Monetary and Financial Innovation in the Spanish Empire: Lights and Shadows

Carlos Alvarez-Nogal

A broad consensus exists among economists that there is a strong positive association between the extent of a country´s financial and monetary development and the material well-being of its population. There is also consensus that causality runs from financial development to economic growth: countries do not have large banking systems and securities markets because they are wealthy; they are wealthy because they have large banking systems and securities markets.[1] The issue at hand is to explain what conditions are necessary or sufficient to develop larger banking systems and securities markets. Throughout history, as different societies evolved transforming their economies, economic agents have had to develop monetary and financial systems that allowed them to grow. These systems were designed gradually, but in no case was the path a straight line. Good decisions have always been mixed with mistakes,[2] a responsibility shared by economic agents and political figures alike, given that laws have always been an essential part of the rules that govern and legitimize currencies and the functioning of financial markets.

One of the major problems with establishing an efficient monetary and financial system, aside from the difficulty of knowing a priori what we believe to be "efficient," was deciding what its main objectives should be. In other words, should the financial and monetary system first promote economic growth and thereby benefit the ruling class, or first achieve the goals of the ruling class so that it may help the rest of the economy? The tension between these two options has existed throughout history and has marked the different paths that each country has followed in the past.

[1] Haber et al. (2008: 10), King and Levine (1993), Levine (1998), Levine and Zervos (1998), Rajan and Zingales (1998).

[2] Sargent and Velde (2002).

C. Alvarez-Nogal (✉)
Universidad Carlos III de Madrid, Madrid, Spain
e-mail: canogal@clio.uc3m.es

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Different theories explain the origins of economic innovation in history. For example, some people think in terms of “yardstick competition”. Monetary innovation happens by extending the scope for comparison.[3] Economic competition with other countries weakens the established interest groups which try to maintain the status quo as explained by the Rajan-Zingales hypothesis.[4] Competition not only between merchants, also between rulers, protects the freedom needed for innovation. Most of these hypotheses start from the point that all important financial and monetary innovations occurred in open and competing states. The lack of innovation elsewhere may be explicable by the absence of those factors. This raises the question of what determines whether a state will be open and competitive, and whether it can be so in one moment of history and not be so in another.

Can we explain the case of Spain during the Early Modern Age from this perspective? Was there a critical moment in Spain when conditions were ripe for the rise of financial innovations and the development of the economy? If Spain was at one time open and competitive enough to generate financial innovations, why did it then cease to be so?

The Role Played by the Private Sector in Institutional Innovation

Before analyzing the Spanish case from a historical perspective, it is worth explaining the importance of opening an economy as a historical pre-condition to financial innovation. Before the rise of the modern states and the accumulation of enough power by the governments to impose and enforce laws over vast territories,[5] the majority of institutional innovations originated in the private sector. Merchants, not kings, were the ones who searched for solutions to the obstacles and problems posed by trade. The development of trade and finances that Europe witnessed during the Modern Age arose as a result of private initiative.

The expansion of trade was based on diversity. Climatic and geographical differences in the different parts of Europe encouraged the movement of all types of goods and raw materials, from where they were abundant to where they were scarce. This diversity was also institutional. In territories relatively close to each other, there were great differences in government structures. Around 1500, there were city-states like Genoa and Venice, monarchies like England, France and Castile, many small principalities in the center of Europe, trade coalitions like the Hansa, even authorities with fiscal powers superior to all of them, such as the Catholic Church, which was capable of collecting revenues in territories it did not govern. There were also regions where the use of force was not

3 Shleifer (1985).

4 Rajan and Zingales (2003).

5 Tilly (1992).

regulated, as occurred over large stretches of the Mediterranean. In this context of great diversity (borders, languages, customs, currencies, laws and taxes), and the common occurrence of resorting to force to resolve conflicts, merchants had no choice but to look for solutions to be able to trade, sometimes with the help of the ruling class and many times without it. The most open societies, those that facilitated the entry and exit of goods and persons, were the most innovative. In the context of greater freedom, individuals created new institutions or copied those that had been successful in other territories. Cooperation between agents of different origins was a key element in promoting exchanges.

