

**Selling & Collecting:
Printed Book Sale Catalogues and
Private Libraries in Early Modern Europe**

edited by Giovanna Granata and Angela Nuovo

eum

The research leading to this publication has received funding from the European Research Council (ERC) under the European Union's Horizon 2020 research and innovation programme (ERC project EMoBookTrade - Grant Agreement n° 694476).



European Research Council
Established by the European Commission

This publication was partially funded by the Regione Autonoma della Sardegna [Autonomous Region of Sardinia] (L.R. 7/2007) under grant “CLASAR (Censimento dei Libri Antichi in SARdegna)”.



**REGIONE AUTONOMA
DELLA SARDEGNA**

Cover Illustration: Vassalini catalogue (Cagliari, Biblioteca Universitaria, Ross. D 115)

isbn 978-88-6056-572-3

Prima edizione: maggio 2018

©2018 eum edizioni università di macerata

Centro Direzionale, via Carducci snc – 62100 Macerata

info.ceum@unimc.it

<http://eum.unimc.it>

Impaginazione: Carla Moreschini

Il presente volume è stato sottoposto a *peer review* secondo i criteri di scientificità previsti dal Regolamento delle eum (art. 8) e dal Protocollo UPI (Coordinamento delle University Press Italiane).

Contents

- Giovanna Granata, Angela Nuovo
7 Introduction. The development of the book market and book collecting in the sixteenth century
- Giovanna Granata
11 The collection of Monserrat Rosselló in the University Library of Cagliari
- Maria Alessandra Panzanelli Fratoni
35 Building an up-to-date library. Prospero Podiani's use of booksellers' catalogues, with special reference to law books
- Graziano Ruffini
79 Une vente de livres à Gênes en 1583
- Christian Coppens, Angela Nuovo
145 Printed catalogues of booksellers as a source for the history of the book trade
- Francesco Ammannati
161 Book prices and monetary issues in Renaissance Europe
- Goran Proot
177 Prices in Robert Estienne's booksellers' catalogues (Paris 1541-1552): a statistical analysis
- Giliola Barbero
211 Ordinary and extraordinary prices in the Giolito *Libri spirituali* sales list
- Flavia Bruni
265 Peace at the Lily. The De Franceschi section in the stockbook of Bernardino Giunti

Pedro Rueda Ramírez

283 La venta de libros italianos en Madrid en tiempos de Felipe II: el catálogo de Simone Vassalini (1597)

301 Abstracts

306 Index

Book prices and monetary issues in Renaissance Europe

Francesco Ammannati*

The implications connected with the production of the printed book in the *ancien régime*, the aspects related to the calculation of its production costs and pricing are still relatively under-explored by economic historians.¹ This gap in knowledge is attributable to several factors: partly a result of an objective lack of documentation, but also arising from the need for the scholars engaged in such investigations to possess specific skills in the field of book and print history. The book as object, in fact, holds a number of features which differentiate it from many of the artifacts produced and traded during the Renaissance period, as it combines elements of craftsmanship and serial production that make it difficult to place in general-type analysis (Ammannati and Nuovo 2017).

A study involving these aspects also requires the use of a complex set of sources, where they exist, which allow us to reconstruct the different steps of the production process and to identify the logic behind publishers' business choices, such as the type of books to produce, how their prices were set and the commercial channels through which they were circulated (Voet 1969).

The trade and the circulation of books across Italy and Europe in the early modern age has recently been receiving more attention, albeit mainly from book historians and less from strictly economic ones.

* University of Udine, Italy; amma.fra@gmail.com

¹ Significant exceptions, though mostly provided by book historians, include Edler De Roover (1953); Voet (1969); Cherubini et al. (1983); the essays included in Cavaciocchi (1992); Panciera (1995); Conway (1999).

From this point of view, much has been done mainly through studies dedicated to individual publishing companies and the places where they operated and which try to reconstruct the commercial networks that these subjects created, the characteristics of their customers, the typology of the books they produced and sold, the dynamics and the way in which the market was shaping in the transition between the Renaissance and the modern age (Hirsch 1974; Richardson 1999; Maclean 2009; Nuovo 2013). These researches have emphasized the aspects related to the evolution and transformations experienced by the world of Italian and European culture, as well as the role of printing in the dissemination of the ideas and the development of the great intellectual movements of that time. The relative scarcity of historical-economic analysis, on the other hand, has led to fragmented and disorganized investigations which are not able to fully encompass the topic of book production and trade as part of a wider discussion of the changes in the structure of consumption (including cultural consumption) and price dynamics in both the shorter and longer term. This latter aspect has recently been the subject of increasing interest since it has been identified as a crucial element in understanding the strategies and management choices of booksellers (publishers, merchants, etc.) and the extent of the diffusion of printed books within an evolving market.

