CHAPTER 6

The Variety of Financial Innovations in European War Finance during the Thirty Years’ War (1618–1648)

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1 Introduction

The public banks of Naples arose in the first instance to enable charitable organizations to meet the increased needs of their respective clienteles when they were struck by a crisis, whatever its cause (Di Meglio, Chapter 3). They expanded in number and size in response to repeated crises that occurred both before and after the 1622 monetary reform (Costabile and Nappi, Chapter 2; Avallone and Salvemini, Chapter 4; and Francesco, Luigi Balletta and Eduardo Nappi, Chapter 5). The 1622 monetary reform was imposed by the ruling Viceroy of Naples in response to the increased demands for war finance by Philip IV of Spain combined with the demands by foreign rentiers that their rents be paid in a hard, not debased, currency (Costabile and Nappi, Chapter 2). The intensification of the Thirty Years’ War (1618–1648) began in 1622 at the end of the Twelve Years’ Truce between Spain and the Dutch

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Republic and the commitment by Spain to aid the Habsburg Emperor in Austria. Then began a series of financial repercussions that beset not only the public banks of Naples but also financial systems throughout the rest of Europe, repercussions that endured for the rest of the seventeenth century (Kindleberger 1991; Parker 1997). The war expenses for all the belligerents kept mounting, not least because of the need to incorporate the essential features of the ongoing “military revolution”, which reached its full expression during the course of The Thirty Years’ War (Parker 1996; Roberts 1967).

The initial finance problem for military leaders was to make the monthly subsidies promised to the troops on each side actually appear to them in usable form wherever they were posted. For example, Maurice of Nassau, commander of the Dutch Republic forces, promised Frederick V, the Protestant claimant to the Bohemian throne, 50,000 guilders monthly at the outset of the war in 1618. The guilders, however, had to be distributed among Frederick’s troops in Bohemia as 25,000 thalers, which they needed to purchase their food, clothing, and shelter in the Palatinate or Bohemia. The Spanish troops opposing them in the Spanish Netherlands needed Flemish guilders for their pay but Philip III in Madrid had to satisfy them with silver pieces of eight from his treasure fleets arriving in Seville. It was up to Genoese merchant bankers to exchange the silver coins from Spain into fewer, more valuable gold coins for transshipment to the Spanish Netherlands. Once in Antwerp, the gold coins had to be converted again into silver guilders for local payments (Parker 1972). It became the task of assorted mint masters strewn along the Spanish Road stretching overland from Genoa to Antwerp to facilitate these exchanges, taking their commissions in return for their service. The number of independent mints proliferated throughout the mining districts of central Germany and their competition to satisfy the local demands for currencies as the various troops moved through their locality spawned the first set of financial innovations—repeated re-coinages in additional units of account.

2 Innovations by Mints

Experiments with new minting technology preceded the onset of the Thirty Years’ War, possibly in response to a fall in the receipts of silver by the Spanish crown toward the end of the sixteenth century (Hamilton 1934), or to higher amounts retained in Spanish America (TePaske 1983, 2010), or to larger diversions by foreign merchants (Morineau 1985). Whatever the ultimate cause of the fall off in silver imports, Philip II
introduced an *ingenio* to mill copper coins in 1596. His intent was to free more silver from small change coins so it could then be used to mint more large coins, which were more useful for war finance. Initially, the numbers of copper coins were limited to the amount of *vellón* coins they replaced from circulation, so no price inflation occurred (Sargent and Velde 2003, Chapter 14, pp. 231–247).

In one of the ironies of history that continue to bemuse historians, it was the attempt by Philip II to mint low denomination coins in copper that led to Sweden’s rise to prosperity in the seventeenth century as it became the main supplier of copper to the Spanish authorities. Louis de Geer, a Dutch merchant based in Amsterdam but originally from the Spanish Netherlands, imported copper miners and metal workers from Walloon to Sweden. De Geer’s profits from the copper trade made him the wealthiest man in the Netherlands and Sweden (Carr 1963). The revenues from copper exports to Spain in turn helped Axel Oxenstierna in Sweden to finance the armies of Gustavus Adolphus when he descended into northern Germany to reverse the tide of war in favour of the Protestants. The unintended consequences of Philip II’s initiative to mint copper coins in Spain led to repeated failures of finance by his successors while it also enabled the eventual successes of their opponents—the Dutch Republic, the Bourbon dynasty, and northern European Protestants.

