Marco, *Bullionism, specie-point mechanism and bullion flows in early 18th century Europe*, Ph.D. in Economic Sciences, Institut d'Etudes Politiques de Paris, Ecole doctorale de Sciences Po, Paris, 2010, pp. 85-87, 112-114.

Turkish advance forced them to abandon the Levant.³ The Genoese did not give up, however, but moved their focus of interest westward, becoming, in the early 16th century, leading actors in several European markets (first of all the Iberian peninsula), along the African coast and on the Atlantic islands stretching towards the Caribbean.

With their solid endowment of entrepreneurial skills, Genoese merchants were led initially to invest in commercial activities (such as the wool and silk industries) and in shipyards, then to specialise in financial activities at the beginning of the 16th century. In their activity as financial brokers, the Genoese operators displayed their deep knowledge of commercial and financial techniques, along with an innate instinct which they applied to the money market and then to the international bullion market as well.⁴ From the 16th century, the emergent states' growing financial activities fuelled the growth of the credit market throughout Europe.

The undisputed pre-eminence of Genoese operators on the credit market in the period 1530-1630 was also ensured by a honing of new skills and commercial techniques. Merchant-bankers since the Middle Ages had begun experimenting with new credit operations that stimulated the creation of new tools for international trade and finance. The most widespread credit instrument in the 16th-17th centuries was certainly the bill of exchange (*tracta*),⁵ which had been developed since the 12th-13th centuries by Italian merchants.⁶ A bill of exchange was a negotiable financial instrument consisting in an

³ G. Doria, "Conoscenza del mercato e sistema informativo: il know-how dei mercanti-finanzieri genovesi nei secoli XVI e XVII", in Id., *Nobiltà e investimenti a Genova in età moderna*, Genoa, 1995, pp. 91-149.

⁴ On the reign of Philip IV, see: C. Álvarez Nogal, *Los banqueros de Felipe IV y los metales preciosos americanos (1621-1665)*, Madrid, 1997, pp. 391-ff.; C. Álvarez Nogal, *El crédito de la Monarquía Hispánica durante el reinado de Felipe IV*, Valladolid, 1999; and C. Álvarez Nogal, "The Role Played by Short-Term Credit in the Spanish Monarchy's Finances", in F. Piola Caselli (ed.), *Government Debts and Financial Markets in Europe*, London, 2008, pp. 81-97.

⁵ R. de Roover, *L'évolution de la lettre de change, XIV^e-XVIII^e siècles*, Paris, 1953.

⁶ G. Felloni, *Moneta, credito, banche in Europa: un millennio di storia*, Genoa, 1999, p. 94.

unconditional order addressed by one person (the seller) to another (the buyer) requiring the latter to pay on demand (a sight draft) or at a fixed or determinable future time (a time draft) a certain sum of money to a specified person or to the bearer of the bill. The transaction took place between private parties: a certain sum of money was exchanged in place A and was made payable in place B, its value expressed in the currency of the latter place. Thus, the giver of the money – the creditor – bought for cash a bill of exchange drawn by the borrower (the drawer). In addition to its commercial function of allowing payments to be made between distant places without need for physical transfer of the money, the bill of exchange began also to be used in the international financial market.

Nevertheless, from the beginning of the 17th century, the Genoese bankers became increasingly interested in the bullion market, and we find them turning progressively from management of the international credit market, by means of bills of exchange, to the bullion market. Silver would provide the impetus for launching the broking role of the Genoese bankers, who then gained control of an important portion of the continental monetary market. Repayment of the loans they had given to the Spanish Hapsburgs made available to them large quantities of bullion, which was shipped across the Mediterranean Sea, making it once again the theatre of important exchanges. In order to move the precious metal, the Genoese brokers took advantage of all the know-how and expertise they had accumulated in decades of leadership on the European money market. The small Republic of Genoa played a leading role in gathering and distributing the American metal, certainly the most active one in the Mediterranean basin, which became an area of intense exchange between the Iberian Peninsula and the Ottoman Empire. For all of these reasons, this article observes the circulation of silver from a relatively novel point of view, focusing on the activity led by the networks of Genoese bankers who, during the 17th century, through the port of Genoa, controlled one of the most important bullion markets in Europe.

2. The historiographical debate on American silver

The debate among historians on the quantity of silver extracted from the Spanish mines in Latin America has run on for several decades without reaching a consensus. Even so, as Alejandra Irigoin recently remarked, the role of silver, as a global commodity, in the European economy has yet to receive the thorough examination it deserves.⁷ This reflects the difficulty of interpreting and comparing the data gathered to date. In particular, while confirming the central role of silver in the international economy, classical historiography has not analysed in depth the impact of its arrival on the pre-existing international and European monetary circuit. Studies of the circulation of silver have concentrated, for the most part, on the West-East route, investigating the transfer of silver from the Spanish mines in the New World to the Asian continent, and particularly to China. More specifically, the historiographical debate focuses on the 17th century, a period examined in a recent article by Klein and Serrano Hernández.⁸ But, above all, one gains the impression that the role of the Mediterranean basin in the mechanism of redistribution of Spanish silver has been grossly underestimated.

Historical studies, including the most recent, are striking for their lack of agreement as regards both the quantities of silver extracted from the Peruvian and Mexican mines and the value of the shipments arriving in Europe. Since the 1930s, the protagonists of this lively debate have included Earl J. Hamilton,⁹ Maurice Morineau, the Spanish historians Antonio Domínguez Ortiz, Lut-

⁷ A. Irigoin, "The New World and the Global Silver Economy, 1500-1800", in T. Roy, G. Riello (eds.), *Global Economic History*, London, 2019, pp. 271-286.

⁸ H. Klein and S.T. Serrano Hernández, "Was there a 17th century crisis in Spanish America?", in *Revista de Historia Económica/Journal of Iberian and Latin American Economic History*, 37 / 1 (2019), pp. 43-80.

