

Public Debts and National Sovereignty from the 12th to the 21st Century

Publications by Michel Fouquin

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Public Debts and National Sovereignty from the 12th to the 21st Century:

Learning Through Crisis

By

Michel Fouquin

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*TO MARY-CHRISTINE,
LAURENT, NADIA, CLARISSE*

“Arbitrary governments, whether revolutionary or despotic, have recourse, for their military expenses, to forced loans, extraordinary contributions, or the circulation of paper; for no country either can or ought to make war with its ordinary revenue. Credit is then the true modern discovery which binds a government to its people; it obliges the executive power to treat public opinion with consideration: and, in the same way that trade has had the effect of civilizing nations, credit, which is the offspring of trade, has rendered the establishment of constitutional forms of some kind or another necessary to give publicity to financial transactions and guarantee contracts.”

Madame de Staël. 1818.
Considerations on the Principal Events of the French Revolution

“The state creditors give nothing away, for the sum lent is transformed into public bonds, easily negotiable, which go on functioning in their hands just as so much hard cash would. But further, apart from the class of lazy annuitants thus created, and from the improvised wealth of the financiers, middlemen between the government and the nation – as also apart from the tax-farmers, merchants, private manufacturers, to whom a good part of every national loan renders the service of a capital fallen from heaven – the national debt has given rise to joint-stock companies, to dealings in negotiable effects of all kinds, and to agiotage, in a word to stock-exchange gambling and the modern bankocracy.”

Karl Marx. 1867.
The Capital, vol 1, chapter 31: Genesis of the capital industrialist.

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Finally, a special thought for Jean-Raphael Chaponnière who left us too soon.

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INTRODUCTION

The exceptional accumulation of public debts, which achieved 100% of world GDP in 2021, is part of a long rising cycle: started with the two oil shocks of 1973 and 1979, greatly accelerated by the financial crisis of 2008, then by the COVID pandemic and, in 2022 by the consequences of the Russian aggression against Ukraine. To this accumulation of public debts, the costs of the fight against climate change should be included for the coming decades, therefore raising with new acuteness the question of the sustainability of these debts and their political legitimacy.

In this chaotic world, the political legitimacy of public debts is the fight to preserve our national sovereignty to overcome severe crises that call into question the independence and the very future of our nation¹. Whether to deal with a foreign aggression, to fight a systemic financial crisis, a pandemic, or the consequences of climate change, the State plays a crucial role to mobilize urgently exceptional resources, that it does not have in its hands at the time of these crises. Public debts represent the prime tool to employ, but the state also must guarantee their long run sustainability. It is the role of the central banks and of the financial system to make this indebtedness possible without excessive risks.

A monetarily sovereign State can in principle create as much money as it wishes via its central bank² but faces two major risks: inflation and the international depreciation of its currency if the debt is partly denominated in foreign currencies. Inflation, which makes it possible to reduce the real value of the accumulated debt, has the first major effect of impoverishing the holders of fixed incomes (employees, pensioners, savers, and landowners) and favouring entrepreneurs and speculators. The second effect is a risk: that of causing an uncontrolled acceleration of price inflation, leading to the growing difficulty of renewing debt securities that have matured except at usury rates. Then it could drive to capital flight and a

¹ Eichengreen Barry, and El-Ganainy Asmaa, and Esteves Rui Pedro, and Mitchener Kris James 2021. *In defense of public debt*. Oxford University Press.

² Grejbine Thomas. 2021. *Comment (di)gérer des dettes publiques élevées*. Pages 41-56 *L'économie mondiale* 2022. Editions La Découverte.

currency exchange rate collapse. A situation of hyperinflation might follow endangering the very existence of the state.

The public debt is a bet on the future, it concerns the entire nation which is, at least we hope, immortal like its debt, contrary to private debt which must be repaid, or the debtor go bankrupt and disappear.

