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*«Li vostri che tenghono li libri non sanno tenere tanti chonnti»  
Useful knowledge and accounting as seen through the accountant's lenses  
and the logic of capitalism\**

## 1. Introduction

On 6 December 1518, the Florentine Lionardo Spina, the director of the Salviati-company in Lyon, wrote a letter to Bartholomäus Welser & Mitverwandte and refers to some transactions operated during the previous fairs. In the same context he reviews the accounting techniques employed by his fellow merchant bankers from Augsburg:

[...] we understood that your men who keep the books do not know how to keep accounts, in the future we should make it one or two accounts, as you say, however, in some cases you could not do it in another way, because those accounts are accounts of different things.<sup>1</sup>

This quotation is one of the very few occasions when we learn about the transfer of accounting techniques explicitly. In this case, the manager of an enterprise of high profile, Lionardo Spina, explains to the bookkeeper of the Welser company how accounts should be kept. Also Bartholomäus Welser & Mitverwandte was one of the great players of that day. Spina knew from the letters he received that the Welsers, up to a certain point at least, did not distinguish into various accounts what actually should be put in different accounts. Hence, we may observe an apparently one-way transfer of a more complex understanding of accounting from a Florentine merchant banker to a South German business friend.<sup>2</sup>

Despite this illuminating individual case, it remains an open question how accounting techniques travelled and were transferred from one cultural context to another or just even from one firm to another, and how the accounting practices of

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<sup>1</sup> Scuola Normale Superiore di Pisa (SNS), *Archivio Salviati*, I, 472, c. 8v: «[...] abiamo inteso che li v(ost)rj che tenghono li lib(r)j no(n) sanno tenere tantj chonntj, p(er) l'avenire si farà uno/ o /ij chontj chome djtte, ma qualche volta no(n) si può fare alt(r)imentj p(er)ché atenghonno a djversa».

<sup>2</sup> For the Salviati companies in Lyon: Matringe 2016; Pallini-Martin 2018; Lang 2020. For the Welser companies: Häberlein/Burckhardt 2002; Lang 2021.

one bookkeeper influenced the accounting practices of another. Knowledge of accounting was fairly practical knowledge which scarcely was explicitly mentioned when put into use. At the mean time it had become an almost natural technique of calculation.

If letters or sheets of notices do not tell, we have to dig deeply into account books to shed light on the mere transfers or, in a more profound understanding, the genealogy of accounting practices. For Italy we have especially in the Venetian context manuals on accounting at hands, but in Tuscany either none has survived or none had ever been written.<sup>3</sup>

However, it was the bookkeepers that disposed of this practical knowledge. My hypothesis here is that in Renaissance Florence of the late fifteenth to early sixteenth century the figure of the accountant-expert emerged. Although we are talking about a very tiny group of bookkeepers which kept accounts for others, it was a significant and exemplary move forward in the history of accounting. The said men managed the personal accounting for the complex transactions on the merchant bankers' behalf. This also means that these particular bookkeepers acquainted a highly evolved knowledge of accounting and, thus, became experts. Therefore, I will refer to the case study of Matteo Brandolini who became the accountant-expert of Alamanno Salviati (1510-1571), son of the papal banker Iacopo Salviati.

This paper discusses the passage from bookkeeper to accountant-expert. The practices of accounting though will be depicted on the background of knowledge of accounting, because the essential question is: how did the newly emerging accounting-expert get acquainted with the expertise of accounting?

The 'bookkeeper' could be defined in a narrow sense simply as the person which keeps the accounts of someone in everyday operations. We use the term in a very general view as well. The 'accountant' in a broader understanding is a person which still does the work of a bookkeeper, but more on an expert level by interpreting the accounting techniques and their adoption to complex banking operations. Both terms are not taken from the evidence<sup>4</sup>.

In consequence, the following considers useful knowledge in the accounting perspective during the late fifteenth and sixteenth centuries. Thus, 'useful knowledge' will be addressed as 'practical knowledge of accounting'. The point of depart is the term 'useful knowledge' as brought into debate by Simon Kuznets and, later on, by Joel Mokyr. However, that kind of knowledge refers to the era of academies in the eighteenth century. This is not the case with knowledge of accounting which is discussed here, because in the centuries earlier knowledge of accounting was not subject to academic, but to vocational education and training on-the-job.

The use of practical knowledge of accounting leads to a crucial issue of accounting practices and, hence, to the inquiry of who used knowledge of accounting and in which contexts it was employed. The answer to these questions is rather simple: in

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<sup>3</sup> On the 'management' of practical knowledge and accounting as an 'instrument of resiliencing' recently: Denzel 2020, 51-59.

<sup>4</sup> The difference between 'bookkeeper' and 'accountant' is somewhat artificial. In modern vocabulary of job descriptions we are told that the bookkeeper is involved in day-to-day business of accounting, while the accountant's service is the interpretation of accountancy. I am using the English terms to raise the profile of the 'new type' of bookkeeper and to stress my hypothesis.

the first line it was the bookkeeper. But this answer rises another series of questions following-up. The bookkeeper had to be trained with accounting techniques and developed his own set of practices by keeping accounts of the firm, of the institution, of the household or of himself (Goldthwaite 2015).

Only in some exceptional cases bookkeepers like Matthäus Schwarz (1497-1575), the «Hauptbuchhalter» (the bookkeeper of the central ledger) of the patrons Jacob and Anton Fugger, became truly visible. For instance, Matthäus Schwarz is presented at the desk sitting next to Jacob Fugger in the headquarters of the Fugger company (the «Goldene Stube») as shown in the famous «Trachtenbuch.» Furthermore, he is the author of various manuals on bookkeeping like the «Musterbuchhaltung» and the «Kaufmannsnotizbuch.»<sup>5</sup>

In general, the bookkeeper is *the* neglected feature of accounting history though. The development of accounting techniques mainly is regarded from the account book's point of view, particularly when the appearance of the Double Entry Bookkeeping is discussed. In these cases, the bookkeeper remains an almost 'anonymous' entity whose contribution to accounting techniques is given for granted, but never carefully elaborated.<sup>6</sup>

Particularly Italian archives preserve fragments of accounting and account books that originate from the times since the Commercial Revolution. In that context, the bookkeeper does not emerge as an independent figure in the process of accounting and developing of accounting techniques. He is only referred to as bookkeeper in his function of keeping books. The Tuscans called him «the one who holds the books» («tenere i libri»). The perspective on the development of accounting techniques is focussed on the merchant banker himself and the manager which is the junior socio (the minor shareholder) of the company «for the estimation of his person» («per la stima di sua persona») as the contracts spell it out (Goldthwaite 2007; De Roover 1963a).