The successor regimes in Spain of Philip III (1598–1621) and Philip IV (1621–1665) increased the number of copper coins so dramatically that the larger denomination silver coins disappeared from circulation as well. The recurring spurts of inflation could only be curbed by decrees “crying down” the value of the coins, regardless of what they had previously been assigned. After several stops and starts for minting copper coins, Philip IV cried down both *vellón* and copper coins in 1628. But then he had to resume inflationary debasement in 1636, re-stamping first *vellón* and then copper coins to three times their previous value. In 1642, Philip then stopped the runaway inflation his earlier measure had caused by crying down both sets of coins by a factor of six. After the end of the Thirty Years’ War, but with war still underway against France, Philip IV re-stamped the copper coins once again to make them worth four times their previous value in 1651, but then followed by crying the coins down by the same factor in 1652. Another bout of first re-stamping, then crying down, took place in 1658 and 1659, culminating in the final demonetization of the copper coinage along with the signing of the Peace of the Pyrenees in 1659 (Sargent and Velde 2003, Table 14.4, p. 252).
Sargent and Velde see these repeated “crying up”, followed by “crying down”, episodes as useful experiments for discovering the essential elements of what they term the “standard formula” for minting both large denomination and small denomination coins. The key element the Spanish state missed was to declare that small change coins would be legally convertible at face value into larger denomination coins, at least up to a relatively small amount. Even though the small change coins carried a face value higher than the market value of their metal contents, maintaining their legal convertibility even for low amounts would have kept larger coins in circulation while limiting the need to produce more token coins. In this way, Spain could have avoided the problem faced by Philip IV.

The successive experiments made by the Spanish authorities in Madrid as they searched in vain for the standard formula, however, had no learning effect upon their Habsburg allies headquartered in Vienna. Searching for some way to finance an army large enough to dislodge the Protestant rebels in Bohemia and then to reclaim the territories that had earlier been allotted to Protestant, mainly Lutheran, authorities and churches, Emperor Ferdinand II turned to the military-entrepreneur Albrecht Wallenstein in 1625. Already wealthy as a proven supplier of military forces in support of the Emperor, first in 1617 in the war against Venice, Wallenstein had enlarged both his domains in Bohemia, Moravia, and Upper Austria in 1622–1623, basically by enlisting the services of his talented financier, Hans de Witte (Ernstberger 1954).

Hans de Witte was a Protestant merchant who had left his family in Antwerp to pursue his fortune elsewhere, primarily in parts of Germany less hostile to even non-practicing Calvinists like him than the Spanish Netherlands. Eventually establishing himself as a wholesale trading merchant in Prague, Hans used his cousin Antoine de Witte, who had remained in Antwerp as a converted Catholic, as his chief correspondent. Their business flourished during the Twelve Year Truce (1609–1621) when traditional trade routes re-opened briefly. When war broke out, de Witte used his now well-established trading connections between Prague and Antwerp to supply Albrecht Wallenstein’s army against the Protestant forces. So valuable were his logistical services that Ferdinand II, the Holy Roman Emperor, authorized him to organize a mint consortium in 1622, despite De Witte’s Protestant origins and connections.

De Witte’s mint consortium had imperial authority to re-mint coins throughout the territory controlled by Wallenstein’s army, the largest deployed by any of the belligerents at the time. Even more daring was
de Witte’s deliberate inclusion of Jewish mint masters in his consortium, despite the religious zeal of the Emperor to eliminate both Jewish moneylenders and Protestants from his domains. The consortium’s profits came from reducing the silver content of the replacement coins by first one-third, then one-half. Their efforts, combined with similar debasements by neighboring mints in Saxony and the Palatinate, created the infamous “Kipper–und Wipper Zeit” in central Germany. The sums generated by de Witte’s consortium were huge by the standards of the time and they enabled Wallenstein to pay the wages and supplies of his ever-larger army without further assistance from either the Emperor or his Spanish ally. The mint consortium produced over 42 million guilders, 31 million by de Witte alone (Ernstberger, pp. 120–123).