The central problem of public debt, once its political legitimacy has been recognized, is therefore its sustainability, its management, day by day and in the long term³. Defaults are nowadays not an option for developed economies, which have a well-developed financial system (we will come back to this in the last chapter). Defaults have an excessive cost in financial and development terms as can be seen among defaulting emerging countries and poor countries.

In this book I have chosen to focus on a few past experiences that have gradually presided over the construction of modern financial systems allowing the management of considerable public debts.

The first chapter addresses the question of the appearance and evolution of long-term public debts of the Republics of Venice and Genoa in the twelfth century to pay for their fight to acquire a monopoly position on intra-Mediterranean trade. Originally financed by forced loans they were replaced by perpetual, non-refundable debts, associated with perpetual annuities. Later these loans became subscribed voluntarily, making them the first major and profitable financial product for investors of all sorts. These financial products were then resealable on a secondary market and became the foundation of our financial markets. However, due to the high instability of these times, states go frequently bankrupted on their debts.

The second chapter focuses on the case of the exceptional indebtedness of the United Provinces (sometimes exceeding 200% of GDP) thanks to which this country was able to acquire its independence after forty years of liberation wars against the Spanish Empire. Then they successfully challenged for two centuries the great powers of Western Europe for the domination of world trade and finance, without defaulting.

The third chapter analyses how France, despite major political instabilities and a lengthy history of defaulting on its debts, managed in the nineteenth

³ Aglietta Michel, and Ould Ahmed Pepita, and Ponsot Jean-François. 2016. *La monnaie entre dettes et souveraineté*. Odile Jacob.

century to overcome the difficulties of financing its debts. We highlight the importance of institutional innovations that have allowed effective coordination between the Public Treasury, the Banque de France, and the Caisse des dépôts et consignations, based on the development of a vast network of savings banks under its control.

The fourth chapter compares and statistically analyses the macroeconomic dynamics of France and England's debts in the nineteenth century, by showing how budgetary rigor, demographic and economic growth combined to ensure a practically complete reimbursement of the pharaonic English debt. While France debt was able to confront major political instabilities and the 1870 defeat against Prussian.

The fifth chapter compares the financing strategies of the First World War developed by France, the United Kingdom and Germany between long-term and short-term loans, between taxes and inflation which push the limits of war financing to the extreme.

The sixth chapter analyses the incredible mistakes committed by the United Kingdom, France, Germany, and the United States in the management of war debts, with a particular analysis of the case of Germany up to the Nazi "solution."

The seventh chapter deals with the question of debts in developed countries over a period ranging from the post-war period to the pandemic. We are moving from the strong reduction of the massive debts inherited from the Second World War (1945-1973) to their gradual recovery (1973-2023) following the two oil shocks, then in 2008 to face the so-called subprime crisis and another time in 2020-2021 to limit the effects of the pandemic. We show how the slowdown in growth and investment in developed countries is accompanied by the decline in interest rates, facilitating debt management up to 2021.

The last chapter focuses on the future by integrating the consequences of the Russian aggression against Ukraine and the climate emergency. In fact, the world changed in 2022: the economy of abundance is now succeeded by an economy where rarities are multiplying, where economic sanctions and the race for technical progress are once again becoming weapons of power, where inequalities and global warming climate worsen, and political liberalism retreats everywhere.

CHAPTER 1

THE ITALIAN CITY-STATES INVENTED THE PERPETUAL PUBLIC DEBT IN THE TWELFTH CENTURY

Financial Revolution

That financial revolution was "the establishment of a public, national, financed, permanent debt, composed of annuities or negotiable perpetual annuities"¹, it predated the industrial revolution by several centuries and made it possible to finance wars and public infrastructures. Economists agree that public debts, thanks to their scale, their sustainability, and their liquidity, were at the heart of modern financial systems². The capital borrowed by the cities was not refundable, unless the city decided otherwise, and generally paid low rents³, around 5%. This radical innovation appeared first in Europe in the twelfth century in Venice and Genoa. Gradually that innovation will extend to other Italian city-states and to the rest of Western Europe. England was the last country at the end of the 17th century.

