A Modern Look At The Banco De' Medici: Governance And Accountability Systems In Europe's First Bank Group

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ABSTRACT

The richness and the importance of Florence during the 14th and 15th centuries are well known all around the world. However only few people know that behind this richness there was a banking group - Banco de' Medici - managed similarly to a nowadays bank colossus. This paper presents an analysis of the governance and accountability systems of this bank. Based both on precious documents of the Florence State Archive and on the existing literature, this paper offers an in-depth study of one of the earliest examples in the world of a bank holding company. In order to understand both the true nature of the Banco de' Medici group and the links between holdings and subsidiaries, the governance and the accounting records of the main headquarters in Florence and the Lyon branch were investigated. This article contributes to literature shedding new light on the structure of this important bank, the relationship between the holding company and its subsidiaries and on the relationship between its majority and minority shareholders.

Keywords: Medici; Florence; Group of Companies; Banking

INTRODUCTION

uring the 14th and 15th century, Florence was not only the capital of culture but also the heart of the European financial system. A number of wealthy Florentine merchants, typically involved in traditional sectors such as the wool and silk trade, started to provide financial services to support international trade thus becoming merchant bankers (Brun, 1930; De Roover, 1941; Sapori, 1932). Some of them became so powerful that they were able to finance popes and kings, wars and alliances: the most important certainly were the Medici.

The Medici family gradually expanded its banking activity internationally by establishing what nowadays would be defined as branches, not only within the Italian market - in cities like Rome, Venice, Milan, and Naples - but also throughout Europe in the most important European trade centres such as London, Geneva, Bruges, and Lyon. The Florentine bank headquarters, called "Tavola di Firenze", were responsible for coordinating international banking operations. The headquarters were known as the "Tavola di Firenze" (Table of Florence) because of the name "tavolieri" (seated at the table) given to the Florentine bankers, as they performed their business seated behind a counter or table.

The accounting history of the Medici bank (Banco de' Medici) has not been widely studied, with the exception of the research carried out during the period between the 1940s and 1960s by De Roover (1955). This lack of interest is surprising, as the Medici Bank represents one of the first examples of a bank holding company, which employed accountability techniques and governance systems quite similar to those in practice today.

Previous literature suggests that accounting systems not only provide quantitative information, they also reflect the economic, social and institutional context in which they were developed (Riccaboni et al., 2006). By examining the documentary sources of the Banco de' Medici - the first banking group in Europe - therefore, it is possible to

reconstruct the accounting system they used while also better understanding the history of the Medici family and the role they played in the European economic scenario during the 15th and 16th centuries.

Drawing on existing literature (Carnegie and Napier, 1996; Fleischman, 1996; Merino & Mayper, 1993; Parker, 1999; Zan, 1994), the aim of this paper is to analyse the Banco de' Medici's accounting system and its organizational structure over a century, from 1397 - when the Banco de' Medici was established by Giovanni di Bicci de' Medici to 1494, when the Medici family had to leave Florence for political reasons. Due to the scarce availability of usable primary sources and the difficulty in interpreting documents written in Ancient Italian (Bracci et al., 2010; Mari and Picciaia, 2014), this period, which saw some of the most important developments in the history of accounting, has not been sufficiently explored and deserves to be further investigated (Carnegie and Napier, 1996).

By using the archival method (Decker, 2013; Bucheli and Wadhwani, 2014) and a synchronic approach (Servalli, 2007; Amaduzzi, 1997), this paper sheds new light on the evolution of European accounting methods, proving the adoption of double-entry accounting methods before the Summa de Arithmetica, Geometria, Proportioni et Proportionalità of Luca Pacioli and showing interesting information on the accounting treatment of the uncollected credits at that times. Primary sources were found in the large Florence State Archive still preserving the entire original collection of documents on the Medici family, from the rise to the fall of their dynasty, covering a period of four centuries. More specifically, this paper relies on a collection of documents named "Mediceo Avanti il Principato (M.A.P.)" which includes historical records from the XIV to the XVI century (Archivio di Stato di Firenze, 1951, 1955, 1957, 1963). Such an extensive source offers invaluable insight into the history of the Medici family and of Italian society during the Renaissance.