The consequences of the serial debasements among the numerous mints scattered through the domains of the Holy Roman Empire, however, proved disastrous even for the original innovators. Very soon after the debasements, their political masters realized that their real revenues were reduced more than proportionally by the failures of their peasants and artisans to maintain their agricultural and industrial production in face of their rising costs and falling market demands. Countermanding the debasements by crying down the value of the existing coinage halted the inflation, but did not solve the continuing problems of war finance, even in Upper Austria and Bohemia (Jung 1976). A longer run solution came only with the creation of public banks, banks dedicated to maintaining the statutory value of the official unit of account locally and thwarting the incentives of mint masters in adjacent territories to debase competing coins (Kindleberger 1999; Schnabel and Shin 2018).

3 Public Banks

When Charles Kindleberger reviewed the history of public banks in Europe, he was struck by how many of them arose precisely to insure local merchants and governments from having to accept debased coinage from neighboring mints (Kindleberger 1999, “Currency Debasement”). The revolting provinces of the northern Netherlands were the prime example. With no established market for sovereign government debt, and with the difficulties of reaching common accord among the separate provinces and independent cities in revolt against Spanish authority for sharing the expenses of defense, the debasement of the metallic coins constituting the money supply for the Netherlands had been inexorable from the start of their revolt against Spain in 1568 (Fritschy 2017).
The strained finances of individual provinces led each of the 14 mints in the Netherlands (8 provincial and 6 municipal) to follow its own policy in the timing and extent of successive debasements. The numerous mints in the adjacent areas of the Spanish Netherlands and Westphalia took advantage of the resulting confusion in circulating coins to produce their own variants. Foreign coins were introduced as well by merchants from the British Isles and the Baltic and German city-states. By 1610, moneychangers in Amsterdam had to keep track of nearly 1000 different gold and silver coins. Bit by bit, but relentlessly, the price of silver rose on average 1 per cent a year in terms of the unit of account, the florin decreed by Charles V in 1544 but which had long ceased to exist as a coin (Dehing and t’Hart 1997, p. 40).

If the Bank of Amsterdam, established in 1609 at the beginning of the Twelve Years’ Truce between the Dutch Republic and Spain, was modelled explicitly upon the Banco di Rialto in Venice, however, its main role was simply to facilitate wholesale payments among merchants, both local and foreign, as they settled accounts, just as in Venice. Protection from debased coins was achieved at first by paying withdrawals in the same coin the account holder had used in deposit. If those coins had been cried up or down in the meantime, however, their withdrawal would vary in value as well from the initial deposit. Indeed, Quinn and Roberds (2009) demonstrated that even though the Bank of Amsterdam tried repeatedly to establish a separate unit of account, the *schelligen banco*, for measuring its deposits and withdrawals, debasements of comparable coins in the Spanish Netherlands kept undercutting the Bank’s authority.

Even in the revolting province of Holland, authorities kept changing standards until the Bank established an independent, fixed, standard on its own initiative in 1659, when the Netherlands had temporary respite from attacks by either Britain, Spain or France. The Bank of Amsterdam’s standard remained set for the next 200 years, creating true “inside money” for the first time and setting a worthy example for modern central banks (Quinn and Roberds 2009). Mints also became stricter in maintaining the mint price of their coins in the Netherlands, which circulated at varying discounts to “bank money”, the stable unit of account for the Netherlands thereafter. In this way, the public bank in Amsterdam managed to control the output of the mints still operating throughout the Dutch Republic. The Bank of Amsterdam had finally achieved permanently the goal sought by de Witte’s mint consortium in Austria, but only after the conclusion of the Eighty Years’ War between Spain and the Dutch Republic.
Kindleberger also noted that the presumed model for the Bank of Amsterdam, the Banco di Rialto in Venice founded in 1587, was not designed initially to protect depositors from currency debasements. Rather, it was promulgated as a secure alternative for depositors to the private banks, which had failed at alarming rates in the previous decade, culminating with the collapse of the largest private bank, the house of Pisani and Tiepolo in 1584 (Dunbar 1892, p. 319). The original Banco della Piazza di Rialto simply provided a substitute for the private banks that had lost the confidence of the Venetian public, the result of continued failures that culminated in the 1584 collapse. (The rise of the public banks of Naples in the same period coincided as well with widespread failures of private banks there.) It was the Banco del Giro established in 1619 that obliged foreign bills of exchange to be deposited and debited there, not the Rialto bank. Kindleberger remarks that in this sense Venice followed the example of Amsterdam, not the reverse. He further doubts that the Amsterdam bank was founded in anticipation of the trade boom that did occur after the truce of 1609. François R. Velde, Chapter 10 compares the many other experiments with public banks that preceded and followed the Thirty Years’ War in Europe. While public banks could become complements to existing mints by helping to stabilize their coinages, there was always the threat of mints becoming competitors under the pressure of war finance. Further, independence of a public bank from the policy goals of the existing government could never be assumed.