Explicit references to prices have never been lacking in book history studies devoted to a single printer, to a specific market, or to private collections that often accumulated huge amounts of printed texts coming from the major European cities. Such references, however, have often been limited, treated and presented episodically and not related to the levels and trends in the prices of other consumer goods or the cost of living in a given place and time, except occasionally and in a very restricted way.

The very nature of the book object itself demands special attention when deciding to perform aggregate data analysis. In contrast to widespread commodities such as wheat, salt, other food products or raw materials, books were objects whose intrinsic characteristics (format, material, quality of print, but also the content itself, targeted at specific market) make the reduction to a single standard category very complex. These are not fungible goods, but at the same time they are by definition series-produced, thus differing from the concept of a unique object like a work of art or of high craftsmanship, with which they however share some peculiarities.

Certainly, it is possible to exclude many of the specific characteristics of a group of printed works in making them into an ideal unit on which to carry out statistical processing, but the operation requires extreme caution because it is at risk of losing precisely the essential information on which the analysis of the phenomenon depends.

Another difficulty is the distribution of books within a transnational market. It is one thing to compare the different trends of the evolution over time of the sale prices of printed books produced and distributed in individual markets (and monetary spaces) because they match a local demand, but quite another to take into account transnational demand and the intra-European circuits in which books circulated.

From this point of view, the implications are not only related to the monetary aspects of price comparability, but also affect the demand and supply mechanisms conditioned by the competition present over a wider territorial area.

In addition, the costs of long-distance book trade should not be underestimated, such as the transport costs that ultimately affected the final selling price (Dittmar 2015, 7). All these aspects, and many others, have to be taken into account in a study on the prices of printed books in Europe and over the longer term.

Undoubtedly, the subject is difficult to handle. In Angela Nuovo's words: "The price of books is to a large extent the result of the relationship of the various agents in the world of books. To understand this, the historian needs to focus on the processes publishers or wholesalers and then retail booksellers used in pricing books, then to make some assumptions about the prices that purchasers paid, based on an examination of the surviving records of some of the great book collectors. Finally, it is crucial to detect how, how far and why the various authorities, religious and governmental, intervened in the establishment of book prices" (Nuovo 2017, 107).

Although they are quite uncommon, there exist in fact a considerable number of sources from which historians should be able to extract even extensive series of book prices from the Renaissance and early modern periods, especially in Italy.

On the one hand, book trade lists allow us to evaluate stocks and their resale price as estimated by the booksellers who were called in to give a valuation. On the other hand, bookshop inventories, although they are among the documents

which have been less studied by book historians, are the first and sometimes unique source for data relating to which books were really circulating at a certain time and in certain places, how many of them just published or old or second-hand, and what their prices were. Moreover, from the first decades of printing, publishers and booksellers produced lists of books as a way of advertising their holdings. But only a fraction of these catalogues include prices of volumes, for reasons which have still to be fully understood.

Particularly interesting for these purposes are also the collections of private individuals who, in the most fortunate cases, contain references to the purchase prices of books or, where entire collections have passed from one owner to another, estimates of their value at the time of sale (Danesi 2014; Wagner and Carrera 1991).

The creation of a large database of book prices undoubtedly constitutes an invaluable resource but it is a daunting task; moreover, it is only the first level of difficulty that researchers have to face. At this stage, it is not important to consider how prices were formed during the various steps of the production process (sedimentation of production costs, costs related to the sale) or the nature of the assigned value (estimated in the case of used books, or stock inventory, or the result of special conditions offered to specific customers, etc.). It is first and foremost necessary to reflect on the interpretation we give to the figures found in the heterogeneous documentation that we are about to analyze. The many reference currencies in which these prices are expressed, depending on the monetary area of action of the economic operators involved, are likely to confuse and mislead if their exact meaning is not understood (Judges 1967, 526). This becomes even more urgent when, for example, our primary sources are the private notations of a collector who recorded how much he had paid for a book, or when two different currencies – geographically and chronologically – bear the same name. This is also crucial in comparing different places and markets. Was the price expressed in money of account or in coined money? In domestic or foreign currency? Is it possible to relate two prices expressed in different currencies?