⁹ E.J. Hamilton, "Imports of American Gold and Silver into Spain, 1503-1660", in *Quarterly Journal of Economics*, 43/3 (May 1929), pp. 436-472; id., "American Treasure and the Rise of Capitalism (1500-1700)", in *Economica*, 9 (Nov. 1929), pp. 338-357; id., *American Treasure and the Price Revolution in Spain 1501-1650*, Cambridge, MA, 1934; id., *War and Prices in Spain, 1651-1800*, Cambridge, MA., 1947.

gardo García Fuentes and Carlos Álvarez Nogal,¹⁰ along with García Fuentes,¹¹ García-Baquero González,¹² Kindleberger,¹³ among others, and, more recently, Romano,¹⁴ Álvarez Nogal,¹⁵ Bernal Rodríguez,¹⁶ and Yun Casalilla.¹⁷

The works most critical of Hamilton's analysis are those by the

¹⁰ Other examples of the critical approach to Hamilton's data in: D.A. Brading and H.E. Cross, "Colonial Silver Mining: Mexico and Peru", in *Hispanic American Historical Review*, 52/4 (1972), pp. 545-579; H.E. Cross, "South American Bullion Production and Export 1550-1750", in J.F. Richards, *Precious Metals in the Later Medieval and Early Modern Worlds*, Durham, NC, 1983, pp. 397-423; P.J. Bakewell, *Silver Mining and Society in Colonial Mexico: Zacatecas, 1546-1700*, Cambridge, 1971; J.J. TePaske and H.S. Klein, "The Seventeenth Century Crisis in New Spain: Myth or Reality?", in *Past & Present*, 90 (1981), pp. 116-135; J.J. TePaske, "New World Silver, Castile and the Philippines, 1590-1800", in J.F. Richards, *Precious Metals in the Later Medieval and Early Modern Worlds*, Durham, NC, 1983, pp. 425-445; D.O. Flynn, *World Silver and Monetary History in the 16th and 17th Centuries*, Aldershot, 1996; D.O. Flynn, A. Giráldez and R. von Glahn (eds.), *Global Connections and Monetary History, 1470-1800*, Aldershot, 2003; J.M. Oliva Melgar, "La Metrópolis sin territorio. ¿Crisis del comercio de Indias en el siglo XVII o pérdida del control del monopolio?", in C. Martínez Shaw and J.M. Oliva Melgar (eds.), *El sistema atlántico español (siglos XVII-XIX)*, Madrid, 2005, pp. 19-74; A. Domínguez Ortiz, "Los caudales de Indias y la política exterior de Felipe IV", in *Anuario de Estudios Americanos*, 13 (1956), pp. 311-383; id., "Las remesas de metales preciosos de Indias de 1621^a 1665", in *Anuario de Historia Económica y Social*, 2 (1969), pp. 562-585; H. Chaunu and P. Chaunu, *Séville et l'Atlantique, 1504-1650*, 8 vols., Paris, 1955-1959; C. Bancora Cañero, "Las remesas de metales preciosos desde El Callao a España en la primera mitad del siglo XVII", in *Revista de Indias*, 75 (1959), pp. 35-88; M.E. Rodríguez Vicente, "Los caudales remitidos desde el Perú a España por cuenta de la Real Hacienda. Series estadísticas (1651-1739)", in *Anuario de Estudios Americanos*, 21 (1964), pp. 1-24.

¹¹ L. García Fuentes, *El comercio español con América (1650-1700)*, Seville, 1980.

¹² A. García-Baquero González, *Cádiz y el Atlántico (1717-1778)*, 2 vols., Seville, 1976, and, subsequently, A. García-Baquero González, "American Gold and Silver in the Eighteenth Century: From Fascination to Accounting", in D.O. Flynn, A. Giráldez and R. von Glahn (eds.), *Global Connections and Monetary History, 1470-1800*, Aldershot, 2003, pp. 107-121.

¹³ C.P. Kindleberger, *Spenders and Hoarders: The World Distribution of Spanish American Silver, 1550-1750*, Singapore, 1989.

¹⁴ R. Romano, *Opposte congiunture. La crisi del Seicento in Europa e in America*, Venice, 1992.

¹⁵ C. Álvarez Nogal, *El crédito de la Monarquía Hispánica durante el reinado de Felipe IV*, Valladolid, 1997.

¹⁶ A.M. Bernal, *España, proyecto inacabado: costes/beneficios del Imperio*, Madrid, 2005.

¹⁷ B. Yun Casalilla, *Marte contra Minerva. El precio del Imperio español (c. 1450-1600)*, Barcelona, 2004.

French historian Maurice Morineau.¹⁸ The unpublished sources consulted by Morineau, in particular the Dutch *Gazettes* and sundry correspondence from European consuls resident in Cadiz, register different quantities for arrivals of silver in Europe, especially from the 1630s onwards. Let's look at the numbers that we find in Morineau. For the quantities actually registered in Europe in the 17th century, we notice at once that his estimate is strikingly higher than Hamilton's, especially for the last quarter of the century. For the years 1650-1700, Morineau theorises exports from the American ports of Cartagena de las Indias and Portobelo¹⁹ greater than amounts that arrived in the Iberian Peninsula at the beginning of the century. As to the data for silver production from the 1660s onward in the Morineau series, we find that the amounts shipped to Europe exceed American production, as shown in table 1.²⁰

With the data diapers he presented, not only did Morineau contest the presumed fall in arrivals in Europe, but he completely altered what had been the consensus interpretative framework. This work has been corroborated by more recent studies. TePaske's high figures for silver production raise questions. Plainly, if we add Mexican silver to the Peruvian production, the total numbers greatly surpass Hamilton's estimate.²¹ The debate has recently been reopened by an essay by Klein and Serrano Hernández that refutes the effects of the economic crisis in the Spanish colonies during the 17th century.²² The data they present show that the *decadencia* often evoked for all of the

¹⁸ M. Morineau, "Gazettes hollandaises et trésors américains", in *Anuario de Historia Económica e Social*, 2 (1969), pp. 289-363; 3 (1970), pp. 139-211; and his pivotal monograph *Incroyables Gazettes et Fabuleux Métaux. Les retours des Trésors Américains d'après les Gazettes Hollandaises (XVI-XVIII siècles)*, Cambridge and Paris, 1985.

¹⁹ M. Morineau, *Gazettes hollandaises*, 1985, pp. 243-250.

²⁰ J. Lynch, *El siglo XVIII*, Barcelona, 1991, p. 20; J.J. TePaske, *A New World of Gold and Silver*, Leiden, 2010.

²¹ M. Suárez Espinoza, "Metales preciosos, moneda y comercio. La participación del Perú en el mundo ultramarino, siglos XVI-XVIII", in Carlos Contreras (ed.), *Historia de la moneda en el Perú*, Lima, 2016, pp. 155-197.; H.E. Cross, *South American Bullion Production and Export 1550-1750*, pp. 417-419.