At the same time, we saw the creation of the first private banks by merchant bankers⁴. The most important one the "grand tavola" was created in 1209 by a trader consortium led by Orlando Bonsignori. These wealthy merchants were also members and financiers of the ruling institutions which most of

¹ JH Munro. 2013. Annuities and the European "Financial Revolution". Chapter 23 of the Handbook of the main Global Financial Markets, Institutions, and Infrastructures. Elsevier.

² The amount of global public debts reached 100% of the world's GDP in 2021.

³ Compared to more than 10% for private loans.

⁴ Merchant-bankers were first international traders who dealt with payments between different markets place all over Western Europe. They accumulated their wealth to such level that they developed credit activities and started to invest in all sorts of activities. They were at the beginning the main source of funds for the public debt.

the time managed the cities and their debts. They could impose forced loans to the wealthy families to finance the development of their trade monopoly in the Mediterranean Sea. Nevertheless, private banking and public debt management were separated, while private banking was a very risky business sanctioned by multiple bankruptcies, public debt management appears to be more resilient over time.

The use of perpetual debt responded to sudden and urgent expenses; these expenses will often be qualified as extraordinary expenses as opposed to ordinary expenses that had to be financed with ordinary resources (such as income from the state domain and taxes). Cities went into debt to finance a war or to develop their infrastructure (ramparts, roads, canals, etc.). They received a capital in exchange for which they paid an annuity, the payment to be supported by the victory and/or by future tax products (tolls, for example). It was an advance on certain recipes, a bet on the future.

Two developments were gradually required: creation of a stock market to exchange these securities between individuals according to their liquidity needs. The listing of these debts on the market gave an indication of the quality of public credit. The second evolution appeared in the fifteenth century when the subscription became, voluntary. This was proof that the annuity became an interesting financial product for savers, hence the birth of the character of the "rentiers", literally people who lived on their annuities, annuitants, dear to French nineteenth-century literature. Its disappearance was the effect of the First World War, which caused a galloping inflation that ruined the holders of fixed incomes (ruin qualified as "euthanasia of annuitants").

The Italian city-states Venice and Genoa were the first to resort on a large scale to public indebtedness to defend, weapons in hand, sometimes against each other, their monopoly on the Mediterranean trade. International trade provided the principal source of the wealth of the cities. This wealth was concentrated in the hands of a few large merchants who, accumulating large profits, became bankers. It was an oligarchy of merchants who managed the city and made the key decisions, especially those of waging war and financing it. This oligarchy controls public spending and strives to avoid defaults that would occur at their expense.

The Venetian Debt

From forced borrowing to voluntary borrowing

The City of Venice developed from the eighth century by choosing to put itself under the tutelage of Byzantium rather than that of Rome, too close for its taste. Its commercial dynamism from the second half of the twelfth century caused a series of conflicts with its tutor for the trade control in the Eastern Mediterranean. As early as 1164, a first voluntary loan had been taken out by twelve of the wealthiest families in Venice to support the presence of the merchants of Venice in Byzantium. Another loan was arranged in 1167, it was a forced tax levied on more than ninety families, and this time the municipality undertook not to raise any other loans in the next two years⁵. The first historical reference archived was that of the declaration of the Grand Council of Venice in 1171, which imposed a forced loan remunerated at 5%⁶, to finance a punitive expedition against the Byzantine emperor Manuel I, who mistreated the Venetian citizens present in Byzantium. There were more than ten thousand of them, which illustrated both the density of international commercial integration and the commercial importance of Byzantium, which was located at the crossroads of the Middle East, Central Europe, and Western Europe. Manuel I had the ambition, thanks to the second Crusade, to restore Byzantium total domination over the Mediterranean and Black Seas, which put the commercial interests of the Venetians in danger.