It could therefore be useful to look in more detail at some monetary aspects in order to clear up any doubts or misreadings by building a reliable picture of the various types of currency used in Europe in the sixteenth and seventeenth centuries. Then we will discuss the possibility of comparing prices expressed in different currencies as they emerged on different markets.

The birth and development of a European monetary system

It is necessary to go back a few centuries to identify the passages that led to the coexistence in early modern Europe of a multitude of currencies having legal tender within a specific monetary area. At the end of the eighth century, Charlemagne developed a monetary reform which was imposed on all the territories of the Holy Roman Empire. This reform foresaw a silver monometalism by setting up a single legal-tender currency, the *denarius* (penny), obtained by dividing a silver pound (about 410 grams, 950/1000 fine) into 240 units. In decimal terms, every coin weighed theoretically 1.76 grams. A monetary system relying on only one coin, with no multiples or fractions, was very primitive, but it was suitable for the low level of transaction in early medieval times. When calculations and prices of hundreds or thousands of *denari* were required, non-coined multiples were used: the *soldo* (shilling) worth 12 *denari*, the *lira* (pound) worth 20 *soldi* or 240 *denari* corresponding to the original silver pound. A weight unit had become a monetary unit. The *lira*, which would go on to enjoy great success over the following thousand years throughout the Christian West, was thus born as a non-existent coin, a 'ghost coin', in Carlo Cipolla's words (Cipolla 1975).

After a long period of relative stability in money-weight and silver content, in a few centuries the political and administrative particularity of the various European territories, as well as the tumultuous economic development after the year 1000, led to the proliferation of new mints striking coins with different characteristics. As for the silver content of the *denaro*, it saw a progressive reduction: the *lira* and the *soldo* followed the same path, fragmenting the monetary landscape of Europe, and of Italy in particular.

With the erosion in the value of the *denaro* (240 *denari* came to represent everywhere a weight less than a pound) the *lira*-coin ceased to be equal to the *lira*-weight and "the ghost had begun its life, independent from the real being from which it had taken its name" (Cipolla 1967, 42). It also began to multiply in variety depending on the minting area (*lira* of 240 Florentine *denari*, *lira* of 240 *denari* of Lucca, *lira* of 240 Venetian *denari*, and so forth).

One of the obvious consequences of Western Europe's economic growth was the increase in the amount of business transactions, for which the *denaro*, which was now debased everywhere, seemed less and less suitable. At the end of the twelfth and the beginning of the thirteenth century different coins with a unitary value

higher than the *denaro* began to be struck: thus, for example, in 1172 Genoa began minting a silver coin with the value of 4 Genoese *denari*. Florence and Rome soon followed the Genoese example. Slightly later, Venice began to strike a piece worth 24 *denari*. In 1252 Florence coined the golden florin equivalent to 240 *denari*, thus giving life to the *lira*. In Genoa, at the same time, a piece of gold equivalent to about 120 local *denari*, i.e. half a *lira*, was created.

Contemporaries began to emphasize the distinction between these “big” (*grossi*) coins and the old “little ones” (*piccoli*): the latter, represented by the ever smaller and debased *denaro*, were destined for circulation in local markets as a means of payment in retail sales, wage settlement, and small credit transactions. The “big” (silver or gold) coins were used in transnational, commercial and financial operations instead.

The problem was that throughout the Middle Ages and the early modern period, the monetary authorities were unable to maintain stable exchange rates between the “small” and “big” coins, leaving the former at the mercy of the inflationary forces which, by contrast, only superficially affected the latter. Instead of harmonizing themselves into an organic monetary system, they formed two distinct ones, with specific areas of social and economic circulation. Within a few years, for example, the golden ducat of Venice which was worth 576 denars in Venice in 1284 rose to 1488 in 1500; in 1252 the golden florin of 240 Florentine *denari* was valued at 1680 *denari* in 1500 (Cipolla 1975, 53; Cipolla 1967, 43). Given these conditions of instability, the “big” coin could not function as a multiple of the “small” one.