At the core of the following is a particular character of bookkeeper and his knowledge of accounting: the personal accountant which evolved in the late fifteenth and early sixteenth centuries. Due to the complexity of business operations and forms of investment, the set of accounts diversified and, hence, the range of processes a bookkeeper was involved in multiplied. In running commerce and banking the main bookkeeper is the one which keeps the ledgers of the business partnership. In most cases, the 'director' of the company was also the key figure of the accountability of the firm. Still, the the position and agency of the bookkeeper within the management fades out behind the analyses of accounts (Denzel 2020; Goldthwaite 2018).<sup>7</sup>

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<sup>5</sup> The *Trachtenbuch* of Matthäus Schwarz is preserved in the Niedersächsische Landesbibliothek, Hannover, and accessible online: [https://commons.wikimedia.org/wiki/File:Trachtenbuch\\_des\\_Matthaus\\_Schwarz\\_aus\\_Augsburg,1520\\_-\\_1560.PDF?uselang=de](https://commons.wikimedia.org/wiki/File:Trachtenbuch_des_Matthaus_Schwarz_aus_Augsburg,1520_-_1560.PDF?uselang=de) (20 November 2022). On Matthäus Schwarz and his visibility: Groebner 1998. Introduction to Matthäus Schwarz and his "Kaufmannsnotizbuch": Westermann and Denzel 2011. On the "Musterbuchhaltung": Weitnauer 1931. For his accounting techniques: Isenmann 2019.

<sup>6</sup> One of the best summaries on the history of accounting techniques is Yamey 1991. The same is true for the history of accounting in Late Medieval Germany: Penndorf 1913.

<sup>7</sup> On complexities in Florentine economy: Padgett and McLean 2006.

The emergence of the accountant becomes evident with the personal bookkeeper of the merchant bankers' personal accounts. This development could also result from social and political changes which evolved in Florence the 1530s, when the Republic ceded to exist and the politically leading group of the merchant bankers was gradually replaced by an elite oriented to the court (Burr Litchfield 1986; Goldthwaite 2009). In this context, we can observe best the shape of the new role which could be described with the particular character of an expert. In the end, personal accounts were kept in the same way as account books of a business company. However, it can thus be hypothesized that the merchant banker himself gave way to his accountant to manage his domestic and personal accounts and hence the new type of the accountant-expert emerged (Goldthwaite 2017).

The following is a contribution to the history of Florentine capitalism. For a better understanding the relevance of knowledge and practical skills of accounting for the capitalist behaviour in the early sixteenth century will be discussed. The South German background of the development of accounting shall create a contrast for comparison. Hence, this article does not deal much with the origin of capitalism in the Florentine Renaissance, but more with the knowledge and skills of accounting as the key issue of accounting history. Capitalism will be treated through the lens of the bookkeeper and the accountant-expert.<sup>8</sup>

## 2. The concept of 'useful knowledge' and accounting

In a first chapter we should examine the concept of 'useful knowledge' and its impact on accounting. The debate on 'useful knowledge' is still open. When Joel Mokyr introduced 'useful knowledge' as an agent of cultural change which broke path to the concept of economic growth, he referred mainly to technological knowledge (that is knowledge about nature). By that he intended the open-mindedness towards the recognition of nature and its laws which, then, became applicated on processes of production. A key role in this context plays the Enlightenment as far as it left behind religiously motivated moral obstacles and, hence, turned to a new perception of the world. In consequence, the concept of economic growth, which underpins the rise of capitalism, was born as a mind set of secular calculative attitude.<sup>9</sup> In doing so, Joel Mokyr argues that the decisive step forward to capitalism does not derive from the economic development in the European cities in the tenth and eleventh centuries as had been told before.<sup>10</sup>

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<sup>8</sup> Convincingly Francesca Trivellato argues that the comparison of processes of capitalisation on the ground of deeply localised research shifts away from the question of the origin of capitalism and sheds new light on the business history in pre-industrial economies: Trivellato 2020.

<sup>9</sup> Mokyr 2002, 3-26; 339-41. This is a modification of the 'Great Divergence'-hypothesis as exposed by Kenneth Pomeranz some years earlier (2000). Of course, we notice the anti-religious tone of what Joel Mokyr tells us. Since many scholars refer to Joel Mokyr (and to Simon Kuznets) in the context of 'useful knowledge' (like the *Settimana di Studi Francesco Datini* of the year 2022), I am briefly looking at his main hypothesis, too.

<sup>10</sup> On the Commercial Revolution as an urban project of the High Middle Ages and its meaning for the emergence of capitalism: Lopez 1971; De Roover 1963b.

Some years later, Steven Marks argues instead that the way to capitalism went through the information revolution which took place above all since the seventeenth century. Marks speaks about information circulated within correspondences, journals and newspapers – by paperwork which defused and stored knowledge about market evolution, development of prices, but also technological knowledge.<sup>11</sup>

The result of Mokyr's and Marks' seminal works is not really convincing in the strict sense: The Western European culture of Enlightenment – taken as emancipation from religious obstacles to (re)thinking nature – was at the core of preconditioning the Industrial Revolution. In the last decade a historiographic boom emphasised the relevance of technical knowledge for growth.<sup>12</sup>

All these important statements about knowledge, though, neglect accounting techniques as technological and, hence, practical knowledge ('useful knowledge'), in general. This blindness towards accounting is quite amazing in this context, because in the end it was accounting techniques to measure economic growth – whatever culture we are talking of<sup>13</sup>. This may be the more surprising since one hundred years ago, some scholars like Max Weber or Werner Sombart identified accounting as a formative factor of Western rationality which made the difference (Weber 1980; Sombart 1969; Yamey 2005).<sup>14</sup> Knowledge of accounting was not academic or theoretical, even if algebraic techniques had to be studied as a prerequisite. It was practical knowledge in the sense that it derived from business practices and was trained on-the-job. It scarcely ever found its way back to a theoretical level – unless it was compiled in manuals.<sup>15</sup>

Moreover, the term 'useful knowledge' implies the existence of *useless* knowledge which could be seen as a *contradictio in adjecto*. The 'usefulness' in the context Mokyr argues with could be referred to as 'applied sciences'. The knowledge which is not defined as 'useful' in that sense might be 'speculative' or 'a priori'-knowledge as Immanuel Kants puts it in his *Kritik der reinen Vernunft*.<sup>16</sup>

In the fifteenth century, for instance, practices of accounting were also preconditioned by theological – or at least moral – knowledge in order to adjust economic operations to the Christian model of society. Generally speaking, we cannot be sure of which quality knowledge appeared to be when it came to usefulness (Caferro 2020, 48-51), and in consequence the term «practical knowledge of accounting» is preferred.