The second known debt was contracted under the leadership of the Doge Enrico Dandolo in 1202 to lead the siege of Zara (Zadar) and seize its salt works. A forced loan was financed by the pledge to devote the revenues of the salt monopoly to its repayment. In 1204, the fourth crusade was partly financed by Venice that supported the transport of the Crusaders on its ships by the promise of the plunder of Byzantium.

From 1207, the following loans were forced borrowings, the amount of which was fixed according to the ability to pay of each one, which was based on a wealth census⁷. Gradually, a debt management system was put in place

⁵ James Macdonald. 2003. *A Free Nation Deeply Indebted, the Financial Roots of Democracy*. Fakkar, Straus and Giroux, New York. Pages 73.

⁶ The 5% rate was frequently referred to in history. The Romans had already fixed the rate of usury at 5% which also corresponded to the rate considered as fair as the land rent.

⁷ It is not in the interest of the declarants to underestimate their wealth too much because it depends on the granting of the rights to own boats and participate in trade.

between 1207 and 1262. In 1262 debt became, in fact, perpetual⁸. The level of the loan was fixed in proportion to the citizen's wealth, and the loan yield was 5%. Specific tax revenues were allocated to the payment of annuities. These loans were non-repayable, unless the borrower (the municipality) decided so, establishing a depreciation fund to possibly redeem the debts and scrap them, etc.

In 1262, all the debts of Venice were consolidated into a single fund, the *Monte Vecchio*, designating a "mountain of debts", with an interest rate fixed at 5% per year payable in two installments. Two centuries later, the Council decided to create the *Monte Nuovo* in 1482, the *Monte Nuovissimo* in 1509, and finally the *Monte del Subsidio* in 1526. 1526 marked the end of forced borrowings, which were replaced by voluntary borrowings. The annuities payments were pledged from public resources. The Monte was managed by a group of eight commissioners elected by the lenders in charge of defending their interests. They formed the *Camera degli Imprestiti* or Chamber of Loans, responsible for keeping the account book of the various operations of payment of interest and repayments, if any.

The first "secondary market" of Venetian's public debt

Very quickly, around 1262⁹, a kind of secondary market for debt securities appeared, the annuity securities rights began to be sold to other people. It was a way to make liquid an asset that was not liquid. The secondary debt market revealed the ambivalent nature of forced borrowing: it was not a direct tax, but it was not refundable, unless the borrower decided otherwise, on the other hand, it could be resold, with no guarantee of parity, at the risk of losing money.

The loans, when they were repaid by the city in times of peace, were valued at parity until 1363. At that time, the repayments became increasingly rare. From 1262 to 1380, the 5% interest was served very regularly, and the value of these securities on the secondary market remained high, between 70 and 90% of the par (the nominal or face value). In 1344, numerous bank failures

⁸ Pezzolo, Luciano. 2003. *The debt of the Venetian government, 1350-1650*. In *Urban public debts, urban government, and the annuity market in Western Europe (fourteenth-eighteenth centuries*, pages 61-74). And Kenneth S. Rogoff, Barbara Rossi, and Paul Schmelzing. 2022. *Long-term trends in Real Long-term Interest rates 1311-2021*. Working document NBER n° 30475.

⁹ James Macdonald on page 74. In fact, it was still an exceptional and delicate practice that was carried out before a notary and gave rise to writings.

and debt repurchases by the municipality caused the value of these debt securities, thought to be safer than deposits in banks, to rise to more than 100% of their nominal value.

As such, public debt became a financial investment instrument and a means of payment for transactions between merchants. The Chamber of Loans (*Camera degli Imprestiti*) could occasionally accept bills of exchange and resell them, which gave its letters an additional value, because they were somehow guaranteed. We next discover that it developed the discount of commercial banknotes and became in fact a discount bank (discount banking). In 1423, a decree imposed that the payment of all bills of exchange be made through the Chamber of Loans. Merchants placed their money on deposit at the bank for the security it offered, they settled their affairs by making transfers from account to account, merchants were therefore encouraged to have an account open in this bank. This practice was then legalized and thus made mandatory for the settlement of all bills of exchange, including for foreigners. In addition, the bank gave credit to depositors in the form of a written letter and these writings, guaranteed by the bank, became a real paper currency.