Some of the major sources of information used in this paper were:

- 1. The so called "secret books" referring to the period prior to the year 1451. They are three bookkeeping record books, spanning half a century from March 26, 1397 - the year the Medici Bank was founded until March 24, 1451, which report shareholders' share accounts, managers' profit and the capital entrusted to each branch. These "secret books" reveal important information on the capital structure of the company as a whole, and of single branches, year by year;
- 2. The exchange of correspondence between the bank headquarters, the branches and the clients;
- 3. Company contracts, balance sheets and other documents, such as letters of exchange, payment requests, certificates of deposit, confidential letters and memos, as well as a plan for the reorganization of the business which was never put into place.

Based on the aforementioned documents, we found evidence that the Banco de' Medici was essentially a bank holding company, the first in Europe, and that the Medici family cleverly used its holding company structure to provide strong incentives for individual bank managers to perform more effectively and to facilitate trade. This article differs from previous studies, analysing a surprisingly neglected financial institution that was the biggest bank group in Europe, linking the accounting system of the group with its compensation system and its governance mechanisms and, finally, contributing to the literature on group of companies generally considered as a phenomenon of the twentieth century.

This paper explores the issues outlined above, by first examining the economic, social and accounting context in which the Banco de' Medici operated. Subsequently, the development of the Medici family's bank, from its rise to its fall, is outlined before going on to analyse the accounting methods adopted by the central headquarters in Florence, and by the most profitable branch in Lyon, a final discussion concludes the paper.

THE RISE AND FALL OF THE MEDICI BANK

The origins of the Medici Bank can be traced back to 1397, the year in which Giovanni di Bicci de' Medici (1360-1429) moved the main headquarters of his bank from Rome to Florence, his native city. Giovanni di Bicci, who may be considered the founder of the Medici family, established the bank in 1393, by buying out the Roman branch of the bank of Messer (Sir) Vieri di Cambio de' Medici (1323-1395), a distant relative, who was at the time considered among the leading bankers. Giovanni di Bicci remained director for many years, learning the art of administration (De Roover, 1965).

The Rise (1397-1425)

The initial equity of the bank amounted to 10,000 "fiorini" (local currency), half of which was provided by Giovanni di Bicci, and the remainder by two partners, Benedetto de' Bardi and Gentile Boni. As was common in medieval banks, a small number of people were employed, and at the beginning of the 1400s the Medici bank only employed 17 people (De Roover, 1949).

In addition to the headquarters, the Medici opened branches in Venice, Naples and Gaeta. This structure remained unaltered at the bank until 1426. Table 1 shows the distribution of the profits of the Medici bank from October 1, 1397 until September 1, 1420. The profits are values net of resources allocated to cope with unrecoverable credits and the compensation of the branch director. He was not merely a bank employee earning a salary, but rather a partner who participated in the profits.

Among these profits, only a portion remained within the company for self-financing, while the most significant amount was allocated to purchase real estate in the name of various family members.

The most profitable branch was that established in Rome, since it was closely linked with the Papal Court, which used the Medici Bank to deposit and transfer funds.

Table 1. Cumulated profits from October 1, 1397 to September 1, 1420

Branches	"Fiorini"	%
Florence	25,344	16.9
Court of Rome	79,195	52.1
Venice	22,705	14.9
Naples	15,458	10.2
Gaeta	485	0.3
Others	159	0.1
Bank and trading earnings	143,348	94.5
1° Wool Branch	1,634	1.1
2° Wool branch	6,837	4.4
Total	151,820	100.00

The years from 1397 to 1425 can be considered the first period in the history of the Medici bank. Only a few years later, in February 1429, the founder Giovanni di Bicci died, after having gradually bequeathed the management of the bank to his two sons: Cosimo and Lorenzo.

The Golden Age (1426-1463)

The second period is undoubtedly the most glorious and it coincides with the rise to power of Cosimo (1395-1440). During the first years under his direction the earnings of the bank, as recorded in "secret book" number two (1420-1435), were high thanks to the usual contribution from the branch in Rome, but also to the capability of the director of the new foreign branch, in Geneva.

Thanks to the big profitability and the favourable trend, Cosimo implemented a policy of expansion, both in Italy and abroad, which was often associated with political opportunities.

Over the following years, with a dynamic approach worthy of modern banks, many branches were opened and closed. The first was in Basel, where a small office, originally established to meet the needs of the church, eventually became an important subsidiary, but then lost relevance to the extent that it became an underling branch of Geneva. The branches of Ancona and Fermo, set up by the Medici to benefit from the profitable transport of goods along the Adriatic coast, were also short-lived, as they were not able to ensure adequate earnings.