Some scholars, following David Hume's observations, have pointed out that any kind of economic knowledge in Renaissance Florence was not theorised, but rather

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<sup>11</sup> Marks 2016. With regard to the information revolution Marks' chronology has to be reconsidered and his main argument should be modified: the Second Information Revolution in the economic context was already evolving in the sixteenth century because of the circulating price lists ("Preiscouranten"): Schmidt 2010.

<sup>12</sup> On innovation deriving from technological knowledge: Epstein 2013.

<sup>13</sup> This is even true, if we speak about the measurement of National economic growth: Kaplan and Reinert 2019.

<sup>14</sup> Critique on the concept of 'rationality': Goody 1996, 49-81.

<sup>15</sup> This is much more about the theory of the emergence of 'early modern' science from the context of practical work as explained by Edgar Zilsel (1976).

<sup>16</sup> Kant 1787, chapter III.

practical. Florentines were well aware of that fact. Economic learning, the same is true for knowledge of accounting in particular, was learning by doing, apart from the elementary skills like writing and reckoning.<sup>17</sup>

In this context a recent study should be carefully reconsidered, because it contributes in a much more *useful* perspective to the discussion about practical knowledge of accounting. Michael Zakim tells us the story about the rise of an entire social class of people. He describes the professional group of the clerks as the engine which made the capitalist's enterprises run. By 'clerks' Zakim understands the white collar workers who became the accountants of the flourishing business enterprises at the daybreak of the Industrial Revolution. In fact, Zakim is talking about thousands of men at white collar working places which expanded in first half of the nineteenth century (Zakim 2018).

What is important here, is the concept of the emergence of a particularly qualified and trained group of bookkeeping staff for accounting. When it came to the very complex personal accounting systems and the diversification of investment in Renaissance Florence at the end of the fifteenth century, a new tiny group of highly qualified bookkeepers – which I call here accountant-experts – emerged. In his article on Iacopo di Tedesco, a Florentine silk weaver, Richard Goldthwaite makes the observation that Iacopo called some accountants in: between 1499 and 1504 it was Francesco d'Albizzo and between 1531 and 1539 Raffaello di Pellegrino Bartoli. These men were paid by a modest sum in order to keep the accounts on the entrepreneur's behalf (Goldthwaite 2005, 78-80). Of course, the number of experts of accounting remained small, and the process should be elaborated by further research on personal and domestic accounting.<sup>18</sup>

## 2.1 Accounting and accountant

The history of accounting was limited to the evolvement of accounting techniques until the late 1990s. Particularly, the historiography about the development of accounting in the Late Middle Ages and Early Modern Europe is going through a significant change. The practices and cultures of accounting are now considered to understand the economic changes and the varying forms of capitalisation. A special aspect is, of course, the knowledge of accounting.<sup>19</sup>

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<sup>17</sup> Reinert and Fredona 2020, 126-131. In his 'Political Essays' David Hume expands on the Italian blindness to 'thinking' political economy, though they were very good at 'doing' it (127). In reference to Giovanni Botero Sophus Reinert and Robert Fredona argue that, at least in the sixteenth century, Italian thinkers articulated the views on the requested skills for getting wealthy through manufacturing textiles. However, there is no Florentine to be named. In their brilliant article they analyse the Medici account books of the Selfridge Collection showing the business strategies of the Medici wool businesses and production in the sixteenth century.

<sup>18</sup> Goldthwaite 2017 does not tell us the story of the accountant of personal accounts explicitly. However, we find traces of the concept in his resuming article on personal and domestic accounts. The study of the *capitalist rentiers* leads to these hypothesis starting off from Goldthwaite 2020.

<sup>19</sup> Most important in this context was the London initiative for a new accounting history by Peter Miller (1994). For the summary on historiography: Napier 2009. On the changes in historiography and

Accounting should hence be described as processing data. It is a process of organising and abstracting data, which homogenises heterogeneous events or occurrences into a coordination system in order to regularly evaluate transfers economically by pecuniary measurement. Sociologically speaking, accounting is processing data driven by a bookkeeper who employs a cognitive artefact, his account book, to set up a valuating operation. The prerequisite conditions for accounting in this sense are literacy, a linguistic evolvement, and a certain algebraic standard as they were pecuniarily applicable concepts of value. The practical knowledge of accounting, thus, was a set of cultural techniques which the bookkeeper had to dispose of<sup>20</sup>.

Only very recently, studies on accounting consider the genuine impact of the bookkeeper's activity. Mechthild Isenmann analyses the accounting in process of the headquarter of the Fugger, when the general bookkeeper, Matthäus Schwarz, proceeded deliberately to resiliencing methods by making use of the account books. The accountant-expert of the Fugger put into practice his own methods of organisation of the accounting system (Isenmann 2019).

Our case study here shows that the ways of applying diversified features of accounting to get along with various problems of refinancing, became quite complex and tricky in the sixteenth century. No matter whether we speak of large business companies like the Fugger or the Welser from Augsburg or the personal accounts of a patrician from either side of the Alpes, at any rate, a good deal of knowledge of accounting was required to cope with challenges, and the bookkeeper was the one who had to set up knowledge of accounting by doing accounting in account books.<sup>21</sup>

### 3. Training in accounting

Here, we trace back the arrival of the experts of accounting down to the early sixteenth century. Hence, the culture of knowledge of accounting and business economy was evolving long before the academic teaching of business economics (what we may call 'pre-academic knowledge') and, thus, before the professionalisation of the clerk which was still to be born as a social figure. During the nineteenth century the early commercial schools and colleges were founded.

Jacob Soll analyses note-taking as the key competence to systematise knowledge, and comes up with commercial accounting. However, he does not review accounting as a kind of 'useful knowledge' *sui generis*. In fact, Soll refers to manuals of the seventeenth century to describe the instrument of commercial accounting as a technique

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new ways of interpretation: Lang 2020. On the perspective of «practices and culture of accounting»: Goldthwaite 2015. On a new understanding of 'capitalism': Levy 2017.