Debt crises in Venice

The decisive war against Genoa for the control of the Mediterranean trade lasted, at its peak, from 1378 to 1381. Venice almost lost the war at the Battle of Chioggia - an island near Venice that defended it from attacks coming from the sea. The island was invaded towards the end of the war by the Genoese navy threatening, but in vain, the survival of Venice. The consequence of the Genoese defeat was the de facto division of the Mediterranean Sea between the two powers: the Eastern Mediterranean and its spices returned to Venice while Genoa controlled the Western Mediterranean and the gold traffic with Africa and Atlantic Europe and later the silver of the Americas on behalf of the Spaniards.

This war put the finances of Venice and Genoa at risk for a long time. Forced borrowings accumulated, the debt of Venice reached, around 1381, four million seven hundred and thirty thousand ducats. The levy on the Venetian families who supported these loans was estimated at 41% of the

declared value of their assets¹⁰, or according to Mueller¹¹ at about 24% of their real assets (in Venice as elsewhere, citizens deliberately underestimated their assets). To comply with their obligations to subscribe to these forced loans, some of the less wealthy families were forced to sell their old debt securities at very heavily depreciated prices, by about two-thirds, to subscribe to the new loans.

Not everyone lost at this game. The secondary debt market became attractive for the wealthiest Venetians and for a few privileged foreign investors such as the Florentines whose businesses were intricately linked to those of Venice. They purchased back securities, sometimes at half their value, while retaining their right to receive the same fixed annuity. In this way, in a roundabout but very tangible way, they achieved a return of more than 10%. This practice caused controversy, and the managers of the Monte tried in vain to find parades.

The accumulation of debts ended up increasing the rates of interest and therefore the payment of annuities and in the end, the city had to borrow to service its debt, which was the case of debts that became unsustainable and led to default. In fact, the payment of annuities was suspended in 1378, and then reduced arbitrarily to 4%, then to 3%. Genoa went into the same restructuring of its debt.

In 1482 the value of the debt fell to a few percent; it had to be abandoned, in the end everyone lost. The Venetians subsequently created the *Monte Nuovo* which lasted only 27 years (compared to the 280 years of existence of the *Monte Vecchio*), and the *Monte del Subsidio* which had an even more limited lifespan of 17 years. This form of financing had therefore reached its limits.

Genoa and International Finance

The public finances of Genoa followed the same paths as those of Venice, sometimes preceding, sometimes following it. In Genoa the first public loan appeared around 1150, it was a forced loan. Initially, these loans were contracted for 29 years on the model of land credits (the owner of the land offered the farmer the right to cultivate his land for 29 years in exchange for

¹⁰ Jacques Macdonald, op.cit. Pages 72 to 77.

¹¹ Reinhold V. Mueller. 1997. *The Venetian money markets, the panics, and the public debt, 1200-1500*. Vol. II. Money and banking in medieval and Renaissance Venice. John Hopkins University Press.

the annual payment of an annuity, the contract was usually renewed and de facto became perpetual). Around 1200, public loans were distributed according to the data of the heritage census and were associated with a fixed interest rate without repayment. In 1257-1259 the debts of the city were consolidated at a rate of 8%, in 1262 the city lost the right to redeem its debt by preemption. The secondary debt market was free¹². The difference with Venice was that in Genoa the loans from the Municipality quickly became voluntary loans. When the loan was voluntary, the debt service was associated with a public income to cover the payment of interest. It was, in a way, a privatization of a public income. Each loan had its legal personality and was managed by elected trustees.