The next step involved the opening of branches in Bruges in 1439 and Pisa in 1442. Then, in 1446, the Medici established a bank in London, and another in Avignon, which was considered the most important commercial centre in southern France. The Milan branch was the final one opened by the Medici in 1452 and marked the end of the period of expansion and prosperity for the bank.

Therefore, in 1452, the Medici group included the holding company in Florence, as well as the Italian branches in Rome, Venice, Pisa and Milan, the foreign branches of Geneva, Bruges, London and Avignon, and two businesses devoted to the production of silk and wool (Figure 1).

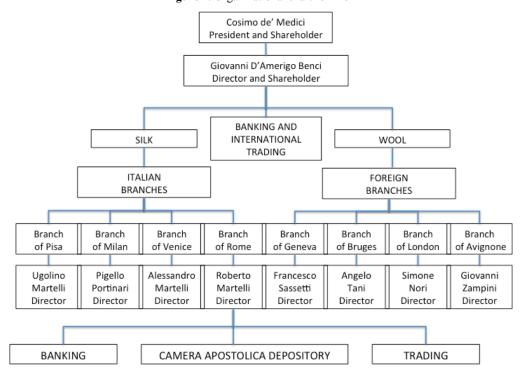


Figure 1. Organizational chart for 1452

Table 2 shows, in the second column, the capital invested by the Medici in each company of the group, in addition to the capital contributed by other shareholders, who were often the bank directors.

Table 2. Equity structure

Companies	Majority	Minority	Total
	"Fiorini"	"Fiorini"	"Fiorini"
Avignon	8,400	1,200	9,600
Bruges	10,800	4,200	15,000
Florence	13,000		13,000
Geneva	11,807	1,687	13,494
London	4,800	1,200	6,000
Pisa	2,000	4,000	6,000
Rome			
Venice	7,700		7,700
Capital invested in bank	58,507	12,287	70,794
1° Wool branch	3,500	2,500	6,000
2° Wool branch	2,500	1,500	4,000
Silk branch	4,800	2,400	7,200
Total	69,307	18,687	87,994

The Fall (1464-1494)

The third period in the life of the Medici Bank marks its gradual decline, which began just before the death of Cosimo in 1464 and ended in 1494 with the expulsion of the Medici family from Florence. During these thirty years the management of the bank was taken over by Piero (1464-1469), the son of Cosimo, and then by Lorenzo the Magnificent (1469-1492), the eldest son of Piero, and finally by Piero II, the son of Lorenzo (1492-1494).

The greatest strength of Cosimo de Medici was his ability to choose the right person for the job of running the holding bank and its branches, giving them broad decision-making power, without completely conceding strategic control of the bank. Lorenzo the Magnificent, a brilliant statesman, did much the same, but nevertheless showed a lack of aptitude for business and a modest interest in the affairs of the bank, often leaving too much decision making power to the branch directors, who sometimes took personal advantages.

The many difficulties that affected the economy in Florence, the decrease in credit adopted by Piero - the son of Cosimo - the currency fluctuation, the decline in the flow of funds from the Pope, and the enormous financing of military campaigns were the main reasons for the decline of the Medici bank. The situation was certainly not helped by the unsuitability of Piero II in the administration of the bank, as well as in entrusting the management to capable directors.

ANALYSIS OF THE GROUP THROUGH ITS GOVERNANCE AND ACCOUNTING SYSTEM

The Group Structure and its Historical Reasons

The Medici bank marks a key turning point, especially when compared to other contemporary organizational models. A study of the significant companies of the Bardi, Peruzzi and Acciauoli families reveals that they all featured a strongly centralized structure (Sapori, 1926). On the other hand, the Medici Bank adopted a completely different organizational structure. With a structure reminiscent of the Datini model (Melis, 2014), the Medici company was not made up of one sole corporate body, but the main headquarters, located in Florence may be compared to a holding company. Each branch was a distinct company with its own name, equity, administration and accounting books and each branch treated the others as customers. The branch's directors had to settle their accounts once a year and send a copy of the balance sheet and the profit and loss account to the holding company.

To better understand the strategic and organizational decisions taken by the Medici, and evaluate their management abilities, it is necessary to consider the importance of the teachings of the church doctrine regarding usury. Indeed, the bank structures typical of the time and the techniques employed often reflected the need to find lawful means to bypass the constraints of usury.