<sup>20</sup> The most significant step forward to a sociological understanding of accounting is by: Lemarchand, McWatters, Pineau-Defois 2014. They borrow the term 'cognitive artefact' from Donald A. Norman (1993). A rather interesting approach is by Llewellyn, Milne 2007: the two authors interpret accounting not so much as a «written, instructional, codified text», but rather as texts which refer to an organisational framing and were to be driven. The sociological concept of accounting as a human-machine-process is described by Lang (2019).

<sup>21</sup> For the Salviati company in Lyon we can reconstruct the methods of dealing with the lease of the duties on silk upon the river Rhône: Lang 2020, 212-13. On the special case of Paulus Behaim from Nuremberg: Isenmann 2015.

which interferes with other methods of note-taking.<sup>22</sup> Manuals, however, do not necessarily represent the practice of accounting, but the theory as for learning.

Hence, in order to profoundly understand accounting of the Florentine sixteenth century, we cannot rely on manuals, instead we have to analyse account books themselves to reveal the bookkeepers' work and their knowledge which formed the processes of accounting of that day. Manuals, as it seems, were used as didactic media, being copied by apprentices, and not so much in commercial practice, as Ugo Tucci puts it (Tucci 1968). In their everyday business, merchant bankers referred to incoming and outgoing letters for the sake of seeking information. As shown by the introductory example, this is even true for the delicate transfer of accounting techniques. For putting transactions into accounts and balancing accounts, the letters written from and to business correspondents preserved the essential data.<sup>23</sup>

The situation in Florence was quite particular: on the one hand the practice and the culture of accounting and accounting techniques were highly refined by then, and the double entry bookkeeping which – in theory – enables the accountant to fully calculate the ongoing business and balance the whole set of accounts, was probably at its best.<sup>24</sup> On the other hand, apparently every young Florentine who became to be a merchant, an artisan or even the patricians in general studied the algebraic techniques at all extent at the abacus schools. After their first years at an elementary school where the pupils learned reading, writing, grammar and some basic Latin language knowledge, they went on to attending the abacus schools at the age of ten or eleven for further three years.<sup>25</sup>

At abacus schools, run by masters of algebra, the arts of reckoning were taught. In Florence, since fourteenth century numerous abacus schools appeared regularly and continuously over the time. Many of the said masters of algebra wrote manuals where they collected and explained arithmetical problems.<sup>26</sup> This particular category of writings like the *Pratica d'arithmetica* of the Florentine Francesco Galigai, which was published in 1521 and many times reprinted, present an enormous number of arithmetical problems as they appear in exchange rates between currencies in gold and silver at different alloy, in the calculation of proportions of prices in relation to different qualities and quantities. In some respect, many of these manuals of algebra give long lists of practical information on currencies and specie. However, these books do not contain any lessons on accounting.<sup>27</sup>

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<sup>22</sup> Soll 2010. Still so: Soll 2014. In the same volume as Soll 2010: Blair 2010. Earlier and more interestingly about the cultural technique of 'note-taking': Cevolini 2006.

<sup>23</sup> On the reluctance of merchant bankers to employ manuals for organising their business transactions and the importance of letters for collecting information: Weissen 2005. For letters as the 'external' component of accounting and the use of letters for organising accounts: Lang 2017.

<sup>24</sup> On the development of accounting in Florence in general: Goldthwaite 2015.

<sup>25</sup> At an early stage of his enormous research on Florentine accounting, Richard Goldthwaite studied the training of young Florentines in the fifteenth century (1972).

<sup>26</sup> Elisabetta Ulivi has profoundly studied that type of schools and the masters of abacus which she identified abundantly (2015).

<sup>27</sup> Galigai 1552, lib. III-V. On the lists of currencies and specie: Travaini 2020. Elisabetta Ulivi confirmed the absence of manuals of accounting in the 'pratiche d'arithmetica' in the Florentiner Late Middle Ages and Renaissance.



If there were any Florentine bookkeeping treatises included in these arithmetic works, they should have been presented like the treatise on bookkeeping published by Luca Pacioli in Venice in 1494 as a part of his *Summa de arithmetica*. Of course, the title does not hint directly to the topic in question. As far as we can see, Pacioli did not make use of Tuscan sources for his considerations on accounting (Sangster 2012; 2016). Probably, there were none.

It is again Matthäus Schwarz, who confirms ‘indirectly’ the absence of manuals on accounting, before his path breaking compilations. When he started composing his «Musterbuchhaltung», based on the documentation of the Fugger-representative in Venice Georg Spengler, in 1518, Schwarz states a significant lack of teaching material about accounting. Though, at first his «Musterbuchhaltung» served only for his own purposes.<sup>28</sup>

What we do know about Florentine apprentices and young merchants, is that they learned accounting by doing on the job. In the business companies the experienced took the future merchant, the *giovane*, under his guidance in order to show him the proper way of keeping accounts. In 1525 for instance, the elder of the Botti brothers, Matteo, wrote the following advice to his younger brothers, Jacopo and Giovambattista, with regard to the inevitable perfection of accounting techniques:

[...] in this context you do not have to be trained by other persons, what does matter quite a bit, if you are in the need of training, you should have someone who teaches you for a certain period.<sup>29</sup>

In the literature on the matter, there is an ongoing debate about the question whether the refinement and innovation of accounting contributed significantly to entrepreneurial success<sup>30</sup>. Be it or not, the referring knowledge was passed from one generation to another, from the experienced businessman to the apprentice. Accounting knowledge was practical training on-the-job and hence acquainted with by trial and error. This is why we shall imagine the importance of copying letters and accounts for the language of business in general and of accounting in particular, and for the practical procedures (Melis 1950).

The improvement of the learning young merchant can only be asserted by the close study of the account books which are preserved in some cases (Orlandi 2022, 79-82). The method of research on the development of accounting knowledge is a rather fragmented and cumbersome undertaking, because we only are able to climb up from the prosaic and detailed bottom of accounts and letters to the bright top of knowledge.

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<sup>28</sup> Isenmann 2019, 140. The first scholar who quotes from Matthäus Schwarz is, of course, Alfred Weitnauer (1931, 14).

<sup>29</sup> Orlandi 2002, 78 (quotation of the letter there): «[...] in questo non habbia a essere governato d'altri che non importa pocho, quando bene bixogni, tenere uno che l'insegni per qualche tempo».

<sup>30</sup> Orlandi 2002, 78-9: Michele Cassandro takes a middle ground position and underlines that the evolution and the refinement of accounting techniques did undeniably have some positive effects on entrepreneurial success: Cassandro 1991.