The solution generally adopted by the businessmen in keeping their accounts was to “keep alive the old ghosts, *lira* and *soldo*” (Cipolla 1967, 45). For accounting purposes, it is necessary to have a differentiated unit system, but it is also essential to have a fixed and stable relationship between the units. The impossibility of ensuring a fixed relationship between the various metal coins obliged people to continue to use ghost units, inherently stable by definition, to measure their value.

The large metal coins (gold florins or ducats) in several Italian monetary areas (Milan, Venice, Genoa, Florence) remained in stable relationship with the small ones for a good part of the 14th century, so they also began to be used as a unit of account, as multiples of the *denaro*.

But when between the fourteenth and fifteenth centuries this stability began to waver and the gold coin resumed its upward trajectory, it too turned into a pure currency of account. For example, in Venice, the golden ducat remained fixed at the rate of 124 *soldi* for more than forty years in the second half of the fifteenth century, but when in 1517 its value started to rise again, people considered the ducat of 124 *soldi* as an abstract unit of account which had nothing to do with the coined golden ducat, which was progressively increasing in value. Likewise, in the state of Milan at the beginning of the fifteenth century, the florin of account had a value of 384 *denari*, while the minted one, for example in 1445, was worth 768 Milanese *denari* (Cipolla 1967, 48).

The terms “*lira*” and “*soldo*” had therefore a universally identical meaning (240 and 12 *denari*, with a different value depending on the monetary area, but with an internally fixed ratio), while the “big” units of account were worth many *denari* depending on the place. The currency of account, or ghost money, was therefore necessary to make calculations and to keep accounts because it represented a measure of value, not a means of payment. This is the main difference from the present monetary systems in which the base unit performs both functions. During the *ancien régime*, the currency of account was used to guarantee stability for a monetary system in which the “small” coins underwent a progressive debasement and the relationship between gold and silver was continuously changing (Goldthwaite and Mandich 1994, 41).

The key feature of all the monetary areas of Europe was, ultimately, the dissociation between hard cash (means of payment) and the unit of account (the specific instrument for measuring prices within a given area of sovereignty). Coins circulated through spaces and across boundaries, while territorial units of accounts were not directly convertible into one another. Only indirect comparisons were possible, in particular when in a certain monetary area an official quotation in terms of the local unit of account was attributed to a foreign coin (Boyer-Xambeau, Deleplace, and Gillar 1991, 184).

The different territorial units of account could be put in relation to each other in different ways: first and foremost, the governments of the various states set up the legal quotation of national or foreign metallic coins which were allowed to circulate within the administered territory. A connection between the unit of account and several coins was thus established; it had to consider their weight and fineness, as well as the relationship between the unit and a certain metal

weight, ie a tariff that was made public (although obviously not stable over time).

Thus, there was a multiplicity of monetary relations as a consequence of the different regime in force in each State: there were as many comparisons between these national monetary ratios as there were States and pairs of coins (Boyer-Xambeau, Deleplace, and Gillar 1991, 99).

The effective application of the laws establishing the official exchange rates was represented by the action of the moneychangers, a private activity often subject to authorization and supervision by the authorities. Their function was to receive all the types of coin existing on a marketplace and exchange them with other coins by controlling their weight and the fineness. Besides performing the 'vertical' exchange, that is, between pieces belonging to the same area of sovereignty (as a result of measures taken by the government to remove certain categories of coins, for example), the moneychangers were also engaged in the 'horizontal' exchange between foreign coins circulating into the State. The operations had to be carried out on the basis of the official quotation established by the authority, but most of the time – for a variety of reasons, from the mistrust or propensity shown towards certain coins, or their abundance or rarity – a different, 'voluntary quotation' could arise.

Parallel to this 'public' management of the territorial accounting unit, there was a 'private' management carried out by independent actors – merchant-bankers – who decided exchange rates through specific instruments, the main one being the so-called bill of exchange. Through this operation, a certain amount of currency was transferred from one individual to another in exchange for a letter containing the order to pay a certain sum in another currency and in another place; the actual payment could have been carried out in different ways, cash, bank transfer, or credit compensation. There is no need to dwell here on its characteristics, its evolution from the late Middle to the Modern Age, its use as a means of payment in transnational trade or as an instrument designed to exchange *per arte* in view of making a profit.² What is relevant here is that the object of the bill of exchange was a foreign currency of account defined in relation to the territorial unit of account, at a rate agreed between the parties involved.