It should be noted that the concept of usury, according to the law of the time, was very wide, so wide as to include any type of interest gained upon capital. A loan had to be granted for free; otherwise it would be interpreted as a contract of usury. The method bankers used most often to escape the accusation of usury was the exchange by letters, which consisted of the negotiation of bills payable in other markets, usually in different currencies. The bill, otherwise known as a "lettera di cambio" (bill of exchange), included interest in its nominal value, which was, however, disclosed as a commission or a transaction fee. In this way the Medici bank used the commission included in its bills of exchange as implicit interest rates for their loans. This activity was possible thanks to the international structure of the group and the presence of many branches of the bank all around Europe. Creating an interconnection between banking activities and the exchange most likely served as an incentive to open a number of new branches in various markets, creating something, within the bank, very similar to what is now known as a bank holding, controlling a group of subsidiary companies.

This was the way used by the Medici family to build and enlarge its banking group and to make profits.

The Organizational Structure and the Compensation System

With reference to the subjects operating within the bank organization, it is possible to identify two figures, also mentioned in other medieval trade documents: the "compagno" and the "fattore" (Elder, 1934).

"Compagno" was the term generally used to indicate the shareholder. He signed the partnership agreement and had the right to a share of profits. Even if working within the company, he did not earn a salary, merely a reimbursement of expenses if he resided abroad.

"Fattore" indicates an employee of a foreign branch assisting the director. This figure was usually associated with the company by a notary agreement that described his tasks, limited his powers and defined his related obligations. The "fattore" earned a salary, but did not receive a share of the profits.

It is interesting to observe that the Medici family's behaviour was unusual for the medieval economic environment. The director of a branch, chosen from among the personnel, was usually promoted to the rank of minority shareholder, and earned a fixed sum for maintenance expenses, integrated with a share of the profits.

Therefore, according to this medieval form of "stock option," a proactive "fattore" had the possibility of becoming a director and, thereafter, shareholder, thus providing him with an effective incentive to work productively. The idea of the Medici family to structure the bank as a group of companies was, therefore, suitable to this purpose. The group structure, indeed, gave the possibility to a number of "fattore" in each branch to become a shareholder so providing them an economic incentive to improve the global performance of the group.

The Relationship Between Majority and Minority Interests

The Banco de' Medici holding company generally possessed more than 50% of the equity of its subsidiaries (Table 3). Moreover, a partnership agreement clearly specified that the "maggiori" (majority members) had the authority to control the company, even if the Medici were not that concerned with frequently inspecting their branches. This was one of the factors that led some branches to bankruptcy (the Bruges branch being the most significant case).

Table 3. The distribution of equity in 1451

		Equity				
Branches	Shareholders	Local currency	Florentine currency	Percentage		
		fiorini potetti	fiorini			
	Banco de' Medici	14,000	8,400	87.5%		
Avignon	G. Zampini	1,000	600	6.25%		
	V. Peruzzi	1,000	600	6.25%		
	Total	16,000	9,600	100%		
		£ di grossi	fiorini			
	Banco de' Medici	2,160	10,800	72%		
Bruges	G. de' Pigli	540	2,700	18%		
	A. Tani	300	1,500	10%		
	Total	3,000	15,000	100%		
		scudi di 64	fiorini			
Geneva	Banco de' Medici	10,500	11,807	87.5%		
Geneva	F. Sassetti	1,500	1,687	12.5%		
	Total	12,000	13,494	100%		
		£ di sterlini	fiorini			
London	Banco de' Medici	800	4,800	80%		
Longon	G. de' Pigli	200	1,200	20%		
	Total	1,000	6,000	100%		
			fiorini			
	Banco de' Medici		2,000	33.3%		
Pisa	C. Marsuppini		2,000	33.3%		
Pisa	U. Martelli		1,000	16.7%		
	M. Masi		1,000	16.7%		
	Total		6,000	100%		
		ducati	fiorini			
Venice	Banco de' Medici	7,000	7,000	100%		
v enice	A. Martelli					
	Total	7,000	7,000	100%		

However, while the retention of the majority of shares limited the decision-making power of minority shareholders, the Medici family was willing to make concessions in the distribution of profits. According to the formula of incentives that they followed, agreement clauses provided more than proportional profit shares to minority shareholders, as demonstrated by the act dated March 25, 1435, regarding the Venice branch (Florence State Archive, MAP, 153, n. 2, cc. v-6v.), in which the holding company contributed the bulk of the equity (7,000 ducats of 8,000), receiving a minor share of profits in order to reward the directors.

However, holding the majority of the equity was not the only means the Medici used to control branches. Each partnership agreement contained a clause stipulating the ownership of their "trademark", along with the accounting books and other records upon the closure of a business.