#### 4. The case study: a personal accountant

The following case study exemplifies the production of knowledge of accounting in a proceeding practical process. The *capitalist rentier*<sup>31</sup> Alamanno Salviati, a Florentine patrician grown up in Rome, has left a good deal of evidence, while his main bookkeeper and accountant-expert was the Florentine Matteo Brandolini. We have to dig deeply into the archival material to keep his track.

Alamanno Salviati (1510-1571)<sup>32</sup> never actively operated a business in banking and commerce. However, he held shares in some of the business partnership companies which belonged to his distant cousins and invested huge amounts of money in the loans to the French Crown, for instance, executed by his bankers who did business on the secondary markets of bills of exchange.<sup>33</sup>

Alamanno Salviati also purchased and administered lands which he mainly inherited from his father-in-law, hence from his wife's family. Some of his account books, which were due to the properties of land, were kept by the administrators of his estates. To sum up, Alamanno Salviati's account books fill a whole shelf in the archives at the Scuola Normale Superiore in Pisa, covering nearly his entire life span as an adult (1530-1571). Some pieces of his series are preserved at the Vatican Library (Rome).<sup>34</sup>

The specific issue about Alamanno's account books is not only the complexity of their organisation, but also their consistency. The ledgers are structured by all accounts necessary for a full double entry bookkeeping as they are entirely balanced. His account books shed light on his style of life – that of a quite well-off member of the Florentine elite – and, above all, on his investments of any kind and the respective return. His expenses are met by the revenues from his land property and from the return of other of his investments. Generally, the profit and loss accounts are used for the regular balance operations in this context. From 1539 on he kept also letter copy books (*copialelettere*) and waste books (*ricordanze*). In his letters he explains his transactions, as if he were running a business company on his own. The difference

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<sup>31</sup> The term *capitalist rentier* shall recall two types of capitalists: one the one hand a 'capitalist' who is an active partner of a company and manages his investments for reinvesting. On the other hand the capitalist's investments are meant to produce a return like on real estate or equity like on shares held passively as a 'rentier'. In preparation of my current project at the university of Leipzig «Investments and Practices of Refinance in Crises. Accountability of Commerce and Banking Companies and of Capitalist Rentiers in Florence and Augsburg in the Sixteenth Century» I discussed with Richard Goldthwaite about accounting and the concept of *capitalist rentiers*. I am owing the term to Richard whom I am very grateful for the many jolly dinners we are having for our ongoing debates on accounting.

<sup>32</sup> Some hints at the profile of this particular character we find in the family's biography: Hurtubise 1985, ad indicem (particularly pp. 241-61).

<sup>33</sup> On the context of secondary markets and the loans to the French Crown: Orlandi 2002; Lang 2020 (extending on the issue: chapter V.2). For a broader view to the Florentine merchant bankers and their activities in the French Kingdom: Goldthwaite 2009, 147-64.

<sup>34</sup> SNS, AS, ser. III, no. 17-62. See the recently completed inventory by Cristina Setti: SNS, Centro archivistico, schedario, 11 September 2020. For the Vatican (Biblioteca Apostolica Vaticana): Fiorani 2010 (cf. no. 300-305; unfortunately, this inventory has many errors).

of his correspondences to other surviving material of that time is, that he carefully described his investment strategies.<sup>35</sup>

Matteo Brandolini's, the bookkeeper's, hand appears in Alamanno Salviati's account books from 1 October 1535 on, when he opened the new ledger "B." The *libro debitori e creditori segnato B*, which belonged to the twenty-five years old Alamanno Salviati, seems to be the first professional account book of the series<sup>36</sup>. However, only in late 1539 Brandolini started the whole range of account books with the *copialelettere* and the *ricordi* "C"<sup>37</sup>. According to his hand in Alamanno's documents Matteo Brandolini stayed with his master until the 1550ies.<sup>38</sup>

Over the years Matteo Brandolini not only became Alamanno's bookkeeper, but also his minister, administrator in chief and, in some exceptional cases his proxy. In 1540, for instance, Matteo opened an account book due to the return on the shares Alamanno and his brother's heirs, *redi di Lorenzo*, held with their distant cousins' *compagnia* in Pisa:

This book belongs to Alamanno and to the heirs of Lorenzo di Iacopo Salviati wherein accounts will be kept by me, Matteo Brandolini, and they are about everything what regards the firm of Averardo Salviati & Co in Pisa which is the return of the bank in so far as for the capital stock as for the return divided from today on.<sup>39</sup>

In another ledger we learn that this account book was a *tavola*, a table to keep account of the return on the capital invested in the business company Averardo Salviati & co in Pisa.<sup>40</sup> So, it becomes obvious that Matteo Brandolini was not a "simple" bookkeeper or a scribe, but an accountant with his own expertise.

In some delicate cases Alamanno Salviati sent his accountant and administrator as his representative: in September 1539, Matteo went to Naples in order to collect the amount of money falling due to the liquidation of his master's share which he

<sup>35</sup> For the state of the art of personal accounts and the implicit difference to business account books: Goldthwaite 2017.

<sup>36</sup> SNS, *AS*, ser. III, no. 21 (Libro debitori e creditori di Alamanno Salviati segnato B).

<sup>37</sup> SNS, *AS*, ser. III, no. 22 (Libro di copialelettere e ricordi di Alamanno Salviati C).

<sup>38</sup> SNS, *AS*, ser. III, no. 25 (Libro debitori e creditori di Alamanno Salviati C).

<sup>39</sup> SNS, *AS*, ser. III, no. 24 (Alamanno e redi di Lorenzo di Iacopo Salviati per la ragione di Pisa, 1540-42), frontspitz: "Questo libro è di Alamanno e redi di Lorenzo di Iacopo Salviati sul quale si terrà conto per me Mateo Brandolini di tutto quello e loro tochè della ragione di Pisa di Averardo Salviati e co per l'adreto dell'bancho tanto per il chorpo quanto per li utili divixa questo di."