Kindleberger made no mention of the creation of seven public banks in Naples, a typical omission in the historiography of European finance to date. Their history, however, also reinforces Kindleberger’s theme that fiscal pressures stimulated financial innovation. While the first bank started formally in 1539 when the Monte della Pietà opened a bank to the public, other charitable organizations in Naples opened banks as well in 1587, 1589, 1590, 1591, 1597 and 1600, all after a brief political revolt in 1585 (a response to fiscal demands imposed by Philip II). Only in 1640 was the last bank created, the Banco del Santissimo Salvatore, which despite its religious name was not founded for philanthropic reasons but rather to enable the collectors of the new flour tax to induce deposits

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1 The Dutch historian Clé Lesger (2006) makes a convincing argument that the prime motivation for establishing the Bank of Amsterdam in 1609 was to ensure that the massive flight capital from Antwerp after the closure of the Scheldt would remain under the political control of the local Amsterdam elite. The same argument can be made for the timing of the Bank of England in 1694, this time to maintain local control over capital imports from Amsterdam!
from the wider public (Tortora 1890; Avallone 1997). The role of this bank, however, is better discussed below in the sections dealing with issues of sovereign debt and the tax base committed to servicing the debt. Moreover, the tempestuous history of this bank illustrates the danger of establishing such a bank purely to placate one set of tax farmers (Tortora 1890, pp. 98–106). While San Salvatore held second place among the public banks in terms of circulation, it was next to last in terms of loans, and dead last in terms of annual revenue (Tortora 1890, pp. 105–106).

4 Public (Sovereign) Debt

Public debts had long been dealt with by southern European cities, especially in Italy and Spain. At first, they would be forced loans taken from the wealthiest citizens, as determined by a cadastral survey. The wealthy elite, provided they had control over the city’s sources of revenues, could obtain secure income as interest paid regularly on their debt holdings. To meet later emergencies, not always caused by war, some cities found they could open subscriptions for new issues of debt that bore comparable levels of interest to the forced loans (Pezzolo 2014). The terminology for the long-term sovereign debts varied, according to the legal backing ascribed to them by city authorities. They typically were in the form of *rentes*, long-term obligations that assigned the annual revenues the city collected in various taxes levied on property or goods brought to market (Munro 2013). In Spain, these were called *juros*, as the issuing authority swore to continue paying annual interest from the taxes imposed for this purpose. Under duress from a warlord, the city authorities would lend an agreed amount, usually in exchange for a pledge of new privileges granted to the city.

In the case of Naples, Philip II’s Viceroy extended the privileges of official recognition of the accounts of the various public banks for payment of taxes as part of the settlement to end the revolt of 1585. In return, the city authorities (composed mainly of feudal lords with extensive estates in the surrounding countryside) accepted new *juros* issued by the Kingdom of Naples. These bonds, modelled after the Castilian *juros*, but backed by taxes levied by royal authority in the kingdom, proved to be very popular with the local population. They were widely held up to the outbreak of the Thirty Years’ War (Calabria 2002). It was only under the repeated demands upon the Viceroy by Philip IV that the issue of *juros* increased faster in Naples than the tax yields for the kingdom.
By 1640, when the last public bank was created in Naples, the search for sources of revenue to meet the demands upon the Viceroy led to repeated fire sales of royal assets. New creditors took over the collection of various revenues at huge discounts in return for providing immediate cash or material or men for the Viceroy to send on to Milan or Genoa. The most successful of the new tax farmers were a consortium headed by Bartolomeo d’Aquino. D’Aquino’s success in turn appears to have depended upon finance from his agent in Genoa, the banker Giovanni Toffetti (Villari 1993, p. 95), who served as the prime conduit for moving Neapolitan resources to Milan and beyond (Villari 1993). But d’Aquino’s rise to wealth and political influence also dated from his marriage in 1640 to Barbara Stampa from the leading banking and political family in Milan (De Luca 2012; Musi 1976).