² It is sufficient to refer to De Roover (1953); Boyer-Xambeau, Deleplace, and Gillar (1991); Matringe (2016).

In each financial center there existed a single currency denominated “present”, i.e. defined in the local territorial unit of account, while the other currency was “absent”, i.e. not measurable by that unit except through the exchange performed by letter. Through this conversion, a private sum of wealth expressed in “absent” currency (i.e. foreign) acquired value in “present” (i.e. local) currency.

While free and private, the relationships created were not due to chance, but rather to the control by the merchant-bankers of a structured exchange network gravitating round a central fair.³ Exchange rates were set up there, by creating a real ‘transnational private currency’. The existence of this currency was the only process capable of giving homogeneity to the multiple monetary relations created by the arbitrary power of the authorities of individual European countries.

The mechanism of the central fair played a dual role: on the one hand, it gathered information related to many European public coinages, allowing the operators to calculate reference rates consistent with each other on the basis of a specific ‘official’ currency of exchange of the fair, to which all had to refer (the *scudo di marco*); on the other hand, it elaborated information based on the common and qualified opinion of the merchant-bankers who supervised the fair by allowing them to comply with the conditions under which the individual contracts were concluded (Vigne 1903; Gascon 1971; Matringe 2016; Pezzolo and Tattara 2008; Marsilio 2008).

It is important to underline that the existence of a network of exchange by bills did not give birth to an ‘organic exchange system’: what was emerging was only a bilateral relationship between the central fair and each financial place, and it was not possible to automatically deduce by transitivity the relative price of two foreign currencies. The fair depended on a centralized procedure, but it cannot be considered a ‘general market’ in the modern sense; the irreversibility and lack of transitivity were due to a phenomenon of a monetary order. This is the decision by the States to establish the seigniorage – the difference between the legal tender of a coin in its issuing country and the value of the precious metal contained in it.⁴ Seigniorage allowed the merchant-bankers to operate the

³ During the period under consideration, the fair was held in Lyon and then, from the late sixteenth century, moved to Besançon and later to Piacenza – why and how we cannot examine here.

⁴ This was due to the levy made by the authority associated with the privilege of minting. From the amount of coin struck, the mint would have taken a cut to cover its own working expenses and another cut by way of seigniorage or tax.

exchange *per arte* and earn a systematic profit,⁵ but it did not the creation of a direct relationship between two foreign currencies exchanged at the central fair in *scudi di marco* (Boyer-Xambeau, Deleplace, and Gillar 1991, 260).

Minted coinage was therefore an official monetary instrument that needed two transactions to establish a relationship between units of account: a public official act establishing its legal value, and the manual exchange for private use. On the other hand, the bill of exchange coordinated the relations between units of account according to arrangements of a private nature.

However, an interconnection between these two types of ‘public’ currency (the legal tender of the coins) and ‘private’ currency (determined by the exchange rates) existed: a lack of coherence between them would have resulted in a chronic instability of the exchange rates (Boyer-Xambeau, Deleplace, and Gillar 1991, 346). In fact, private monetization could not be arbitrary, as the exchange rates practiced had to be linked and bound to the public one.

Problems of comparison and possible solutions

After this long digression, it is time to go back to the initial question, whether it is possible and if so how it is possible to compare the prices of books that appeared in different monetary areas. The first problem, as discussed in the previous chapter, and to which the last part of the paper will try to provide an answer, is the need to find a correlation between the monetary units in which prices are expressed in the sources.

Based on what has been said in the first part of the paper on the slipperiness of the topic, each result should be considered only as a first approximation to a more complex analysis taking into account several factors.

The immediate temptation would be to use the relationships between currencies of different areas which emerge from the two types of monetization, public and private, as discussed above. For example, we could identify a reference currency to which all the prices we are interested in could be traced back.

⁵ It was equal to the sum of the seigniorage rate of the two countries on the intrinsic value of the national currencies, provided that the exchanges by letter corresponded to the official exchange rate.

The monetary instrument that we have called ‘public’, that is, put into practice by the rulers who established the quotation in units of account of all the coinage in the territory, both internal and external, does not seem to be ideal. The tariffs that were periodically made public concerned the minted coins, so a series of conversions would be needed to correlate the value of the foreign coin with the unit of account of the country of origin and the value of the foreign coin in units of accounts of the reference currency. This operation could not ignore the distortion caused by the seigniorage and by the arbitrary decisions of the States in determining the official rates: they could consider or not the precious metal content of the individual minted coins as a result of specific, though rudimentary, monetary policies aimed at defending the national currency.