<sup>40</sup> SNS, *AS*, ser. III, no. 21 (Libro debitori e creditori di Alamanno Salviati segnato B), ac 177: «[...] che tanti se ne fa creditore Averardo Salviati e co della Maghona di Pisa per l'adreto che tantj mi tocha a paghare per la  $\frac{1}{2}$  di  $\beta$  8.7  $\frac{0}{2}$  per lb partecipavo in detta Maghona di duc 2213,11,1 di moneta di creditorj erano in detta Maghona in di primo di novembre proximo pagato che me ne tocha fl 477.5.6 di moneta dj  $\beta$  8.7  $\frac{0}{2}$  per lb cioè la  $\frac{1}{2}$  e per avere sopra preso Averardo e Piero Salviati propri duc 267.18.7 e Stagio Barducj e debitori di duc 292.2.10 che anno per mia apparte quello anno sopra preso e quello restano debitori di modo che mi tocha dettj duc 337.5.8 di moneta per mia parte come di dice al Gior ac 146 e per j<sup>a</sup> tavola che sono de scripti dettj creditorj al Giornale ac 171 e li si dice partiquarmente j<sup>o</sup> dettj dj Maghona avere a bonconto per quando li aranno paghati a detti creditori e non altrimenti».

had inherited from his father. Jacopo Salviati, Alamanno's father, was a shareholder of Averardo Salviati & co in Naples during the years before his death. By then, we are talking about a remarkable amount of money, Matteo had to receive 1,050 *ducati di carlini* on Alamanno's behalf, which he explains in Alamanno's Journal in detail<sup>41</sup>.

On other occasions, Matteo Brandolini became even Alamanno Salviati's attorney. On 21 May 1548, he wrote down an entry in the recently opened ledger "C" of his master, that he was to represent claims and obligations after Alamanno's death:

+ Nota that today, May 21<sup>st</sup>, in 1548, Messer Alamanno Salviati commissioned me, Matteo Brandolini, that I should write this nota: the said *Capitano* Francesco de' Bardi is debtor [of  *Fiorini* 47.1.6]. [Messer Alamanno] deliberates that *Capitano* Francesco could not be asked for repayment, if he could not make it during his life time to repay or even if he could dispose of the sum in another way, and [Messer Alamanno] does not want that the heirs [of *Capitano* Francesco] could be forced to repay. And [Messer Alamanno] will release [*Capitano* Francesco] from paying back in case of his death; in the case of his death no one should be allowed to make the claim. [Messer Alamanno] only insists on his right of asking [*Capitano* Francesco] and making him dispose of the due sum in another way than this nota says. If [*Capitano* Francesco's] heirs do not have any means for repayment, they should not be claimed to do so. In the very case a favourable nota should be added ex post to his testament.<sup>42</sup>

<sup>41</sup> Biblioteca Apostolica Vaticana, *Archivio Salviati* (further on: BAV, *AS*), no. 305 (Libro Giornale di Alamanno Salviati segnato B), ac. 168r: «+ addi 13 di settembre 1539 // Richordo questo di detto chome Mateo Brandolini mio procurato à venduto a Bernardo di Ridolfo da Sommaia tutta la parte mia chosi de l'j utili debitori e entrate che avevo per l(etter)<sup>a</sup> della redita di Iac(op)<sup>o</sup> mio padre nella ragione di Napoli che chantò in Averardo Salviatj e co di Napoli e chominciò l'anno 1517 e fini l'anno 1530 in circha et s'è acholato tutto il bene e male di detta comp(agni)<sup>a</sup> e per ogni mio resto della <sup>a</sup>/<sub>2</sub> del <sup>o</sup>/<sub>3</sub> partecipava detto Iac(op)<sup>o</sup> mio padre m'à a dare duc millecinquanta d'oro di k(arli)<sup>mi</sup> di Napoli ap(ar)<sup>e</sup> ogni anno la metà e di più mi lascija la <sup>a</sup>/<sub>2</sub> di duc 510.1.5 e' debitori Filippo da Sommaia e la <sup>a</sup>/<sub>2</sub> di duc 554.1.16 e' debitori Ghuglielmo da Sommaia per conto de' tempi e di più la <sup>a</sup>/<sub>2</sub> di duc 513.2.8 e' debitore Ghugl(iel)<sup>mo</sup> Nasi e co di Firenze che questo s'intende la <sup>a</sup>/<sub>2</sub> del <sup>o</sup>/<sub>3</sub> che partecipava mio padre in detta ragione el altra metà resta allj eredi di M(esser) L(orenz)<sup>o</sup> mio f(ratel)<sup>lo</sup> e di più mi da la <sup>a</sup>/<sub>2</sub> del <sup>o</sup>/<sub>3</sub> di duc 513.2.8 e debitore Ghugl(iel)<sup>mo</sup> Nasi e co di Firenze che aspetava al detto Bernardo per la <sup>a</sup>/<sub>2</sub> della parte sua di detto debito e di più mi sono reservato le ragione contro a Averardo e Piero Salviati per conto delle partita dj Bernardo Braccj e co di Roma di duc 543.4.9 e ognj altra chosa resta al detto Bernardo da Sommaia e mi à promesso chavare d'ogni danno che per tempo alquono potessi avere per detta comp(agni)<sup>a</sup> come di tutto apare contratto roghato Ser [lacuna] j'Napoli sotto di tredicj di setembre e questo di 4 d'otobre detto Alamanno retifichò al detto contratto / Nota che'l detto Bernardo à promesso paghare dettj duc 1050.- dj k(arli)<sup>mi</sup> a me a Mateo Brandolini con M(esser) Rafaello da Sommaia liberamente e senza alcuna eccezione».

<sup>42</sup> SNS, *AS*, ser. III, no. 25 (Libro debitori e creditori di Alamanno Salviati C), ac. 28: «Nota che questo di 21 di maggio 1548 M. Alamanno Salviati à chomesso a me Mateo Brandolinj che jo faccia questa nota chome di quello è debitore il sopradetto Capitano Francesco de' Bardi non vole gli possino essere domandatj, se non da luj e non li avendo rischossi o dispostone in contrario in vita sua, non vole [che] possa essere stretto a pagharlj dalle sua rede e gle ne dona in chaso chome è detto, ch'alla morte di detto M(esser) Alamanno non avessi paghato ho altrimenti dispostone in contrario e non vole persona lo possa risquotere e lui si riserba solamente il poterlj domandare e disporre secondo li parra in contrario chome si questa nota fatta, non fussi e non avendo reschossi o dispostone le sua rede non gle ne possino domandare che disse esserselo sdimentichato di meterlo sul testamento».