The Bookkeeping System

Regarding to the bookkeeping system we found that the director of the holding company in Florence kept the "secret books", which contain the accounting records concerning relationships between the shareholders and the company. Three of the "secret books" have survived:

- "secret book" no. 1 (1397 1420);
- "secret book" no. 2 (1420 1435);
- "secret book" no. 3 (1435 1451).

Moreover, it must be emphasized that each branch kept a "secret book", a "cash book", a "book of creditors and debtors", the denomination of which often varied. For instance, in the Court of Rome it was called "Black book marked G", while elsewhere (the "Tavola di Firenze" and Venice branches) it was known as the "Red book marked G".

Since the first two books are fragmentary, and do not provide any practical information about the accounting profile, attention can be concentrated on the third "secret book". The most interesting part regards the opening lines, which emphasize that the accounting book was kept according to the "Venetian" practice, a double entry method:

> "E tegniallo alla viniziana, nell'una faccia il dare e nell'altra l'avere, e lle due faccie mettiamo per una charta"

Looking at the accounting system at that time a distinction must be made between accounting practice and doctrine. With regard to the former, a sufficiently advanced and correct double entry method had been developed in Italy, particularly in the city-states of Venice, Genoa and Florence, through the practice of merchants and traders, beginning in the early 13th century (de Roover, 1956; Mills, 1994; Taylor, 1935). Previous accounting books had contained only credit and debit accounts. Nevertheless, the doctrinal arrangement only refers to the work of Pacioli, often described as "the father of accounting" (Hatfield, 1924; Langer, 1948; Taylor, 1942; Stevelink, 1986; Weis and Tinius, 1991), who published the Summa de Arithmetica, Geometria, Proportioni et Proportionalità in Venice in 1494, which contained, in Distinctio IX the Tractatus de Computis et Scripturis, the first printed description of double entry bookkeeping.

While Luca Pacioli may not have truly invented the double entry method (Hernandez-Esteve, 1994), it should be recognized that he was the first to organically treat the subject, and was responsible for the widespread adoption of the method. Thanks to the publication of Pacioli's work, the double entry method spread through Italy, among the majority of the numerous commercial, banking and navigation companies, and was also adopted by the monastic guilds. In a short time, the method became so well known that it began to spread to other countries, such as France, the Low Countries and Germany, to the extent that double entry came to be known outside Italy as the "Italian method" (Luchini, 1898).

A further issue, interesting also nowadays is related to the uncollectible credits. Since the accumulation of uncollectible credits was one of the more serious threats to the solvency of the bank, it was the director's responsibility to check the balances and control each individual entry, pointing out late or insolvent debtors and other irregularities.

The fear of uncollectible credits was so strong that, in their company agreements, banks usually inserted two clauses: one clause imposed the constitution of a special reserve for uncollectible credits, and the other prohibited the granting of credit to anyone who was not a "trustworthy merchant". The attention of the Medici family to the uncollectible credits shows us that this topic was relevant also at that time and not only nowadays. It is interesting to notice that the instruments used to reduce the uncollectible credits were the same than nowadays: a "rating" to select only the "trustworthy merchants" and a special reserve in the balance sheet.

THE HOLDING COMPANY: "TAVOLA DI FIRENZE"

The "Tavola di Firenze" was the Florentine holding of the Banco de' Medici. The "Tavola di Firenze" dealt with exchange letters and currency exchange, and gave financial support to the import/export transactions of Florentine merchants.

Table 4. The Balance sheet of the "Tavola di Firenze" (1427)

Panel A:

	ATTIVO			
Voce	Numero delle partite		i	
		f.	S.	d.
Debitori al quaderno di cassa:				
Danari in cassa	1	4.223	-	-
Altre compagnie Medicee	3	11.087	21	4
Varii conti "propri" dei soci	3	2.891	-	1
Merci in magazzino	2	12	16	7
Crediti varii	60	4.055	19	7
Totale parziale	69	22.269	28	7
D. I. I. III.				
Debitori al libro rosso G:				
Merci in magazzino	4	3.509	18	4
Altre compagnie Medicee	7	6.102	25	3
Corrispondenti su altre piazze, escluse le filiali	13	4.913	10	4
Prestiti ad altri enti pubblici	2	3.689	1	10
Varii conti "propri" dei soci	8	8.424	8	8
Conti varii	90	35.804	8	7
Totale parziale	124	62.443	15	-
Debitori ai libri di ricordanze F e G:				
Crediti derivati da vendite di seta e di lana	19	4.910	6	2
Debitori al libro segreto:				
Folco di Adovardo Portinari, direttore	1	423	17	11
I nostri di Roma	1	10.000	-	-