In peacetime, as in 1350, the budgets were balanced but the weight of past borrowings was exceedingly high. The ordinary expenses of the city amounted to 500,000 lire per year¹³, including 300,000 lire of interest on the debt, while the income reached 300,000 lire of indirect taxes (*gabelles*), 100,000 lire were linked to commercial traffic; 50,000 lire were direct taxes, and 13,000 lire were property taxes. As in Venice, the direct taxes were very unpopular and covered at most only a tenth of the expenses of the Municipality. The indirect and port taxes ensured the bulk of public income¹⁴.

Voluntary public loans in Genoa were called “compere”, i.e., purchases, and the associated public revenues give the name of the *compera*, *compera salis* for taxes on salt, or even on the income of colonies such as the *compera of Corsica*. These loans were sold to the highest bidders. These could join in syndicates of lenders to reach the sums raised. Each share had a minimum value of one hundred lira – but then they could be divided, which expanded the financing base to small savers. These shares could be resold before a notary on the open market. Each participant received a share of the pensions paid *-luoghi-* according to his contribution. The municipality entrusted the management of these incomes to farmers-collectors who had to ensure the payment of fixed rents at their own risk.

¹² And in 1263, debt prices were valued at 110.5, which was significantly above their face value.

¹³ The lira contained at that time about 39.4 grams of silver, the expenses then represented 19.7 tons of silver; or four hundred thousand ducats. Note on the currency: a lira contained 39.4 grams of silver or 0.80 ducats which weighted 3.5 grams of gold, or a gold silver ratio of 14.1.

¹⁴ General evaluations proposed by Jacques Heers. 1971. *Genoa in the fifteenth century*. Flammarion. Page 112.

This borrowing system was necessarily very heterogeneous in terms of both the sums concerned and the terms of the loan. Especially in times of acute tensions, loans were again forced loans, but their yield was particularly favorable to lenders. Then when the danger passed the municipality imposed a debt consolidation. Thus, after the victories against Venice between 1294 and 1299, the debts were consolidated at 6%. However, as in Venice, this system of forced borrowing during wartime worsened social inequalities: the less wealthy were forced to sell their debt securities to the wealthiest who bought them back at a low price. This situation led to social revolts that demanded the abolition of the system in favor of non-refundable direct taxes.

In 1340, after a period of civil war, the debt was consolidated on drastic conditions: the nominal debt of 2.4 million ducats was reduced to 832 thousand ducats and to an annuity of 75.000 ducats (9%). Despite the recourse to this conversion, Genoa regularly found itself in serious difficulties; the service of its debt reached the totality of its income while for Venice this burden represented merely 50%. From his defeat at Chioggia in 1381, Genoa, to restore its accounts, renounced to compete with Venice in the Eastern Mediterranean, accepted the protection of continental powers, successively France and then Spain. Thanks to his submission to Spain, the Genoese financiers were closely associated with the management of Spanish finances and that of the treasures of the Americas, which made their fortune.

Early Fifteenth Century Birth of Public Banks¹⁵

In 1587 Venezia create the Banco de la Piazza di Rialto

The management of public debts became a major activity, and as private banks seemed very fragile, the creation of a public bank was necessary. Various attempts to create public banks took place from the beginning of the fifteenth century, these banks had the particularity of managing tax revenues and the public debt of municipalities; they made advances to political power to finance wars; they were also authorized to receive deposits from private bankers in search of security; they ensured a role of

¹⁵ Raymond de Roover. 1974. *Business, banking and economic thought in the late Middle Ages and early modern Europe*. The University of Chicago Press. Chapter V. New interpretations of the History of the bank. Pages 217 and following.

financial stabilizer. However, at first, they were not allowed to compete with private banks and moneychangers, which limited their expansion.

The bankruptcy of almost all Venetian private banks, following the crisis of 1499-1500, caused their disappearance. This put merchants, who were used to making payments by resorting to bank transfers, in difficulty. To overcome this constraint, they developed the practice of endorsing commercial debt securities, which would not be legalized by the courts until the sixteenth century. This solution proved to be inadequate in relation to the increasing volume of exchanges.

