

Banking History – Italy 13C & Florence 14C

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Italy 13th Century - Fibonacci - Liber Abaci - number systems - decimals - calculating interest.

Fibonacci also known as Leonardo of Pisa, or Leonardo Pisano, lived around 1170 until 1250. He was known as the "greatest European mathematician of the middle ages" . born in Pisa, Italy. Leonardo's father held a diplomatic post and he grew up with a North African education under the Moors and later travelled extensively around the Mediterranean coast. He would have met with many merchants and learned of their systems of doing arithmetic. He soon realised the many advantages of the "Hindu-Arabic" system over all others.

Leonardo was responsible for introducing to Europe the Hindu-Arabic numeration system that we use today when he published Liber Abaci in 1202. He also published at least five other works including:- *Scritti de Leonardo Pisano* - (The Writings of Leonardo Pisano) a two volume set, published in 1857, which are held in the Linda Hall Library. Volume 1 contains Liber Abaci, whilst Volume 2 is titled *Practice Geometriae ed Opuscoli* (Practical Geometry and Lesser Works).

A quote from Fibonacci's famous book Liber Abaci (1202):- "When my Father who had been appointed by his country as Public Notary in the customs at Bugia, acting for the Pisan merchants going there was in charge, he summoned me to him while I was still a child and having an eye to usefulness and future convenience, desired me to stay there and receive instruction in the school of accounting. There when I had been introduced to the art of the Indians' nine symbols through remarkable teaching, knowledge of the art very soon pleased me above all else and I came to understand it, for whatever was studied by the art in Egypt, Syria, Greece, Sicily and Provence in all its various forms."

The Holy Roman Emperor Frederick II became aware of Fibonacci's work through the scholars at his court who had corresponded with Fibonacci since his return to Pisa around 1200, this happened around 1225. After 1228 there is only one known document which refers to Fibonacci. This is a decree made by the Republic of Pisa 1240 in which a salary is awarded. This salary was given to Fibonacci in recognition for the services that he had given to the city advising on matters of accounting and teaching the citizens.

According to the Dictionary of Scientific Biography, there are 12 surviving manuscript copies of Liber Abaci which date from the 13th through to the 15th century with only three of the copies complete. In the introduction to the English translation of Liber Abaci, which was translated by L.E. Sigler who writes, "There exists a number of manuscripts of Liber Abaci in Europe which were examined by Boncompagni in preparing his definitive text, which is complete and unambiguous."

Florence 14th century - Moneylenders

Medici family

The Medici family came from the agricultural north of Florence and they are first mentioned in a document of 1230. The origin of the name is uncertain. Medici is the plural of medico, meaning 'medical doctor'. The dynasty began with the founding of the Medici Bank in Florence in 1297.

For most of the 13th century the leading banking centre in Italy was Siena but in 1298 one of the leading families of Europe the Bonsignoris went bankrupt - Siena lost its status. Until the late 14th century prior to Medici the leading family of Florence was the House of Albizzi.

Albizzi's main challengers were Medici, firstly under Giovanni di Bicci de Medici, later under his son Cosimo di Giovanni de Medici and great grandson Lorenzo de Medici. The Medici controlled the Medici Bank which was then Europe's largest bank along with other enterprises in Florence and elsewhere. In 1433 Albizzi managed to have Cosimo exiled. The next year however a pro-Medici Signoria (civic government) led by Tommaso Soderini, Oddo Alltoviti and Lucca Pitti was elected and Cosimo was returned. The Medici became the city's leading family, a position they would hold for the next three centuries.

Cosimo married Contessina de Bardi around 1415. Her marriage into the House of Medici provided her husband's family with much needed nobility, prestige and military support as they established their power in Florence. They had two sons Piero and Giovanni.

The Medici Bank, from when it was created in 1397 to the fall in 1494, was one of the most prosperous and respected institutions in Europe and the Medici family was considered the wealthiest for a time. From this base they acquired political power initially in Florence and later in wider Italy and Europe. They were among the earliest businesses to use the general ledger system of accounting through the development of the double-entry book-keeping system for tracking credits and debts.

The Medici family financed the invention of the piano and opera, also funding the construction of St. Peter's Basilica and Santa Maria del Fiore and were patrons of Leonardo de Vinci, Michelangelo, Mechiavelli and Galileo. They were also protagonists of the counter-reformation, from the beginning of the reformation through the Council of Trent and the French wars of religion.

Piero de Medici was only in power for five years 1464-1469. He was called Piero the Gouty because of the gout that pained his foot and led to his death. Lorenzo de Medici 1449-1492 called 'the Magnificent' was more capable of leading and ruling a city but he neglected the family banking business which led to its ultimate ruin.

Bardi Family

Banking and commercial trade on an international level began to develop in Europe during the thirteenth century. Two sectors began to especially thrive in many Italian city-states. Merchants and Bankers lent capital throughout Europe and used sophisticated means of book-keeping and currency exchange to establish their reputation as a major banking and trading area. Two of the major banking and trading firms in Italy were Bardi and Peruzzi companies, they expanded overseas financial networks until their eventual collapse in early 1300's on the eve of the Black Death.

The failure of the Bardi 1345 and Peruzzi

In January 1345 the Company of the Bardi failed and the reason was that they had lent money (as had Peruzzi and others) to Edward, King of England and the King of Sicily. So much that the Bardi were found to have owing them from Edward 900,000 gold florins and because of Edward's war with France (which he could not pay), the King of Sicily owed 100,000 gold florins and to Peruzzi, Edward owed 600,000 gold florins and the King of Sicily 100,000 gold florins. Citizens and foreigners alike failed to repay and in turn many other smaller companies and individuals who had their property with Bardi and Peruzzi were brought to distress and ruin. The Bardi gave up their possessions to their creditors and settled with them for 9s. 3d. in the £ which did not actually return 6s. in the £. The Peruzzi compounded 4s. in the £ on their possessions and 16s in the £ on debts of the Kings. If they received their due from the Kings of England and Sicily, or part of it, they would have remained Lords of great power and wealth.