The Banco del Santissimo Salvatore was also founded in 1640 when d’Aquino’s consortium acquired the concession for collecting the tax on flour in the kingdom. While d’Aquino’s biographer makes no mention of the creation of the bank, it is likely that Bartolomeo’s brother, Tommaso d’Aquino, helped manage the affairs of the bank as well as those of their father’s mercantile business, which remained very prosperous. Indeed, both Tommaso and Bartolomeo received noble titles, Tommaso as Duca di Casoli and Bartolomeo as Principe di Caramanico in recognition of their financial services to the Viceroy of Naples.

Both the creation of the bank and the marriage in 1640 laid the basis for d’Aquino’s success in buying up other tax concessions, also at fire sale prices. In eight years from 1636 to 1644, he managed to provide the Viceroy 16 million ducats to send to Milan and Spain. He quickly became the wealthiest man in Naples, but in 1647 his increase in taxes on all fruits brought to the city led to a brief, but bloody revolt led by the fishmonger, Masaniello (D’Aquino 2017). In the course of the revolt, d’Aquino’s mansion was destroyed, but he escaped with his life on promise of making restitutions, only to die in the plague of 1656. D’Aquino’s efforts to combine management of the growing public debt by a combination of public banking and control over sources of tax revenues were surely heroic, but ultimately could not overcome the problem of economic distress that kept reducing all tax yields, whether on oil, flour, salt or silk (Villari 1993). If public banks were the key to solving the problem of competitive debasements by uncoordinated mints, then securing a reliable source of tax revenue was the key to solving the long-run problem of marketing sovereign debt.
5 Reliable Tax Sources

Indeed, d’Aquino’s efforts at managing the repayment of the loans his consortium made to the Viceroy during the intensive period of financing the Thirty Years’ War, starting in 1636, evolved over time to find new sources of revenue that the government could assign to the consortium. D’Aquino initially (1636–1640) claimed excise taxes on local consumer products, flour, wine, salt and oil. As those sources of revenue were depleted, the new loans were backed by claims on export products, silk from Calabria and export quality olive oil (Musi, pp. 26–28). In the final stages, starting in 1637 but increasing in scope up to the revolt in 1647, d’Aquino’s group actually acquired the rights to preempt the payment of feudal obligations to local nobles throughout the Kingdom (Musi, pp. 37–38). The nobility were only too happy to regain their traditional claims on their feudal holdings while the new Viceroy managed a protracted default on the Kingdom’s debts to d’Aquino and his partners, mainly to block the substantial payments owed to the Genoese (Musi, pp. 49–50). Ultimately, the traditional feudal rights of the Neapolitan nobility were restored, even as they lost their chance at gaining independence from the political power of Spain (Musi, pp. 53–54).

Much the same story of a financial innovation based on reliable sources of tax revenues and monitored by merchant bankers can be told for the Republics of Genoa and Venice (Luciano Pezzolo, Chapter 7), the Duchy of Milan (Giuseppe De Luca and Marcella Lorenzini, Chapter 8) and for the Commonwealth of England during the English Civil War (D’Maris Coffman, Chapter 9). In each case, the long-run benefits of the financial innovation undertaken in response to the immediate demands of war or revolution could not be sustained, due to political constraints that emerged after the initial emergency had been overcome.