²² H. Klein and S.T. Serrano Hernández, "Was there a 17th century crisis in Spanish

TABLE 1
1631-1700: American silver production and silver arrivals in Spain (tons)

	Total American silver production (TePaske)	Hamilton	Morineau	Domínguez Ortiz	Álvarez Nogal	García Fuentes
1631-1640	3,286.813	1,413.523	2,356.724	1,917.075	1,373.443	
1641-1650	2,628.662	1,081.230	1,779.046	1,145.133	1,085.857	
1651-1660	2,355.765	452.430	1,827.612	659.474	478.976	439.650
1661-1670	2,191.526		4,010.521	19.171	187.108	283.727
1671-1680	2,556.891		3,598.989			207,044
1681-1690	2,808.119		3,252.183			93.428
1691-1700	2,371.740		2,769.234			53.019

Sources: J.J. TePaske, *A New World of Gold and Silver*, op. cit., p. 181-182; 212; C. Álvarez Nogal, "The Role Played by Short-Term Credit in the Spanish Monarchy's Finances", in F. Piola Caselli (ed.), *Government Debts and Financial Markets in Europe*, London, 2008, pp. 91-92; E.J. Hamilton, *American Treasure and the Price Revolution in Spain 1501-1650*, Cambridge, MA, 1934; L. Garcia Fuentes, *El comercio español con America (1650-1700)*, Seville, 1980; A. Domínguez Ortiz, "Los caudales de Indias y la política exterior de Felipe IV", in *Anuario de Estudios Americanos*, 13 (1956), pp. 311-383; id., "Las remesas de metales preciosos de Indias de 1621^a 1665", in *Anuario de Historia Económica y Social*, 2 (1969), pp. 562-585; M. Morineau, "Gazettes hollandaises et trésors américains", in *Anuario de Historia Económica e Social*, 2 (1969), pp. 289-363, 3 (1970), pp. 139-211; M. Morineau, *Incroyables Gazettes et Fabuleux Métaux. Les retours des Trésors Américains d'après les Gazettes Hollandaises (XVI-XVIII siècles)*, Cambridge and Paris, 1985.

territories of the Spanish crown did not directly affect the Spanish possessions in the New World.²³ Their conclusions suggest a critical reading of the data concerning the decline in silver arrivals in Europe around the second half of the 17th century. Widespread contraband represents an additional difficulty all authors have faced in calculating the quantities of silver brought to Europe. Silver *sin registro*, unregistered in tax documents, grew more important as the years passed. Is it possible to estimate the quantity of silver that came to

America?", in *Revista de Historia Económica/Journal of Iberian and Latin American Economic History*, 37/1 (2019), pp. 43-80.

²³ R. Romano, *Opposte congiunture. La crisi del Seicento in Europa e in America*, Venice, 1992, pp. 17-20, and A. Irigoín, "The New World and the Global Silver Economy, 1500-1800", in T. Roy and G. Riello (eds.), *Global Economic History*, London, 2019, pp. 271-286.

Europe “illegally”? It turns out that determining with a degree of certainty the amounts of American production and, in consequence, those of silver exports to Europe is not at all easy.

Those who have tried to construct long time series have relied almost exclusively on fiscal sources, which naturally do not take the widespread contraband into account. Morineau, using non-fiscal sources, reckons that between 1558 and 1659 illegal exports may have ranged between 13% and 83% of the total amount shipped. In the second half of the 17th century (1659-1693), “illegal” arrivals rose to between 86% and 95%.²⁴

3. The “Mediterranean Road”: Genoese bankers and the Spanish bullion market

Let’s go back to the pre-eminent role of the Genoese bankers during the reign of Charles V. His increasing need to finance his military campaigns across the continent propelled them into the role of privileged partners of the *Hacienda Real*, providing capital (*asientos de dinero*) and services (*asientos de servicios* such as the *asientos de galeras*).²⁵ What did the Genoese bankers receive in payment? Above all, Spanish public debt bonds (in particular *juros*) and silver both in coins (the famous *reales de a 8*) and ingots. Following the repeated suspensions²⁶ of repayments of the *asientos* starting in the 1620s, the

²⁴ M. Morineau, *Incroyables Gazettes et Fabuleux Métaux*, cit., p. 242 and p. 289. Bakewell suggests that at least 12% of the silver escaped the control of the Spanish authorities: P.J. Bakewell, *Silver Mining and Society in Colonial Mexico: Zacatecas, 1546-1700*, Cambridge, 1971, pp. 83-85.

²⁵ *Asiento* can be defined as a contract between a private individual (or a pool of entrepreneurs) and the Spanish kings. Usually, its object was a money loan, a service, or particular licences. The contractual clauses also included *adehalas*, benefits which, together with exchange rates, were often the most lucrative part of the *asiento*. See J.M. González Ferrando, *Negociación de cambios y asientos. Un opúsculo de autor anónimo sobre asientos, cambios y contabilidad por partida doble, de finales del primer tercio del siglo XVII*, Madrid, 1993; C. Marsilio, *Dove il denaro fa denaro*, p. 197.

²⁶ The Spanish term is *quiebra*. Often, they are called bankruptcies. In fact, they were temporary suspensions of every form of repayment towards the Crown’s creditors.

Genoese bankers decided to progressively reduce their investment in Spanish public debt and to diversify their financial portfolios.

What changed in their strategy? They began to demand repayment of principal and interest, and to invest the proceeds in the public debt of the states of central and northern Italy. The latter form of investment required far less administrative work than the complex bureaucratic procedures of the *asientos*. Moreover, beginning in the 1630s-40s, the heirs of the great *asentistas* found themselves in possession of much greater liquidity, generated by the repayment of previous investments in the Iberian Peninsula.²⁷ For all these reasons, the Genoese began to look to the Venetian market again.²⁸

Historians have underlined the role of the chartered companies (the EIC and the VOC) in transporting and distributing bullion in the Asian markets, but have paid much less attention to the redistribution of bullion in Europe.²⁹ Within the mechanism of redistribution of Spanish silver in Europe, the importance of the Genoese route was noted by numerous scholars throughout the 1900s. In particular, in a 1932 essay, the French historian Albert Girard presented his estimates of the shipments of silver from the Bay of Cadiz to Marseilles, Genoa, Amsterdam, and England.³⁰ Moreover, an examination of the correspondence of the French consul Pierre Catalán suggested that Marseilles and Genoa were the most impor-

The situation was discussed during the *medio general* in which new terms and conditions for repayment on the *asientos* were fixed. See C. Marsilio, *Dove il denaro fa denaro*, p. 197.