Sometimes Matteo Brandolini represented his master in far less significant contexts than the liquidation of shares in business partnerships, when he had to carry some cash to the coffers of Alamanno. On 4 December 1543, he puts down 50 *scudi di sole* which were to be paid by Maria de' Salviati, mother of Duke Cosimo:

I remember that today I, Matteo Brandolini, received *scudi 50 di sole* from *Monna Maria de' Salviati* paid by Tommaso de' Medici which are paid on the account of Don Giovanni di Lunagia, *castellano*, out of a share of *scudi 150 di sole* which Alamanno borrowed him some time ago [...]<sup>43</sup>

Since we recognise Matteo's hand, we know that it was him receiving the amount by cash, which was only the third part of an entire loan of 150 *scudi di sole*, and, then, writing down the incoming transaction on his master's behalf.

In 1537 Alamanno Salviati married Costanza Serristori (c. 1522-1538) who was the only child of the very wealthy merchant banker Giovanni Serristori<sup>44</sup>. Giovanni had prematurely died in September 1531. At the time immediately after his death, two series of account books were opened upon his legacy, both called 'heirs of Giovanni Serristori'. One took account of the shares Giovanni held in the Serristori *compagnia*, the other referred to his personal properties. The marriage between Costanza and Alamanno was arranged one year later in 1532 by the mother and widow, Camilla, and the executors of the last will respectively, on the one side, by Alamanno Salviati on his own on the other side<sup>45</sup>. These said two series of account books passed from the bookkeepers of either series to Matteo Brandolini's hands, as Alamanno became the administrator of Giovanni's properties alongside the dowry, the *dota*<sup>46</sup>.

Matteo Brandolini's impact on Alamanno Salviati's accountancy was not at all insignificant. When he opened the above-mentioned ledger «segnato B», he elaborated his master's system of accounts and developed a technique of full double entry bookkeeping. Later, just before the start of the following ledger «segnato C», he began to copy the outgoing letters and put down «ricordi». On 13 November 1539, Matteo registered a letter to Averardo e Piero Salviati & co in Lyon which spells out like the following:

Dear friends etc. in my last letter I wrote that little which happened. The present letter shall only tell you that Francesco Bandini & co is drawing *marchi 40 [d'oro]* on you in some rates from Florence on my account due on the fair of All Saints. [I am asking you to] promise payment and to pay. At the time being

<sup>43</sup> BAV, AS, no. 300 (Libro Giornale di Alamanno Salviati segnato C), ac. 335v: «Ricordo questo dj detto come jo Mateo Brandolini ho riceuto da Monna Maria de Salviati e per sua S(igno)<sup>ra</sup> da Tomaso de' Medicj ∇ cinquanta di sole e' qualj pagha per conto di Don Giovannj di Lunagia chastellano per parte di ∇ 150 li prestò Alamanno più fa [...]».

<sup>44</sup> On the Serristori family: Tognetti 2002 (Unfortunately, this wonderful book does not talk about Giovanni Serristori and his daughter).

<sup>45</sup> SNS, AS, Filza 58, no. 6. Apparently, behind this arrangement was the Duke of Florence, Alessandro de' Medici: Hurtubise 1985, 248.

<sup>46</sup> BAV, AS, no. 380-392 (Libri delle redi di Giovanni Serristori).

put it on my account which is the amount of *scudi* 2,600 *di marchi* and you ought to pay *scudi* 12,012.7.6 *di marchi* to Tommaso Guadagni & co due on the said fair. [Tommaso Guadagni & co] disposes of an order by a letter which they will present you. In total you should put me *proprio* on the debit side at the amount of *scudi* 14,612.7.6 *d'oro di marchi*, and we should proceed as said before in another letter from your Lorenzo [Pasquali] of 11 August 1539. If any error occurs in your or our accounts, I ask you to balance [my account] by the amount requested, and hence we should always turn back to my indebtedness and the following balance payment. The present letter serves as a receipt for this account.<sup>47</sup>

For the dimension of the values exchanged we may underline that Alamanno Salviati was dealing with enormous amounts here. It is an investment with the company of his distant cousins' banking business in Lyon which comes close to the total of the capital stock which was in the very Salviati-company due to the contract of 1532 (*scudi di marchi* 12,000).<sup>48</sup> This reflects a tendency which evolved in these years: investors from outside gave growing financial means to the internationally operating banks in order to profit from the returns (Lang 2020, 503-25)

The cited lines do not show any difference to letters between business companies, reporting prescripts of transactions to set up commercial or financial transfers and, then, to balance the accounts. At the beginning we have already noticed how business letters prescribed practical aspects of accounting techniques. But they also were the channel of communication between two business companies where accounting and economic techniques appear as a process of practical knowledge. In other words, the merchant bankers and their bookkeepers learned and refined their accounting techniques by doing (Goldthwaite 2011).

'Doing', hence, means that they explained in their letters what they were *going to do*. Up to a certain extent they had to know what to do and how to execute it. However, in the letters to their fellow merchant bankers they extensively described the transactions they aimed at. An essential issue was the balance of the open accounts which the business transfers were to put on (Lang 2020, chapter VI).

Thus, by writing letters the merchant bankers created «communities of practices». Knowledge in that context was continuously referred to in pragmatic terms and thus implicitly. Of course, this is to be repeated, merchant bankers and their bookkeepers

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<sup>47</sup> SNS, *AS*, ser. III, no. 22, c. 1v: «Amici car(issi)mi etc. al pax(a)<sup>io</sup> ve s'è scripto quel pocho n'è hochorso. la prexente solo per dirvj che da Francesco Bandinj e co di qui vi è stato trato per mio conto jn questa fiera proxima di Tutti Santi in più parte m(archi) 40.- d'oro prometetelj e paghatelj, al tempo conporlj a mio conto che sono ∇ 2600.- di marchi e ∇ 12012.7.6 di marchi pagherete in sudetta fiera a Tommaso Ghuadagni e co ànno hordine come per j<sup>a</sup> [lettera] d'avixo da loro vi sarà presentata che jn t(utt)<sup>o</sup> sono ∇ 14612.7.6 d'oro di marchi che mi fece debitori e li tenevj da me p(ro)p(tr)<sup>io</sup> con le condizione che eramo d'achordo e chome apare per j<sup>a</sup> lettera del vostro Lorenzo fatta qui sotto di xj<sup>o</sup> d'aghosto paxato e quando nel conto vi fusse erore per voj ho per noj paghate le somme dete e senpre si farà tornare a dovere e paghato avere le sudete forme la prexente vi serve per quitanza per questo conto/».