6 Finances in Europe After the Thirty Years’ War

The eventual workout of the Kingdom of Naples’ financial obligations to Philip IV, therefore, resembled in many ways the financial resolution of the Fronde rebellion in France at the same time. The central authority of the ruling monarch was reasserted over the affairs of the city (Naples in Italy and Paris in France) while the basis of local taxes remained the same in both Naples (Bulgarelli 2015, pp. 66–67) and France (Beguin 2012), at least until the French Revolution and Napoleon’s rule abolished feudal obligations and imposed central tax authority in both Italy and France.
The contrasting successes of the sovereign debts issued by various European city-states in other parts of Europe can largely be attributed to the control that the majority of their debt holders had over the collection of city-authorized taxes (Stasavage 2011). D’Aquino’s efforts came close to achieving this goal in Naples during the Thirty Years’ War but fell short due to circumstances very much beyond his control, although the earlier stabilization of the currency held up throughout the war, at least with respect to Milan (Musi, p. 21). In other city-states, the most successful guarantee for their debt service were indirect taxes, either excises collected on the domestic goods brought to market or customs duties levied on foreign goods imported from abroad or from neighbouring cities and countryside. The amount of revenue collected depended positively upon the number and income of the city’s inhabitants. For entrepôt cities such as Genoa, Venice, Amsterdam, Hamburg or London, revenue could rise as well if overseas trade was forced by circumstances to go through the city’s port. While the goods would be transshipped eventually, they would be stored in warehouses in the meantime where they were subject to taxes and storage charges, but also serving as collateral for mercantile loans.

Amsterdam clearly benefited from its central role in first, long-distance trade between the Mediterranean and the Baltic, especially during the Twelve Year’s Truce, and second, in the ensuing period as its trade with both the West Indies and East Indies expanded at the expense of the Portuguese while Portugal was under the rule of Philip IV of Spain.2 Excise revenues, previously levied solely within individual cities, now were levied throughout the province of Holland and were collected by the provincial authorities of Holland. As tax-receivers scattered through the province, they also had responsibility for managing the sovereign bonds held by local residents. The result was a felicitous harmony of interests of traders, tax collectors, and local bondholders, producing the basis for continued expansion of Holland’s provincial debt, but easily serviced by the burgeoning tax revenues of the province (Fritschy 2003, 2017).3

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3 Fritschy (2017) emphasizes that customs revenues were kept low throughout the Dutch Republic, which maintained Amsterdam’s role as an international entrepôt.
The virtuous circle of regularly collected indirect taxes that served as backing for repeated issues of short-term sovereign debt with low interest rates in Holland had another unintended consequence. Unlike the case of Naples, Amsterdam and the other city-states that made up the United Provinces that broke away permanently from Spanish rule at the end of the sixteenth century did not create public banks of deposit for the purpose of lending at a profit. Instead, individual moneyed men (and women) were readily available to lend to worthwhile artisans or merchants (Gelderblom et al. 2016), while the needs of the urban indigents and even artisans were provided by municipal-financed charities (McCants 1997). Indeed, the Lombard bank in Amsterdam (Bank de Leening), formally established in 1614 by public subscription and finally financed by the municipal authorities in 1684, increasingly served a wide section of Dutch society as did the Municipal Orphanage (Burgerweehuis) (McCants 2007; Philopolis 1733). A similar story holds as well for the self-governing cities of Flanders and Brabant. Even under continued Spanish rule, their merchant elites had sufficient control of local taxes and sources of funds to make even an exchange bank as in Amsterdam and Hamburg unnecessary, much less public banks of deposit as in Naples (Aerts 2011).

By sharp contrast, the tax revenues collected by the Kingdom of Naples faltered repeatedly in face of revaluations of the coinage, poor harvests and competition from surrounding areas, especially Sicily (Calabria 2002). Debt had to be issued at a higher rate to compensate for falling tax yields. This was the situation when the Viceroy’s government began to sell off an increasing number of the remaining royal assets, sometimes to local nobles, sometimes to foreign lenders especially from Genoa, and last of all to d’Aquino’s consortium of tax farmers. In common with tax farmers in England, France, and central Europe, d’Aquino’s partners raised their own finance through selling partial shares in the tax farm to depositors looking for some return on their savings. These outside investors were especially susceptible to new investment opportunities if their existing investments had been in the Kingdom’s sovereign debt, which fell sharply in value throughout the last years of the Thirty Years’ War (Calabria 2002).