²⁷ G. Felloni, "Accumulazione capitalistica ed investimenti a Genova nei secc. XVI-XVII: uno sguardo d'insieme", in *Scritti di Storia Economica*, t. I, pp. 665-666; G. Doria, "Investimenti della nobiltà genovese", in Id., *Nobiltà e investimenti*, p. 256.

²⁸ U. Tucci, *Un mercante veneziano del Seicento: Simon Giogalli*, Venice, Istituto Veneto di Scienza, Lettere ed Arti, 2008; L. Pezzolo, *Una finanza d'ancien régime la Repubblica veneta tra XV e XVIII secolo*, Naples, 2006.

²⁹ For the historiographical debate see H. Klein and S.T. Serrano Hernández, "Was there a 17th century crisis in Spanish America?", in *Revista de Historia Económica/Journal of Iberian and Latin American Economic History*, 37 / 1 (2019), pp. 43-80.

³⁰ A. Girard, *Le commerce français à Seville et Cadix au temps des Habsbourg: contribution à l'étude du commerce étranger en Espagne aux XVI^e et XVII^e siècles*, Bordeaux, 1932, pp. 37-45.

tant Mediterranean ports of arrival for Spanish silver in the second half of the 17th century. Girard observed an increase in arrivals of precious metals in Genoa starting in the 1660s and peaking in the period 1670-1686. Ruiz Martín put forward the same hypothesis in a 1990 essay, in which he proposed a very detailed periodisation of the destinations of Spanish silver: through the 1620s, the main destination appears to have been Italy; from 1630 to 1648, it was England, from 1648 to 1672, the Low Countries, and in the last quarter of the seventeenth century, France.³¹

This hypothesis is confirmed by John Lynch, who offers the following breakdown of the distribution of silver in Europe: France (39%), Genoa (17%), England (15%), Low Countries (12%).³² More recently, Henry Kamen has also reported interesting testimony in support of the thesis of the importance of the port of Genoa in the distribution of Spanish silver. He tells us that the correspondence sent to Paris in 1670 by the French consul in Cadiz contained data confirming that at least 50% of the silver leaving Cadiz was destined for Genoa, Marseilles, London, Amsterdam or Hamburg. In another case, in 1682, a French consul witnessed the arrival in the Bay of Cadiz of the Panama galleons carrying over 21 million pesos destined for Amsterdam, Marseilles and, at least 30%, Genoa.³³

What mechanisms underlay the “Mediterranean Road”? As Álvarez Nogal explains, the transport of silver from Madrid to Spain’s Mediterranean ports was a complex and dangerous operation.³⁴ Madrid used an experienced and reliable network of carriers (*comisarios* or *conducteros*). The caravans reached the coast at Valencia or Barcelona, where their cargo was taken over by trusted shippers

³¹ R. Ruiz Martín, *Los destinos de la plata española*, Madrid, 1990, p. 42. Data on the Spanish silver used in the French mints in F.G. Spooner, *L’économie mondiale et les frappes monétaires en France, 1493-1680*, Paris, 1956, pp. 137-138; 163-164; 356-362; 407-411; 532-534.

³² J. Lynch, *Los Austrias (1598-1700)*, Barcelona, 1993, pp. 254 ff.

³³ H. Kamen, *Imperio: La forja de España como potencia mundial*, Madrid, 2003, pp. 613-614.

³⁴ C. Álvarez Nogal, “El transporte de moneda en la España del siglo XVII: mecanismos y costes”, in *Revista de Historia Económica*, 23/S1 (2005), pp. 379-408.

who, in the case of Ligurian *asentistas*, were often other Genoese (such as the brothers Giacomo and Gio. Batta Di Negro).³⁵ From the 1630s onwards, silver arrived in other Spanish ports, such as Dénia, Cartagena and Valencia.³⁶ This transport system was strictly private, with the Spanish authorities' regulatory and control intervention reduced to a minimum.

According to the Genoese historian Edoardo Grendi, Genoa in the 17th century was at the heart of the "silver age,"³⁷ representing the reference market in Italy and at the European level. Stanley J. Stein and Barbara H. Stein offer a similar assessment, stating that "flows of American silver into Northwest Europe's regional economies accelerated the monetization of Europe and advanced a market-oriented economy there [...] they transformed late sixteenth- and early seventeenth-century Genoa into the financial capital of the *siècle de l'argent*."³⁸

It is exceedingly difficult to procure Genoese archival sources on this topic, because there is no complete time series of silver arrivals, which were exempt from taxation. According to Grendi's hypothesis, we are dealing with a tax shelter *ante litteram*.³⁹ The debate within the *Collegi della Repubblica* (the legislative houses) reveals a sharp disagreement within the oligarchy as to the possibility of avoiding the

³⁵ C. Álvarez Nogal, L. Lo Basso and C. Marsilio, "La rete finanziaria della famiglia Spinola. Spagna, Genova e le fiere dei cambi (1610- 1656)", in *Quaderni Storici*, no. 124 (2007), pp. 97-110.

³⁶ Once the cargo manifestos were compiled and checked, the silver was handed over to the captain of the ship. Most of it was in the form of hard coins (*piezas de a ocho*), but shipments often also contained *barras* (ingots). From the 1590s onwards, the ports with the most traffic were Seville, Cadiz, Alicante, Barcelona, Valencia, Cartagena, Denia, Roses (Girona), and Vinaròs (Castellón); F. Ruiz Martín, *Pequeño capitalismo, gran capitalismo. Simón Ruiz y sus negocios en Florencia*, Barcelona, 1990, p. 37.

³⁷ E. Grendi, *Introduzione alla storia economica della Repubblica di Genova*, Genoa, 1974, p. 180.

³⁸ S.J. Stein and B.H. Stein, *Silver, Trade, and War: Spain and America in the Making of Early Modern Europe*, Baltimore, MD, 2000, p. 52.