The Venetian Senate finally created the *Banco de la Piazza di Rialto* in 1587 that could receive deposits and made transfers between accounts at the request of depositaries; it could also manage foreign exchange but could not make credit. It fulfilled a strict public service function in a city of international trade. However, this turned out to be insufficient. Then in 1619 the creation of the *Banco del Giro* was decided, which was assigned the function of creditor of the State for an initial amount of five hundred thousand ducats, which was raised promptly to two million five hundred thousand ducats. Initially, the bank played the role of collector and managed only the accounts of the creditors of the State. These were so numerous that all the merchants of Venice wanted to have an account in this bank to be able to benefit from the facilities of the Giro. Although it did not provide credit to individuals, it created credit instruments sold to individuals to finance expenses. Inevitably, the bank issued too much paper and found itself in difficulty when it had to cope with the liquidity demands of individuals. The government then chose to suspend and depreciated the bank currency, marking the financial decline of Venice.

In Genoa: The Casa di San Giorgio¹⁶ and the “creditor citizen of the State”

The political instability that reigned in Genoa, unlike Venice, made citizens extremely suspicious of public finances. To remedy this situation that

¹⁶ It is thanks to a fund of exceptional archives that economists have been able to analyze the role of the Casa di San Giorgio in the Genoese economy. Cf. Giuseppe Felloni. 2005. *Genova e la storia della finanza: una serie di primati* (Genoa and the History of Finance: a serie of Firsts?). Banco di San Giorgio, Genoa. See also Macdonald op.cit. pages 94-99, and Luca Parisoli. 2006. *The "Casa di San Giorgio", a regulatory authority in medieval Italian communal cities*. Law and Cultures magazine n ° 52.

threatened both the survival of the city and the heritage of the rich, the solution was the seizure by private creditors over the management of public debt. Thus, it was decided to create a sole body responsible for managing the collective interests of all creditors. The Casa di San Giorgio was created in 1407 on a new consolidation of all the debts accumulated since 1340. Its initial capital was two million three hundred thousand ducats, the largest of all existing debt syndicates. From 1454, the Casa gradually absorbed all the existing loans. It collected all taxes, managed the salt works, the monetary minting, and governed the external territories of the city (Corsica, Cyprus, and the counters of the Black Sea). It also had the power to torture tax evaders and to judge farmers for taxes. This was a genuine state within the state. The number of its shareholders was about eleven thousand individuals, more than the total adult male population of the city. The Casa was run by representatives, in equal shares at all levels, of the different political parties, between pro-imperial and pro-papists, and between all social categories – only the two great families, the Grimaldi and the Fieschi, were excluded from it to prevent them from getting their hands on public finances. This led to a kind of democratic control of the state by the creditor citizens.

How were they going to manage the debt? Surprisingly, they managed to reduce its cost by choosing the Genoese silver lira as their currency, which was constantly depreciating, while Florence and Venice, on the contrary, choose the gold currency, the ducat, which was not depreciating. The depreciation of the lira reached 60% between 1407 and 1509; in addition, interest rates were gradually reduced to 2.5%. The loss for the creditor, however, was not greater than that of the creditors of Venice or Florence who had suffered the complete debacle of the value of their loans on the secondary market.

Genoa also developed sinking funds intended to reduce the debt. The prototype of which was tested by Francesco Visconti who bought ninety shares of the *Compera Magna Pacis* in 1371 for a value of 9,000 lire and donated them to a sinking fund on the condition that the interest paid, of about 7% per year, was intended to buy back new shares of the *Compera*; so much so that in 1454 the entire debt, valued at about one million lire, was almost completely repurchased. This represented almost 12% of the global Genoa debt. Many other funds of this kind were then created, either for debt reduction or to finance charitable institutions. It was a way to avoid austerity policies, that increased the tax burden. Likewise, it helped maintain a high monetary liquidity by avoiding immobilizing scarce resources such as real cash.