The fate of tax farmers scattered around the periphery of Europe varied therefore with the prices and volumes of goods passing through their respective portals. The variety of experiences among sundry sources of taxable traffic led the most successful governments to auction off the rights to the varied tax farms in order to find the best composition of local
expertise among the competing financiers (Johnson and Koyama 2014, 2017). Only when a central, unified system of tolls could be imposed on a more homogeneous set of ports could central government customs officials replace the tax farming. Only then could governments assure their debt holders that interest could be paid regularly at a fixed rate for the duration of the bonds. In the meantime, governments waging war needed the *ad hoc* services of financial intermediaries, who profited to the extent they could sustain financial innovations. And sustainability depended, in the final analysis, on political factors largely beyond their control.

Throughout the sixteenth and then well into the seventeenth century Genoese bankers dominated the network of European finance, including Naples. Their ability to deal in bills of exchange to finance large-scale trade between the Mediterranean and the Baltic was well-known and their “virtual” fair for clearing accounts, known as *Bisenzone*, dominated finance of trade and armies moving along the “Spanish Road” between Spain and the Netherlands (Pezzolo and Tattara 2008; Marsilio 2013.) Their success over the centuries of repeated crises in Europe, it would appear, owed much to their base in the corporation called the *Casa delle Compere e Banco di San Giorgio*, founded in 1408. The Casa was a joint-stock corporation with a well-defined governance structure based on its shareholders, who held the sovereign debt of the city of Genoa and were responsible for collecting the taxes assigned to repay the debt (Felloni 2006, 2014). Whenever and wherever Genoese bankers operated in Europe, their actions were coordinated through their respective accounts at the Casa di San Giorgio (Neal 2015, Chapter 3).

7 **A Final Tour d’Horizon**

The net results of the financing experiments performed by the European participants in the Thirty Years’ War can be divided into three sets: one group of countries clearly failing to put a viable financial system together (Spain, Austria), another group fortunate enough to keep in place some solid parts to build upon later (Dutch Republic, Britain, France, Sweden), and the rest of Europe that continued to cope with reduced economic opportunities and uncertain political regimes thereafter (including Genoa, Milan, Naples and the Ottoman Empire).

In the cases of Spain and Austria, there were many proposals to implement some of the innovations that had succeeded in facilitating the finance of war by their opponents. The rulers of Spain, in particular, looked to the obvious success of the Casa di San Giorgio in Genoa and
the public banks in Naples, and entertained seriously proposals to initiate similar banks. But all the proposed banks, whether they were to be imposed by royal fiat, or solicited from the individual cities of Castile, or initiated by forced loans from mercantile groups, came to nought due to political resistance by the Spanish nobles or city elites (Hamilton 1949). The case of Austria is the focus of Jobst, Chapter 11.

In the middle group, we can put the Atlantic maritime countries who managed to profit by tapping into the growing trans-Atlantic trade initiated by Portugal and Spain: France (Atlantic ports), the Netherlands, Great Britain, Denmark, Hamburg and Sweden. A century later, the United States of America would join them. Their respective paths to modern economic growth have been studied intensively so all this paper can add is to note that each of the potential maritime powers attempted in their own way to imitate in some respect the Genoese experiment in mobilizing finance, the Casa di San Giorgio. Each country, however, attempted to incorporate what its leaders saw to be the essential elements of the Casa for economic success but also to limit the possibilities that the new corporation could encroach on existing political powers.