³⁹ Grendi's hypothesis concerning the possible existence of a tax (*Dricus armamentis*) collected by the Banco di San Giorgio is not corroborated by any of the documents I have consulted.

burden of additional taxation on their investments.⁴⁰ During the same years, some members of the oligarchy began to think about cutting the umbilical cord that had tied Genoa to the Spanish Empire for almost a century, in order to return to the maritime activity of the past.⁴¹ The debate between the pro-Spanish side and the “maritime” faction (the *Repubblichisti*) quickly grew heated.⁴² Especially after the outbreak of the war between Spain and France (1635), the *Repubblichisti* wielded increasing strength in the *Collegi*. In 1638, the altered balance of power⁴³ allowed the *navalisti* to build the first *galere di libertà* (freedom galleys),⁴⁴ but it was only in 1655 that this political project fully bore fruit with the creation of the *Magistrato del Nuovo Armamento*.⁴⁵ Thus, in the period 1655-1680, there were 34 convoys to Cadiz, and only in five of them do we find a suspension of

⁴⁰ The Republic of Genoa, supported by the Banco di San Giorgio, preferred not to tax the return on Genoese capital lent to the Spanish Treasury: taxing the Spanish silver would have given rise to a very dangerous opportunity to control the Genoese oligarchy.

⁴¹ Especially in the light of Spain's ambiguous behaviour following the Duke of Savoy's attempt to invade the Republic of Genoa in 1625.

⁴² L. Lo Basso, “Diaspora e armamento marittimo nelle strategie economiche dei genovesi nella seconda metà del XVII secolo: una storia globale”, in *Studi storici*, 1/2015, pp. 137-156.

⁴³ The project was accomplished thanks to the support of the new doge, Agostino Pallavicini, a militant anti-Spanish activist.

⁴⁴ Manned by a crew of free men, not slaves or prisoners, and paid for by the brothers Francesco Maria and Galeazzo Giustiniani. On the Genoese fleet, see: L. Lo Basso, “Che il Signore la conduca a salvamento. Le assicurazioni marittime nelle strategie economiche dei Genovesi nel Seicento”, in Id., *Capitani, corsari e armatori. I mestieri e le culture del mare dalla tratta degli schiavi a Garibaldi*, Novi Ligure, 2011; Id., “Una difficile esistenza. Il duca di Tursi, gli asientos di galee e la squadra di Genova tra guerra navale, finanza e intrighi politici (1635-1643)”, in M. Herrero Sánchez, Y. Rocío Ben Youssef Garfia, C. Bitossi and D. Puncuh (eds.), *Génova y la Monarquía Hispánica*, pp. 819-846; p. 825; Id., “Gli asentisti del re. L'esercizio della guerra nelle strategie economiche dei Genovesi (1528-1716)”, in R. Cancila (ed.), *Mediterraneo in armi (secc. XV-XVIII)*, Palermo, 2007, volume II, pp. 397-428.

⁴⁵ The first three galleons bought in Holland, in Texel, docked in Genoa in February 1655. The fourth, the flagship Santa Maria, reached Genoa in April of the same year. Beside the purchase of these first four galleons, the Genoese government also intended to organise three “armed convoys” a year on the Genoa-Cadiz route. See G. Giaccherio, *Il Seicento e le compere di San Giorgio*, p. 455, note 59.

the service departing from Genoa,⁴⁶ while in 1662 we find the sole shipwreck on the return voyage from Cadiz. Goods and silver could travel both on vessels built by private shipbuilders and on galleons built by the Republic.⁴⁷

TABLE 2
1655-1680: The Genoese convoglio: sea freight and armed escort costs

	Convoglio of the Republic	Private ships
1655-1659	sea freight: 1-2% armed escort: 2%	sea freight: 1-2% armed escort: 2% (goods); 1-3% (bullion)
1660-1680	sea freight: 2% armed escort: 0	sea freight: 1% armed escort: 1%

Source: G.C. Calcagno, *La navigazione convogliata a Genova nella seconda metà del Seicento*, pp. 348-351.

The officials of the *Magistrato del Nuovo Armamento* stressed two factors of paramount importance for the economic management of the convoy: growth of the volume of goods carried and the unique opportunity to bring huge quantities of silver to Genoa. After 1680, the Republic no longer organised armed convoys, save for one mission in 1682; this activity fell to private entrepreneurs, who continued to do so until the end of the 17th century.⁴⁸ Giulio Giacchero calculates that between 1601 and 1680 around 110,000,000 silver pieces of eight were carried to Genoa, or around 2,736 tons of silver.⁴⁹ Giacchero suggests that some 2,340 tons were carried on galleys belonging to the Republic, to private shipbuilders or to *asentistas*, the rest (just over 395 tons) reaching Genoa on the other ships belonging to the *convoglio* of the Republic.

⁴⁶ In the years 1657, 1661, 1668, 1676 and 1678

⁴⁷ Archivio di Stato di Genova, Antica Finanza, no. 155, *journal of the Magistrato del Nuovo Armamento* (03/01/1661-14/01/1665); no. 157, *ledger of the Magistrato del Nuovo Armamento* (01/01/1655-31/12/1656); no. 158, *ledger of the Magistrato del Nuovo Armamento* (01/01/1672-31/12/1655).

⁴⁸ G.C. Calcagno, "La navigazione convogliata a Genova nella seconda metà del Seicento", in *MSL*, III (1973), pp. 265-392; T.A. Kirk, *Genoa and the Sea: Policy and Power in an Early Modern Maritime Republic, 1559-1684*, Baltimore, MD, 2012.

⁴⁹ G. Giacchero, *Il Seicento e le Compere di San Giorgio*, p. 472.

TABLE 3
1631-1680: Silver delivered to Genoa (tons)

	Genoese public galleys	Genoese public galleons (<i>convoglio</i>)	Total arrivals
1631-1640	367,439	0	367.439
1641-1650	415.366	0	415.366
1651-1660	166.147	42.176	208.322
1661-1670	83,073	260,467	343,540
1671-1680	0	93,553	93,553

Sources: G. Giaccherio (1979); T.A. Kirk, *Genoa and the Sea: Policy and Power in an Early Modern Maritime Republic, 1559-1684*, Baltimore, MD, 2012; Archivio di Stato di Genova, Antica Finanza, ledgers 155, 157, 158.