Another critical point that shouldn’t be underestimated is the existence of the ‘voluntary exchange’ materially performed by moneychangers: its very presence questioned the credibility of the legal exchange rate decreed by the authorities.

Also the ‘private’ monetization is certainly not free from criticism. The exchange rates set during the periodic fairs influenced the arrangements between merchant-bankers and their customers, but were still ‘contaminated’ by the seigniorage. This ensured the enrichment of the operators, as previously mentioned, but did not make transitive the relationships between the individual financial places and the central fair and the respective units of account. In addition, situations of extraordinary or abnormal abundance (*larghezza*) or lack (*strettezza*) of liquidity on a financial market could lead to more or less serious deviations between the rates materially indicated in the contracts and the reference ones. Nevertheless, it would be overly cautious not to take advantage of the wealth of information on exchange rates which emerged during the central fairs and is available for numerous years over the course of the sixteenth century (Lapeyre 1955; Da Silva 1969; Vázquez De Prada 1960; Denzel 2010).

Resorting to the economic historical literature dealing with prices could offer some solutions to these problems, as long as we remember to exercise caution in carrying out such delicate operations which are susceptible of methodological as well as interpretative errors (Parenti 1981; Cipolla 1950; Romano 1967; Braudel and Spooner 1967).

Price series, both of individual products and in the form of general indexes, traditionally refer to values of account obtained within a single monetary space.

This does not protect the creation of such series from mistakes, since, as we saw at the beginning, the account currency was subject to centuries or decades of changes in values as a result of the change in weight or alloy of the coined currency to which it was anchored.

Paolo Malanima has identified two types of influence that the currency could exert on prices. First of all, the fluctuation in the market value of the precious metal to which the unit of account was linked, which affected the price trend in such a way that it could not be isolated from the other variables, such as the demand and the supply of goods. In the second place, the changes, established by governments, in the alloys of coinage, or the value of the coined money in terms of money of account: from a certain point in time the same coin with the same fineness could assume a higher value in terms of money of account. Consequently, the unit of account ended up corresponding to a lower amount of precious metal (Malanima 2002, 406).

A possible remedy for this second problem is the conversion of the values of the series of prices from units of account to precious metal content (silver) in order to ‘sterilize’ them from the processes of ‘mutation’ of the currency which occurred over the years. This operation is made possible by the large amount of historical data related to the theoretical silver content of the units of account of the most important Italian and European currencies (Malanima 2002, 409; Mueller 1997, 624; De Rosa 1955).⁶

For our purposes, the adoption of these parameters is not only useful to guarantee the reliability of book prices in terms of local account units over time, by avoiding any purely monetary influence, but it also allows us to compare prices formulated in different territorial units according to their relative silver content. This conversion process has been criticized by some economic historians over the years: an awkward element, which has already come to the fore, is the monetary policies that sovereigns could implement in their States. Prices could not show an immediate reaction to these policies, being conditioned by several factors such as the general economic situation, the reaction of the market, and so on (Cipolla 1950; Judges 1967; Malanima 2002).

⁶ Tables that aggregate large amounts of data, also regarding the theoretic metallic content of local units of account, can be found on the website of the Global Price and Income History Group, <http://gpih.ucdavis.edu>.

However, within the project EMOBookTrade, the decision has been taken to make use of multiple approaches, despite our awareness that none of them is perfect; however, their combined use probably represents the lesser evil and does not affect the analysis that, at this stage, we intend to do.

A reference currency to which all the prices of the printed books contained in the sources could be brought back, the Venetian *lira*, was then chosen. Exchange rates (of a 'private' nature) between the Venetian *lira* and the other currencies have also been traced in the relevant literature (even through the mediation of the fairs' official currency, the *scudo di marco*, despite the limits of such procedure) (Lapeyre 1955; Da Silva 1969; Vázquez De Prada 1960; Denzel 2010). At the same time the silver content over the years of the Venetian *lira* and the other units of account has been identified. Finally, these two values have been correlated to confirm and verify the equivalence of the two ratios, that is, the exchange ratio between the units of account and their theoretical weight in silver. As expected, in all cases examined, the two ratios do not differ substantially in terms of absolute value, sharing the same pattern over time.