(Table 4, Panel B continued on next page)

(Table 4, Panel B continued)

Panel B:

	PASSIVO			
Voce	Numero delle partite	lle Importo in fiorini		
		f.	S.	d.
Creditori al quaderno di cassa:				
Varii debiti	47	3.880	26	0
Creditori al libro rosso G:				
Varii conti "propri" dei soci	7	3.790	1	5
Altre compagnie Medicee	12	47.411	17	2
Corrispondenti su altre piazze, escluse le filiali	6	6.717	23	1
Depositi e varii altri debiti	57	13.489	3	2
Totale parziale	82	71.408	15	10
Creditori al libro di ricordanze F e G				
Debiti derivanti da compre di panni e drappi di seta	20	2.355	25	7
Creditori al libro segreto:				
Corpo o capitale:				
Giovanni de' Medici e Ilarione de' Bardi	1	10.500	0	0
Folco d'Adovardo Portinari	1	1.500	0	0
Sopracorpo o utili non ripartiti	1	2.938	4	7
Salari maturati	1	280	0	0
Riserva per crediti inesigibili	1	630	4	9
I nostri di Venezia	1	4.000	0	0
Totale parziale	6	19.848	9	4
Totale magning	155	97.493	18	9
Totale passivo	155		-	-
Eccedenza dell'attivo sul passivo	155	2.553 100.047	9	11 8
Totale generale	133	100.04/	9	8

A general idea of the "Tavola di Firenze" businesses and managerial policies can be obtained through the analysis of its balances sheets and accounting data. Among the few documents available, it was decided to focus on the first balance sheet, dating back to 1427 (Table 4) (ASF, Catasto, 51, cc, 1162-1168 v). In Table 4 it can be observed that:

- the assets typical of banking activity were more prominent than trade assets; indeed, unlike the activities of other contemporary bankers, the investments of the "Tavola di Firenze" in trade, especially in wool and silk, were limited and of little relevance;
- there was scarce availability of cash reserves, which would not have been sufficient to cover a possible lack of liquid funds. This practice was common however, even among other bankers who, in the occurrence of a financial crisis, preferred to pay from their personal wealth, rather than keep non-invested funds within the bank;
- there were some "personal" accounts of the partners, which recorded the sums paid in by members of the Medici family and other partners and the loans granted to them for personal use;
- the total assets did not tally with the total liabilities and equities, probably due to an incorrect observance of double entry principles.

The Medici essentially preferred to operate using loans in the form of deposits, whereas they reduced the use of personal capital to the minimum. Such a strategy ensured high earnings, thanks to the existing spread between the interest rates applied on the loans and those paid to depositors. The capital of the "Tavola di Firenze" amounted to 12,000 "fiorini", and corresponded to almost a tenth of the total financing resources. The "Tavola di Firenze" however, was not the only undercapitalized company, since the Rome branch was also operating with no equity. The directives

of the holding imposed an attentive policy of self-financing, and while a high share of profits was re-invested within the company, huge sums were also allocated to face the possible insolvency of creditors.

An Important Subsidiary: The Lyon Branch

Among the many branches that the Medici opened in Europe during the fifteenth century, it is interesting to pay particular attention to the branch that operated in Lyon. This was a big market thanks to king Louis XI who conceded, with a decree dated March 8 1463, significant privileges to the merchants who went there to sell their goods. Indeed, transactions in Lyon were exempt from tolls and customs duties, and merchants were also protected from possible retaliation or arrest; moreover, there were no limitations to currency exchange, or even exchange through letters (Bresard, 1914; Gascon, 1956; Vigne, 1903). A study of the Lyon branch is also worthwhile due to the availability of relevant documentation (accounting books, balance sheets, letters), which allows for an accurate reconstruction of the foreign branch model of the Medici Bank.

The Lyon branch was established on March 25, 1466, after the transfer of the Geneva branch, following a pattern that was very similar to that of other subsidiaries controlled by the Medici (see Table 5, ASF, MAP, 83, n.49, c.304 v). Though they held the majority (about 66%), the Medici did not, in fact, earn a proportional profit share, according to the previously mentioned model.