Interestingly, the data gathered by the Venetian consul Paris Tasca, resident in Genoa between 1652 and 1672, confirm Giaccherio's research. Tasca's dispatches to Venice reported the silver arrivals in the Genoese port. We can derive a time series from this source, even accounting for a few lacunae in the years 1641-1665, which we can compare with the data presented above. In the decade 1641-1650, the consul recorded a total of 360 tons arriving in the port of Genoa on board *asentistas'* galleys (belonging to the Doria and Spinola families), galleys of the Republic and private ships, in particular Dutch and English galleons coming from Cadiz and other Spanish ports. In the following decade, arrivals fell sharply to just 80 tons, carried by English, Dutch and Hamburg ships. The galleys of the Republic of Genoa and Carlo II Doria Del Carretto, Duke of Tursi, and the convoy galleons carried most of the precious metal. In the period 1661-1665, the quantity of silver arriving in Genoa returned to growth, to 225 tons. The carriers were mainly Genoese galleys and galleons from the armed convoys of both the Republic and the United Provinces. There were only occasional deliveries by private ships.⁵⁰

Several authors, among them Calcagno and Giaccherio,⁵¹ suggest

⁵⁰ Data presented in: F. Fioriti, *I Genovesi e Venezia: argento e finanza (1627-1669)*, tesi di dottorato (Ph D. dissertation), Università degli Studi di Milano, Milan, 2018.

⁵¹ G. Giaccherio, *Il Seicento e le Compere di San Giorgio*, Genoa, 1979, Appendice, tab. XIV, p. 696.

that silver was often loaded illegally on board the galleons.⁵² They estimate that we need to add at least another 50% to the official figures to reflect silver loaded illegally during the long stayovers in the Bay of Cadiz. The values presented in Table 3 are to be considered incomplete, given the scarcity of sources and rampant smuggling. Beginning with the 1680s, the data in our possession become even more incomplete and only concern the registration of occasional silver transports on private galleys. These are isolated cases, allowing us neither to construct a complete and reliable series nor to venture hypotheses. Comparing the data found in the letters of Tasca, the Venetian consul, with Giacchero's, we notice that they match remarkably for the period 1641-1650, with a discrepancy of just 55 tons. For the following decade, the discrepancy widens: Giacchero reports arrivals amounting to 208 tons, while the consul estimates that they came to no more than 80 tons.⁵³ For the last period (1661-1665) Tasca reports 225 tons, while Giacchero (for 1661-1670) estimates more than 340 tons, suggesting a clear increase in arrivals.

The silver remained in the hands of the Genoese operators for the least time possible. The Genoese tried to sell it quickly to obtain both liquidity, for use on the credit market, and new bills of exchange, used to pay for the bullion and to feed the clearing system of exchange fairs. The coffers full of Spanish 8 reales and silver bars were sent to different buyers: Venetian bankers, Florentine and Milanese brokers or Sicilian merchants. In some periods of the 17th century, opportunities for transport by Flemish vessels were exploited and the coffers were sent to Amsterdam and Antwerp. Let's not forget that, at least until the 1650s, silver managed by Genoese opera-

⁵² In the cargo manifestos, the description of the silver carried is extremely detailed. Coins bags, boxes and crates are described. Moreover, the value in Spanish pieces of eight is always expressed. See G.C. Calcagno, *La navigazione convogliata a Genova nella seconda metà del Seicento*, pp. 348-351.

⁵³ Giacchero also published an anonymous report (dated 1655) that states: "[A]s to liquid cash (silver coins), it is a very creditable opinion that (in Genoa) there has never been as much money as at the present time." It concluded that "currently we lack more in faith than in cash."

tors was also minted in the London mint.⁵⁴ Very often, the bullion was not unloaded and taken to warehouses in Genoa, but was transferred directly onto other galleys or ships – usually Genoese or Tuscan armed galleys – for transport to Livorno, the new centre for the redistribution of silver. Once they were removed from the ships, the coffers were taken in hand by Florentine operators, who sold the silver on behalf of the Genoese bankers.⁵⁵ Clearly, the distribution of silver became a family affair. For several decades, at least into the 1690s, we find a recurring pattern: the silver was shipped to Livorno, received by the Florentine bankers via Pisa, sent via Bologna to Venice to other local operators (such as Dotto & Vambarle, the Castelli family, Paolo del Sera or Dell'Oste & Flangini), not to mention other Genoese operators resident there (for instance, Tagliacarne & Cassione, Odescalchi).⁵⁶ Once in Venice, the silver coins were delivered to the local mint or sent on to the Levant.

4. The Genoese exchange fairs: New interpretative perspectives on the European bullion market (1630-1700)

An exchange fair⁵⁷ was the centre of a wide network of interna-

⁵⁴ H. Taylor, "Trade, Neutrality, and the English Road, 1630-1642", in *Economic History Review*, 25/2 (1972), pp. 236-260, C. Marsilio, "Nel XVII secolo dei genovesi. La corrispondenza commerciale di Paolo Gerolamo Pallavicini nel triennio 1636-1638", in *Storia Economica*, 8 (2005), pp. 101-119, J.S. Kepler, *The Exchange of Christendom. The international entrepôt at Dover*, Leicester, 1976; J. Alcalá-Zamora y Queipo de Llano, *España, Flandes y Mar del Norte (1618-1639). La última ofensiva europea de los Austrias madrileños*, Madrid, 1975.

⁵⁵ Beginning in the 1630s, often the brothers Giovanni and Francesco Orlandini, or the brothers Nicolò and Raffaele Castelli, among the most important Florentine bullion brokers.

⁵⁶ Intense correspondence between the Genoese families Pallavicini, Durazzo and Sauli and their Venetian agents in Archivio Durazzo Giustiniani, Genoa.

⁵⁷ J.G. da Silva, *Banque et crédit en Italie au XVII^e siècle*, Paris, 1969; M.T. Boyer-Xambeau, G. Deleplace, L. Gillard, *Banchieri e principi. Moneta e credito nell'Europa del Cinquecento*, Turin, 1991; G. Mandich, "Le fiere genovesi di soli cambi culla delle borse valori", in *Rivista milanese di economia*, 17 (1986), pp. 132-146; Id., "Fiere cambiarie concorrenti (genovesi, fiorentine, veneziane) nel 1622-1652", in *La Repubblica Internazionale del denaro tra*

tional payments. In other words, it was a credit market through which vast quantities of money were moved from one place (or *piazza*) to another.⁵⁸ The purpose of these gatherings was to pay and cash the bills of exchange expiring during the fair and renegotiate new letters of exchange drawn on the following fair or on another European commercial centre.⁵⁹ The unquestioned protagonists of these meetings were a small group of bankers and agents who reached the fair from their different places of residence to settle debts and credits pertaining to their company or on account of third parties. To allow this complex network of transactions to take place, there was a need for a specific, univocal monetary system⁶⁰ expressed in *scudi di marche* quoted in relation to *scudi d'oro delle cinque stampe*⁶¹ (golden *ecus* of the five mints, that is Castilian, Genoese, Venetian, Florentine and Neapolitan *ecus*).