By doing so, prices can be made compatible at a given moment in time even when expressed in different currencies. However, it must be emphasized that this kind of analysis can only provide indicative results, and its representativeness and utility in conducting a comparative price study is somewhat limited.

Conclusions

What has been shown here resolves, albeit with some pending issues, just one of the many aspects related to the study of book prices in Renaissance Europe. Understanding their monetary nature, and having in mind the dynamics between different currencies for a comparison between them is important, but it is only the first hurdle, and not perhaps the most fearsome.

A further step, remaining within the monetary sphere but focusing on a single monetary area at a time, is following the vicissitudes of a price series over time in an attempt to 'purify' it from contingent situations arising from different phenomena other than normal market competition. It will then be necessary to explore more deeply the issue of the uniformity of different types of books in order to create an 'abstract object' so as to attribute the prices recorded by

the sources found in most parts of Italy and Europe. These steps are mandatory for the comparison not only of the level but above all the dynamics of the price series emerging within two or more specific book markets or trade areas, linking them to the cost of living and the consumption level of all the other goods.

References

Ammannati, Francesco, and Angela Nuovo. 2017. "Investigating Book Prices in Early Modern Europe: Questions and Sources." *JLIS.it* 8, 3: 1–25. Doi: 10.4403/jlis.it-12365.

Boyer-Xambeau, Marie-Thérèse, Ghislain Deleplace, and Lucien Gillar. 1991. *Banchieri e principi. Moneta e credito nell'Europa del Cinquecento*. Turin: Einaudi.

Braudel, Fernand, and F. C. Spooner. 1967. "Prices in Europe from 1450 to 1750." In *The Cambridge Economic History of Europe. IV: The Economy of Expanding Europe in the Sixteenth and Seventeenth Centuries*, edited by E.E. Rich & C.H. Wilson, 374–486. Cambridge: Cambridge University Press.

Cavaciocchi, Simonetta, ed. 1992. *Produzione e commercio della carta e del libro, secc. XIII-XVIII. Atti della "Ventitreesima Settimana di Studi", 15-20 Aprile 1991*. Serie II - Atti delle "Settimane Di Studi" e Altri Convegni. Florence: Le Monnier.

Cherubini, Paolo, Anna Esposito, Anna Modigliani, and Paola Scarcia Piacentini. 1983. "Il costo del libro." In *Scrittura, biblioteche e stampa a Roma nel Quattrocento. Atti del II Seminario, 6-8 Maggio 1982*, edited by Massimo Miglio, Paola Parenga, and Anna Modigliani, 323–553. Città del Vaticano: Scuola Vaticana di paleografia, diplomatica e archivistica. Doi: 10.1117/12.2234235.

Cipolla, Carlo M. 1950. "Storia dei prezzi e storia della moneta. Considerazioni critiche." *L'industria* 4: 1–10.

Cipolla, Carlo M. 1967. *Money, Prices and Civilization in the Mediterranean World*. New York: Gordian Press.

Cipolla, Carlo M. 1975. *Le avventure della lira*. Bologna: Il Mulino.

Conway, Melissa. 1999. *The Diario of the Printing Press of San Jacopo di Ripoli, 1476-1484. Commentary and Transcription*. Florence: Leo S. Olschki.

Da Silva, José-Gentil. 1969. *Banque et crédit en Italie au XVIIe siècle*. Paris: Klincksieck.

Danesi, Daniele. 2014. *Cento anni di libri: la biblioteca di Bellisario Bulgarini e della sua famiglia, circa 1560-1660*. Ospedaletto, Pisa: Pacini; [Florence]: Regione Toscana.