<sup>48</sup> Lang 2020, 197. The following contract in December 1539 established a stock capital of *scudi di marchi* 20,400 with a share of Averardo e Piero Salviati di Firenze at *scudi* 15,000 *di marchi*.

had to know what to do and how to do it, but the single transaction was anticipated by explanation.<sup>49</sup>

Matteo Brandolini behaved in the same way. Since he probably had experienced a merchant's education attending the elementary school and, thereafter, classes of an abacus master. With this education as knowledge base he entered service in a business company. When he arrived at Alamanno Salviati's household – at his office – he was ready prepared. He obviously did not copy letters to learn the businessman's idiomatic language and he had not to learn how to understand account books anymore. He apparently was a well-trained expert at accounting (Goldthwaite 2015).

In 1543 Matteo Brandolini put down a whole balance sheet with his own comments in the waste book 'A' of the heirs of Giovanni Serristori, which had passed on to Alamanno Salviati after his wedding to Giovanni's daughter Gostanza. Therein, he draws the sums from account books of the Serristori-series and wrote off debts that would never be paid back. Furthermore, he explains from one account book to the next the reasons for these markdowns. It is evident that Matteo Brandolini was taking notes of his procedures in order to justify how he kept account of what he was doing.<sup>50</sup>

This practice of accounting could be confirmed by comparing with the accounting techniques developed by the bookkeepers in chief of the Fugger: Matthäus Schwarz and, a generation later on, Melchior Geisstetter transformed the accounting system of Anton Fugger into a much more complex device. The most significant difference to what Matteo Brandolini did is, that Schwarz and Griesstetter wrote manuals on accounting to hand over their practical knowledge to the next generation of bookkeepers. Brandolini did not make that effort (Isenmann 2019, 141-53).

## 5. The new type of the accountant-expert

In the early sixteenth century accountant-experts like Matteo Brandolini appeared in the service of wealthy Florentine households when the patricians started to diversify their investments. Particularly, the combination of various forms of assets which had to be treated created the demand for this tiny group of experts. Of course, most of these merchant banker-patricians were still active partners in their business partnership companies, but some of them already tended to only hold shares in the companies of their relatives. In this case they were silent partners who kept account

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<sup>49</sup> This point I have made earlier: Lang 2017. On the concept of «communities of practices»: Wenger 1998.

<sup>50</sup> BAV, AS, no. 394 (Giornale e ricordanze dell'erede di Giovanni di Battista Serristori, Rosso segnato A), ac. 146r-149v: «Ricordo questo di detto come se aconciò a' Libro Rosso segnato A a 194 della redità il conto di Giovanni Serristori e co linaiuoli in San Martino e se aconciò li utilij come a deto libro si dice e si sono tiratj di poj a Libro segnato E. Giallo a 16 dove erano debitorj per conto del chorpo e non s'è saldo detto conto e cancellato perché non si trova maj che queste partite dappiè ne sieno itj debitori a libro del nostro maggiore Giovanj de chosi anche sono itj creditorj delle apresso partite e per non sapere chome abbia da stare si sono notate qui dappiè donde venghano e a che libri appaiono perché el deto Libro E restano creditorj di duc 33 in circha e non anno a essere e di più chome è detto non si trova dieno aconce le apresso partite in loro debito e credito e prima».

books to pursue expected returns on their capital invested. For their personal accounts, however, they engaged experts like Matteo Brandolini.

The wealthy patricians from cities like Florence, Genoa, Augsburg, or Nuremberg were the main investors in the loans provided to European Crowns. Their capital was transmitted through expanding markets for letters of exchange: the latter were secondary markets, set up to refinance the investments of capital (Lang 2020, chapter V.2). Especially in this context, the patrician investors did not deal with their accounting themselves, instead they employed personal accountant-experts who not only kept their books, but also represented their masters in various context as proxies or acted as their agents. In that sense, the personal accountant and agent, like a minister, had to coordinate the various fields of activities of their masters. The bookkeeper became an accountant-expert who had to figure out the chains of investment.<sup>51</sup> What we do not know, of course, is how strictly masters like Alamanno Salviati supervised their accountants. It is rather difficult to judge the impact of the practical knowledge of the patrons. The accountant-expert like the bookkeeper surely did not act autonomously in business affairs as if he were the head of the household. Nevertheless, he was not dependent on his master's advice how to keep accounts. The accountants of the new type became at least the right hands of their masters.

In the fifteenth century the role of the personal bookkeeper, the household's accountant, was at a lower profile. Of course, there were private secretaries like the famous Ser Alessio Pelli who was the minister of Cosimo de' Medici's household as described by Dale Kent in her study on «the patron's oeuvre» (Kent 2000; Lang 2009). It was particularly the diversification of investments that made the difference: when the merchant banker's families became rich by the changing distribution of wealth in their favour within society, they started to diversify their investments (Goldthwaite 1995). At the end of the fifteenth century about 70 percent of the whole family properties were invested in businesses and about 30 percent in land. The situation one hundred years later was inverted, and the properties had grown in total<sup>52</sup>.

However, historiography has not discussed in detail the investment of the wealthy merchant banker's families in the secondary markets during the sixteenth century, yet. In the context of further research, other personal accounts like the ones of Andrea degli Strozzi or Giovanni Quaratesi and Battista Manzuolo may reveal the same appearance of accountant-experts (Goldthwaite 2017).<sup>53</sup>

The new type of accountant-experts was called in to handle refinancing in terms of accounting. Thus, the bookkeeper left his prior role of a scribe behind and took gradually more responsibility for the administration of his master's properties. This change in the function from a personal secretary to a personal expert of accounting was a symptom of the evolution within the structures of wealth. Maybe, this new

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<sup>51</sup> For the concept of 'expert' and further literature: Rexroth 2012.

<sup>52</sup> The first study to draw the lines of that tendency: Malanima 1977. On the Salviati in particular: Pinchera 1999.

<sup>53</sup> Archivio di Stato di Firenze (ASF), *Strozzi Sacchetti*, ser. I, 516; 517; 521; 524; 525; 582 (Andrea degli Strozzi). ASF, *Compagnie religiose sopprese*, 1027, 211 (Battista Manzuolo). ASF, *Quaratesi*, 87 (Giovanni Quaratesi).



type of accountant-expert even promoted the ongoing diversification of investment. For sure, this new type of accountant was not a simple clerk, but an expert in bookkeeping – and economic affairs. The same might be true for the process of accounting driven by accountant-experts on the behalf of business partnerships in the context of emerging markets and new opportunities around 1500 (Goldthwaite 2020, 316-35). However, the story of the ‘logic of capitalism’ and accounting may be a history we have to re-write.

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