During the fair, among other operations, the participants had to *mettere il conto*, i.e., decide on the official exchange rate for the *scudo*

XV e XVII secolo, ed. by A. De Maddalena and H. Kellenbenz, Bologna, 1986, pp. 123-151.

⁵⁸ C. Marsilio; *Dove il denaro*; Id., *Exchange fairs and the Money Market in Early Modern Italy (1630-1650) - Fiere di cambio e mercato monetario nell'Italia di età moderna (1630-1650)*, Novi Ligure, 2018. The contemporary text which we must keep in mind when we talk about the Genoese exchange fairs is the "manual di mercatura" (business handbook) of Gio. Domenico Peri, *Il negoziante*, Venice, 1672 (anastatic reprint, Turin, 1972). Another highly interesting though often overlooked work that offers a critical reading of the exchange fairs is Bernardino Giustiniani, *Breve trattato della continuatione de' cambi in cui si esaminano alcune moderne foggie di cambiare*, Genoa, presso Giuseppe Pavoni, 1619 (see the second, fully revised edition, published in Mondovì in 1621). For a "technical handbook" to use as a guide to the complex system of exchange rates between the different currencies used in Genoa in the sixteenth and seventeenth century, see David Veronese, *Prattica d'aritmetica mercantile di David Veronese nativo di Genova. Nella quale con modi, regole, et osservationi di brevità non più usate da altri autori, si risolve la maggior parte de' conti, che accadono al mercante. Aggiuntovi un trattato de' cambij dello stile di Genova, che contiene tutte le brevità dette. Opera nuova, curiosa ed utile à studiosi di saper far conti con prestezza, e facilità. Con privilegio della Sereniss. Rep.*, Genoa, presso Giuseppe Pavoni, 1627.

⁵⁹ The four fairs (Apparizione, Pasqua, Agosto, Santi), usually lasting eight days, were held every three months, and were regulated by laws issued by the Genoese Senate.

⁶⁰ G. Felloni, "Un système monétaire atypique: La monnaie de marc dans les foires de change génoises, XVI^e-XVII^e siècle", in *Études d'histoire monétaire*, ed. J. Day, Lille, 1984, pp. 249-260.

⁶¹ M.T. Boyer-Xambeau, G. Deleplace and L. Gillard, *op. cit.*, pp. 147-148.

di marche in relation to the main Italian and European commercial centres. At the end of the meeting, they drew up a list (*listino*) containing the exchange rates of the main European currencies, which the participants sent to their clients and correspondents. This document, known as “current,” has been called the first example of financial journalism.⁶² It could be handwritten or a printed form filled out by hand. Most of the *listini* we examined for our research were printed forms, but there was no lack of handwritten ones.⁶³ This document (*prezzo dei cambi*, the price of exchanges)⁶⁴ contains important data bearing on the redistribution of Spanish silver in Europe. Indeed, the last entry identifies the silver ecus officially registered during the fair, given that it represents the value of the coins bought and sold by fair operators during the week of the meeting.⁶⁵ Since there were four fairs every year, we are looking at 280 entries for the period 1630-1700. Unfortunately, this documentation lacks 42 entries, or some 15% of the total, possibly owing to the cancellation of the meeting⁶⁶ or the inaccuracy of the handwritten *listino*.

In short, we can observe that the fair was taking on a new role: that of redistributing a large quantity of silver. The silver stock negotiated in the Genoese fairs shows us that a large part of Spanish silver did not, at least at first, leave Europe for the Asian market, but was used by the operators who gathered at Novi within the European market.

Beginning with the 1630s, we can observe the negotiation of several tons of silver coins on the fair market, and this allows us to hy-

⁶² J.J. McCusker and C. Gravejstijn, *The Beginnings of Commercial and Financial Journalism*, Amsterdam, 1991; S. Homer and R. Sylla, *A History of Interest Rates*, New Brunswick, NJ, 2005; M.A. Denzel, *Handbook of World Exchange Rates, 1590-1914*, Farnham, 2010. All these researches are based on original archival and rare printed sources (currents, exchange rates, *listini* and commercial prints).

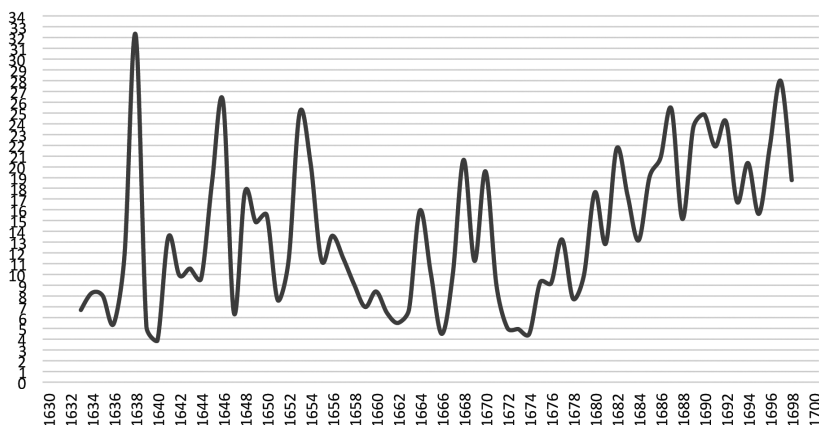
⁶³ For the full list of the *listini* consulted, see the Appendix 1 - Archives.

⁶⁴ This is the recurrent formula at the beginning of the list of exchange rates fixed at the fair.

⁶⁵ Always expressed in Genoese silver *ecus*.

⁶⁶ As was the case of the meeting of August 1657, which was cancelled because of the plague that struck Genoa.

CHART 1
1631-1700: Silver traded at the exchange fairs (tons)



Source: See Appendix 1 - Archives.

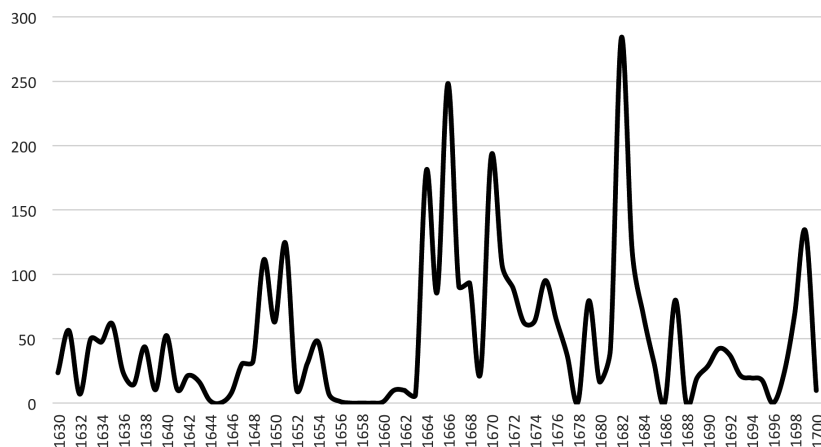
pothesise an increase in the availability of cash both on the Genoese market and in other commercial centres linked with the Genoese bankers.