- De Roover, Raymond. 1953. *L'évolution de la Lettre de Change, XIVe-XVIIIe siècles*. Paris: Armand Colin.
- De Rosa, Luigi. 1955. *I cambi esteri del Regno di Napoli dal 1591 al 1707*. Naples: Banco di Napoli.
- Denzel, Markus A. 2010. *Handbook of World Exchange Rates, 1590-1914*. Farnham: Ashgate.
- Dittmar, Jeremiah E. 2015. "New Media, Firms, Ideas, and Growth: European Cities after Gutenberg." London. http://www.jeremiahdittmar.com/files/dittmar_new_media_firms.pdf.
- Edler De Roover, Florence. 1953. "Per la storia dell'arte della stampa in Italia. Come furono stampati a Venezia tre dei primi libri in volgare." *La Bibliofilia*, 55:107–15.
- Gascon, Richard. 1971. *Grand commerce et vie urbaine au XVIe siècle. Lyon et ses marchands (Environs de 1520 - Environs de 1580)*. Vols. 1–2. Paris-Mouton-La Haye: S.E.V.P.E.N.
- Goldthwaite, Richard A., and Giulio Mandich. 1994. *Studi sulla moneta fiorentina (secoli XIII-XVI)*. Florence: Leo S. Olschki.
- Hirsch, Rudolf. 1974. *Printing, Selling and Reading, 1450-1550*. Wiesbaden: Otto Harrassowitz.
- Judges, A. V. 1967. "Scopi e metodi della storia dei prezzi." In *I prezzi in Europa dal XIII secolo a oggi: saggi di storia dei prezzi*, edited by Ruggiero Romano, 519–37. Turin: Einaudi.
- Lapeyre, Henri. 1955. *Une famille de marchands: les Ruiz*. Paris: Armand Colin.
- Macleon, Ian. 2009. *Learning and the Market Place. Essays in the History of the Early Modern Book*. Leiden-Boston: Brill.
- Malanima, Paolo. 2002. *L'economia italiana. Dalla crescita medievale alla crescita contemporanea*. Bologna: Il Mulino.
- Marsilio, Claudio. 2008. *Dove il denaro fa denaro. Gli operatori finanziari genovesi nelle fiere di cambio del XVII secolo*. Novi Ligure: Città del silenzio.
- Matringe, Nadia. 2016. *La banque en Renaissance. Les Salviati et la place de Lyon au milieu du XVIe siècle*. Rennes: Presses Universitaires de Rennes.
- Mueller, Reinhold C. 1997. *The Venetian Money Market. Banks, Panics, and the Public Debt, 1200-1500*. Baltimore: Johns Hopkins University Press.
- Nuovo, Angela. 2013. *The Book Trade in the Italian Renaissance*. Leiden-Boston: Brill.
- Nuovo, Angela. 2017. "The Price of Books in Italy (XV-XVI Centuries)." In *I prezzi delle cose nell'età preindustriale - The Prices of Things in Pre-Industrial Times*, 48:107–27. Florence: Firenze University Press, Fondazione Istituto Internazionale di Storia Economica.

- Panciera, Walter. 1995. "Aspetti tecnologici delle stamperie veneziane tra Cinque e Settecento." *Miscellanea Marciana* 10-11:184–98.
- Parenti, Giuseppe. 1981. *Studi di storia dei prezzi*. Paris: Maison des sciences de l'homme.
- Pezzolo, Luciano, and Giuseppe Tattara. 2008. "'Una fiera senza luogo': Was Bisenzone an International Capital Market in Sixteenth-Century Italy?" *The Journal of Economic History* 68, 4: 1098–1122. <http://journals.cambridge.org/action/displayFulltext?type=1&fid=2681296&jid=JEH&volumeId=68&issueId=04&aid=2681288>.
- Richardson, Brian. 1999. *Printing, Writers and Readers in Renaissance Italy*, Cambridge, Cambridge University Press.
- Romano, Ruggiero, ed. 1967. *I prezzi in Europa dal XIII secolo a oggi: saggi di storia dei prezzi*. Turin: Einaudi.
- Vázquez De Prada, Valentín. 1960. *Lettres marchandes d'Anvers*. Vol. 1–4. Paris: S.E.V.P.E.N.
- Vigne, Marcel. 1903. *La Banque à Lyon du XVe au XVIIIe siècle*. Paris-Lyon: A. Rey-Guillaumin.
- Voet, Leon. 1969. *The Golden Compasses. The History of the House of Plantin-Moretus*. Vols. 1–2. Amsterdam-London-New York: Vangendt & Co., Routledge & Kegan Paul, Abner Schram.
- Wagner, Klaus, and Manuel Carrera. 1991. *Catalogo dei libri a stampa in lingua italiana della Biblioteca Colombina di Siviglia = Catalogo de los impresos en lengua italiana de la Biblioteca de Sevilla*. Ferrara: ISR; Modena: Panini.