Table 5. Equity structure of the Lyon branch

Shareholders	Equity	%	% of shares	% of earnings
Medici	8,200	66.1	8s. 0d.	40
Francesco Sassetti	1,500	12.1	4s. 3d.	21.7
Francesco Nori	1,500	12.1	4s. 3d.	21.7
Giuliano del Zaccherìa	1,200	9.7	3s. 4d.	16.6
Total	12,400	100	20s. 0d.	100

The business conducted by the Lyon branch can be outlined by analysing the annual balance sheet dating back to the year 1466 (State Archives of Florence, MAP 83, n.49, cc. 301-306), which contains the balance sheet dated April 2, 1467 and the profit and loss account, referring to the period from March 25, 1466, to March 24, 1467. The financial statement contains 172 items under assets and 96 items under liabilities. The fixed assets consist mainly of furniture and horses, representing a modest percentage of the total. The amount of liquid funds was also very modest, probably because many loans had been issued, while a limited number of people had deposited their own money at the Lyon branch (in 1467 the deposits were at 38.81 per cent, see Table 6).

Table 6. The Balance sheet of the Lyon branch (1467)

Panel A:

	ATTIVO			
Voce	Importo	S	d.	Perc.
Mobili e masserizie				
Masserizie	572	12	10	0.53%
Cavalli	418	4	8	0.39%
Totale	990	17	6	0.92%
Cassa, merci, crediti				
Quaderno di cassa	2.248	1	0	2.08%
Merci in magazzino	8.134	7	1	7.53%
Crediti diversi	36.827	13	9	34.08%
Cattivi debitori	683	13	6	0.63%
Nobiltà e alti prelati	18.580	12	6	17.20%
Corrispondenti all'estero	6.161	3	11	7.55%
Depositi presso altre compagnie medicee	14.575	0	0	13.49%
Ufficiali	2.011	9	9	1.86%
Totale	91.222	1	6	84.43%
Conti speciali				
Francesco di Lapo del Tovaglia	9.991	13	6	9.25%
Accomandita dei drappi di seta	4.428		0	4.10%
Anticipi su salari	307		0	0.28%
Conti vari	1.049	19	9	0.97%
Totale	15.777	6	3	14.60%
Totale	107.990	5	3	99.94%
Residuo sbilancio	60	8	6	0.06%
	108.050	13	9	100.00%

PASSIVO						
Voce	Importo	s.	d.	Perc.		
Debiti verso terzi						
Creditori diversi	6.235	8	7	5.77%		
Lettere di credito pagate in anticipo	2.143	14	0	1.98%		
Cambio con VE per clienti	2.544	16	1	2.35%		
Accettazioni	2.762	8	8	2.56%		
Corrispondenti all'estero	20.453	1	4	18.93%		
Ricavo di spezie vendute per conto di mittenti	63	7	6	0.06%		
Totale	34.202	16	2	31.65%		
Depositi vincolati a discrezione	41.931	7	9	38.81%		
Riserve e altri conti						
Francesco Sassetti proprio	3.068	7	4	2.84%		
Salari maturati	1.602	17	9	1.48%		
Riserva per cattivi debitori e salari da pagare	719	8	6	0.67%		
Poveri (ànnosi a distribuire per Dio)	7	13	3	0.01%		
Totale	5.398	6	10	5.00%		
Conto vecchio della ragione di Lione	49	10	6	0.05%		
Conti patrimoniali						
Corpo (capitale)	12.400	0	0	11.48%		
Utili non ripartiti	5.575	5	0	5.16%		
Profitti anno in corso	8.493	7	6	7.86%		
Totale	26.468	12	6	24.50%		
Totale	108.050	13	9	100.00%		

As De Roover rightly observes (De Roover, 1949), it is also true that the sale of letters of exchange might have represented a way of amassing liquid funds. This was a form of credit that depended on exchange rate oscillations and the goodwill of foreign counterparts to pay for the trades.

The value of stock represented 7.53% of the total assets and was mainly represented by drapery and silver, indicating that the Lyon affiliate, unlike the other companies, based its business essentially on financial activities; this detail is particularly significant, especially when considering the importance of Lyon as a market for trade at the time.

Credits represented the most stable asset (about 35%). They were composed of 113 entries, the bulk of which were modest amounts. In fact, few entries were higher than 1,000 "scudi" (local currency), and only two were over 2,000 "scudi". Next to each credit entry, there was a mark that diligently pointed out the anticipated time and terms of reimbursement.