5. The silver production of the mint of Genoa (1630-1700): another point of observation

Chart 2 gives us an idea of the money stock produced by the mint of Genoa. The data presented here pertain solely to silver coins. The chart shows that, compared with the period 1631-1650, the mint's output was lower over the next ten years but then turned sharply upwards in the following decade, with peaks equal to a 75% increase in production.

In the last thirty years of the series, the mint's output fell back, and by the end of the century was below the level of the 1630s. Nevertheless, output grew on average despite the downswing of the years 1671-1680, most likely as a consequence of the monetary reform that the Genoese authorities approved in 1671, which decreed

CHART 2
Mint of Genoa (1630-1700): Silver output (tons of pure silver)



Source: G. Pesce and G. Felloni, *Le monete genovesi. Storia, arte ed economia nelle monete di Genova dal 1139 al 1814*, Genoa, 1976.

an increase in the mint's production of silver coins.⁶⁷ This monetary policy decision may have augmented the stock of Spanish silver at the mint, removing it from the fair market. The increased quantity of silver coins implies a certain loss of confidence in the fairs, with participants preferring to do business in cash rather than bills of exchange. It is well known that in the second half of the 17th century the Genoese fairs gradually lost their central position in the European market. However, this did not keep them from becoming an essential link between the Mediterranean and the Levant in the bullion market.

Furthermore, we can confirm the central role of Genoa in the European bullion market by comparing the Genoese mint's output of silver coins with that the Dutch mints examined by Attman.⁶⁸ The

⁶⁷ G. Gianelli, "La riforma monetaria genovese del 1671-75 e l'apertura del banco di moneta corrente", in G. Felloni (ed.), *La Casa di San Giorgio: il potere del credito*, Genoa, 2006, pp. 121-141.

⁶⁸ A. Attman, *American Bullion in the European World Trade, 1600-1800*, Goteborg, 1986, p. 82.

Dutch mints' output was only 27% as great as that of the Genoa mint for the years 1606-1700. While the Genoese mint produced silver coins weighing a total of 6,786 tons, the Dutch mints' output was only 1,844 tons. Even when we add the silver coins produced by all the mints of Spanish Flanders (equal to 1,886 tons in the years 1598-1700), the total still does not exceed 55% of the Genoese output.

In conclusion, I would like to underscore again the central role of the Genoese brokers in the European bullion market. Their importance becomes clear when we look at both the volume of silver coins traded at the exchange fairs and at the output of the local mint. These financial operators controlled and managed a huge amount of silver, but mainstream studies have not yet emphasised the vitally important role they played during the second half of the 17th century in redistribution in the Mediterranean area. Their privileged link with the Spanish Treasury allowed them to have a plentiful supply of silver at their disposal, and at a cheaper price than their competitors. This silver could be delivered directly and rapidly to Genoa, one of the chief hubs of the European bullion trade. Moreover, Genoese control of the most important exchange fairs of the 17th century constituted a clear comparative advantage when the brokers needed to sell this precious metal. It is also worth noting that during the years 1665-1685 the Genoese mint reached a production peak and that the quantity of silver coins traded at the Genoese exchange increased accordingly in the last two decades of the century. What should we put on a future research agenda? Even if the debate on Morineau's data on Spanish silver remains open, the Genoese data on silver redistribution presented in this article appear to point in the same direction. For the second half of the 17th century, further research should be conducted in the Italian archives – in particular those of Genoa, Florence and Venice – to find further evidence bearing on Spanish silver and its redistribution in the European markets. If we want to gain a better understanding of the "long 17th century," we would do well to focus our investigation on the Mediterranean area, according it the correct weight in relation to an overestimated Northern Europe.

Appendix 1 - Archives

A.C.D.V., Archivio Caccini Del Vernaccia, Biblioteca Roncioniana (Prato, Italy)

- *Ugolino Del Vernaccia*, scartafacci di fiera (1640-1715) ledgers from no. 189 (1640) to no. 237 (1674).

A.D.G.G., Archivio Durazzo Giustiniani (Genoa, Italy)

Archivio Sauli, Archivio Durazzo, and Archivio Grimaldi Cebà

- *Archivio Sauli*: scartafacci di fiera (1622-1630; 1676-1696). (Gio. Antonio Sauli q. Lorenzo, 1622-1630) – ledgers nos. 1291, 1292, 1293, 1294, 1295, 1296, 1297, 1298, 1299, 1300, 1301, 1302, 1303. (Francesco Maria Sauli q. Gio. Antonio, 1676-1696) - ledgers nos. 1311, 1312, 1313, 1314, 1315, 1316, 1317, 1318, 1319, 1320, 1321, 1322, 1323, 1324, 1325, 1326, 1327, 1328, 1329, 1330, 1331, 1332.
- *Archivio Sauli, Archivio Grimaldi Cebà*, scartafacci di fiera (1666-1674). (Antonio II Grimaldi Cebà) - ledgers nos. 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057.
- *Archivio Durazzo*, scartafacci di fiera (1632-1657; 1658-1664; 1665-1694). (Giacomo Filippo and Gerolamo Durazzo) - from ledger no. 752 (1632) to ledger no. 776 (1657). (Gerolamo, Giuseppe Maria, and Marcello I Durazzo, 1658-1664) - from ledger no. 777 (1658) to ledger no. 813 (1694). (Marcello I Durazzo, 1692-1694) - ledgers nos. 814, 815, 816.

A.S.Ge, Archivio di Stato di Genova (Genoa, Italy)

Antica Finanza

- No. 155, journal of the *Magistrato del Nuovo Armamento* (03/01/1661-14/01/1665); no. 157, ledger of the *Magistrato del Nuovo Armamento* (01/01/1655-31/12/1656); no. 158, ledger of the *Magistrato del Nuovo Armamento* (01/01/1672-31/12/1655).

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