The Dutch imitators for example, the VOC and WIC, each kept their governance in the hands of a board of directors, the Heeren XVII or XIX, who were politically appointed by the member cities rather than being elected annually by the shareholders votes as in Genoa (Felloni 2014). The interaction of the Dutch companies with the Bank of Amsterdam remained a matter of bilateral negotiation thereafter, as analysed by Quinn and Roberds (Chapter 13). The Tudor monarchs tried to keep royal power over their distant agents operating the royal chartered monopoly companies as well, until the Glorious Revolution in 1688–1689 asserted Parliament’s authority instead (Dickson 1967). Even the brief experiment with financial innovations by the English Commonwealth had to await political developments before they came to fruition (Coffman 2013). French monarchs monitored closely their overseas companies after subsidizing them initially, which limited their entrepreneurial activities. Even John Law’s later attempts to imitate the Genoese example for France was eventually aborted by political interventions (Murphy, Chapter 12). Much later, Hamilton’s First Bank of the United States made sure that the Federal government had a substantial bloc of voting shares. Political, more than financial, constraints, limited the long-run success of the sundry efforts to imitate the Genoese example.
From smaller political states bordering the north Atlantic, the Danish, Swedish and Hamburg trading companies simply lacked the financial ability to provide either the naval protection that the Genoese had provided their Mediterranean and Black Sea outposts or the convoys that both Genoa and Venice had deployed in their Mediterranean trade. Ultimately, even the Dutch East India Company could not defend Amsterdam in the final Anglo-Dutch War of 1784. Nevertheless, the rising customs revenues that each Atlantic port enjoyed as ocean trade expanded allowed each to feel their modifications were fully vindicated and perhaps even Providential. Genoa and Venice, meanwhile, like Naples, lacked the increased tax revenues that expanding Atlantic trade generated for the Atlantic ports, but all three sustained their economies by relying on the financial resiliency provided by their financial systems, which successfully coordinated banking, public debt, and commercial finance with sound currencies (Pezzolo, Chapter 7). Milan proved eventually to be a special case by developing a manufacturing and mining sector, thanks to the resiliency of its financial system emerging from the trauma of Spanish domination (De Luca and Lorenzini, Chapter 8).

In contrast to these success, or partial success, stories, the efforts by Philip IV to raise donations from the kingdoms of Catalonia, Portugal, and Sicily comparable to those he managed to extract from Naples, led in each case to successful tax revolts. In Portugal, the revolt succeeded to the extent that it separated the kingdom of Portugal from the rule of Spain in 1640, a separation enduring to the present. The revolts in both Sicily and Naples were suppressed effectively, but only by conceding to local nobility further taxing authority previously reserved to the king. In each case, the newly empowered barons imposed further fees, taxes, or rents upon the inhabitants of their estates. The fiscal fragmentation by Philip IV of the composite state of Spain that had been governed more or less successfully by Philip II continued to be a problem for Spain thereafter (Stein and Stein 2000, Chapter 2). The revolt in Catalonia proved more difficult to suppress, aided as it was by intervention of France under the direction of Cardinal Mazarin, and appears to remain a problem for the fiscal unity of Spain to this day.

The “dream of liberty” (il sogno di libertà) for the city of Naples ended after the brief revolt of Masaniello in 1647–1648 and the seizure of d’Aquino’s estates by the Viceroy. The Viceroy then followed the example of Olivares in Spain by alienating the remaining tax resources
of the kingdom to the nobility of Naples in the surrounding provinces. Meanwhile, the public banks of Naples continued to deal with the fiscal emergencies that struck the kingdom in the future. These included repeated bouts of the plague, earthquakes, piracy, as well as dealing with the eventual replacement of the Habsburg viceroy with a Bourbon monarch, Charles I, Duke of Parma and Piacenza.

In 1734, Charles conquered the kingdoms of Naples and Sicily and reigned there as Charles VII of Naples and Charles V of Sicily until 1759, when he became Charles III of Spain. During his reign in Naples, one of the oldest of the public banks, Banco dei Poveri, caused a scandal by the misuse of the congregation’s assets by the self-appointed directors. Charles intervened forcefully, creating new members of the congregation of electors and appointing directly the new governor of the bank from a list of three provided for his consideration by the reconstituted and expanded congregation of the confraternity responsible for the bank (Avallone 1995). Afterwards, while reigning as Charles III of Spain in Madrid (1759–1788), among his many reforms that brought back a measure of stability and prosperity to the Spanish empire was founding the Banco de San Carlos in 1782, which later became the Bank of Spain. Perhaps it was his experience dealing with the public banks of Naples, including his reform of the Banco dei Poveri, which enabled this enlightened monarch to adapt belatedly to the emerging world of financial capitalism.

REFERENCES