Sometimes these terms did not appear very optimistic, such as "will pay sooner or later". The debtors were not only citizens of Lyon, but also lived further afield, for instance in Paris, Rheims and Rennes. While the Medici were not particularly willing to grant loans to nobles and prelates, at least 18,000 "scudi" recorded in the balance sheet pertained to these social classes. This was probably an exception to the general rule. Liabilities and deposits at will represented, as for every banking institution, the main source of funding (almost 40%). The Lyon affiliate counted 19 depositors, among which 8 were registered in the "big book" (or master book) and 11 in the "secret book".

The deposits were not always registered under the real name of the depositor. For example, the sum of 5,000 "scudi", nominally registered to Amèdèe de Pesmes, "the old accountant of Genève", belonged to Sassetti himself, as he recorded in the "secret book".

Regarding the profit and loss account (see Table 7), it would be of interest to study the reconciliation referred to the cash accounts, probably due to currency exchanges; this was a standard procedure within the Medici companies, and reconciliations were performed as often as four times a year.

	7. Profit and loss accou					
	Importo	s.	d.	Importo	Soldi	Denari
Rivedimenti di cassa				728	10	6
Pro di cambio:						
con Firenze	2.682	8	0			
con Roma	1.300	0	0			
con Avignone	365	12	5			
con Montpellier	250	0	0			
con Milano	63	3	4			
Totale				4.661	3	9
Discrezione e spaccio di bolle				3.630	13	0
Pro di mercanzie				111	18	0
Accomandita della seta				2.600	0	0
Utili dell'Agenzia di Ginevra				700	0	0
Provvigioni e senserie				523	10	10
Totale utili lordi				12.955	16	1
Meno spese di esercizio:						
Spese di cancelleria	17	13	0			
Spese per mandare contanti	21	0	0			
Spese di corrieri	46	12	0			
Spese di casa	1.096	16	6			
Pigione di casa	188	18	0			
Salari di servitori	49	11	0			
Regali	77	0	8			
Peggioramento di masserizie	40	0	0			
Discrezione	352	0	3			
Elemosine	15	0	0			
Perdita per furto	25	10	0			
Totale spese				1.930	1	5
Totale				11.025	14	8
Meno interesse su depositi				2.352	7	2
Micho interesse su depositi				2.332		

Moreover, the Lyon branch had the exclusive right to sell Papal indulgences, and this activity, while not recorded as an operational activity, represented 28% of the affiliate's profits.

8.493

Utili netti

The revenues registered as "merchandise" were linked to the trade undertaken by the Lyon branch. The entry "profits of the agency in Genève" may be a type of consolidated profit. Indeed, the Geneva branch had been closed in 1465, with all activities transferred to Lyon. All that remained in Switzerland was an office detached from the French subsidiary, which dealt with the closure of previous transactions. With regard to costs, there are no entries that merit specific comment, except perhaps the "house expenses" that were always present in the profit and loss accounts of the Medici branches.

CONCLUSIONS

The accounting history of the Medici bank has not been previously sufficiently explored. Such a lack of interest is quite surprising, since the Medici Bank represents one of the first examples of a bank holding company, employing accountability techniques and governance systems that were not so different from those used today.

In this article we investigated the governance and the accounting system of this important banking group shedding new light on its structure, the relationship between the holding company and its subsidiaries and on the relationship between majority and minority shareholders.

Our research is based on the documentation available in the State Archive of Florence, which holds the entire collection of original documents regarding the Medici family, from the very beginning until the extinction of the dynasty.

As highlighted, the Banco de' Medici was not made up of one sole corporate body, and the main headquarters, located in Florence and called "Tavola di Firenze", can be compared to a holding company. The "Tavola di Firenze" did not count among its members only those related to the Medici family, but also encompassed the participation of members from outside the family. Each branch was a distinct subsidiary company with its own name, equity, administration and accounting books. Each branch treated the others as customers, realizing as nowadays intercompany operations.

This paper makes some relevant contributions to the previous business and economics literature shedding new light on financial practices and innovations at that time able to affect the real economy in following centuries. In detail we found evidence that the Banco de' Medici was essentially a bank holding company, the first in Europe and that it facilitated both domestic and international trade with its structure and practices. It should be noticed that the Medici family cleverly used its holding company structure to provide strong incentives for individual bank managers to perform more effectively and to facilitate the techniques of the day that were used to circumvent very problematic usury laws. In the end, with this article we also make some relevant contributions to the accounting literature shedding new light on the adoption of double-entry accounting methods before the Summa de Arithmetica, Geometria, Proportioni et Proportionalità of Luca Pacioli and on the accounting treatment of the uncollected credits.

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