Among the most important economic institutions were those which served to guarantee property rights, defining and limiting the range of privileges conceded to individuals who possessed certain goods.[6] Advances included the capacity to exclude others from access to certain goods, the right to appropriate revenue derived from their use and the right to sell or transport them freely. One correct definition of property rights influenced not only the economic growth of society but also the way the wealth was distributed.[7]

Including the concept of "transaction costs" in traditional models of production and trade has modified some explanations of economic processes and the role played by institutions in them.[8] For example, the assignment of property rights determines an economic result, but the way the rights are assigned depends on the amount of transaction costs. In addition to influencing the volume of transactions and their prices, institutions influence the decisions of individuals, at least to the same extent that exchange rates influence relative prices. For these reasons, the institutional framework includes not only economic but also social, cultural and political aspects that are much more difficult to quantify, but essential for understanding any process of economic development.[9]

For example, the concept of transaction costs and the discussion of informational economies help us to understand much better the concentration of information-gathering activities in a single center.[10] When the complexity of a system of production or exchange increases, the aggregate transactions costs within that system also increases. In the early modern period, people seek to reduce transaction costs by internalizing them within large organizations and by attempting to concentrate as many transactions as possible in one place. Stigler's analysis of search in dispersed markets explains why information-handling tends to become organized into a system with a unique center.[11] Venice and Amsterdam were relevant commercial centers because they were able to create a system which main feature

[6] Property rights have received great attention in different studies during the last decades (Furubotn and Pejovich 1972, Libecap 1986, De Alessi 1980).

[7] Barzel (1989), Libecap (1989), Eggertsson (1990), Alston et al. (1996).

[8] Commons (1934), Coase (1937), Williamson (1975, 1985).

[9] North and Thomas (1973).

[10] North (1981: 33–44), Stigler (1968: 171–190).

[11] Stigler (1968: 176).

was the handling of information,[12] but each one in a different historical period: Venice during the Middle Age and Amsterdam in the 17th century. Genoa was another important center of trade in the Mediterranean, and from a financial point of view, its importance was essential between 1500 and 1650, in connection with its interests in the Iberian Peninsula. In the Baltic, different cities linked to the Hansa also concentrated economic information and important financial services. Economic historians have long stressed that the assembly and exchange of business information are important parts of the operation of a commercial center. It is clear that one by-product of markets in the period was the creation of institutions and business contacts through which large amounts of information passed.

In addition to cities, fairs were an important hub for commercial activity in the Middle Ages. These markets of limited duration were meeting points for merchants who could exchange economic information and regulate transactions, reducing transaction costs. In addition to such well-known fairs like that of Champagne, there were others in different European territories (Besançon, Piaçensa, Antwerp etc.). The most famous in Castile were the fairs of Medina del Campo, Medina de Rioseco y Villalón. Different studies have attempted to explain the institutional innovations that enabled them to become important centers for the exchange of goods as well as credit.[13]

The same happened with bills of exchange and the double-entry bookkeeping system. Although these financial instruments were invented in the north of Italy,[14] it did not take long for their use to spread to many other parts of Europe as Italian traders expanded their networks and businesses. Bills of exchange helped those who charged interest for lending their money on the merchant market avoid sanctions imposed by laws against usury, but soon they were also used as financial instruments to channel investments in the medium term. The bills were transferred from one place to another, thereby accelerating the speed at which money circulated. Their existence explains the economic growth of the regions where they were located. Some merchants attracted others, and money flowed there in search of good and sound investments.

None of these institutional innovations originally required the help of the state or a powerful monarch. On the contrary, the majority appeared autonomously and independently, and once developed, were those that reinforced political power, because in contributing to the growth of economic activity, they contributed to the fiscal strengthening of the monarch's power. The interest of the authorities and rulers was not to restrict this type of initiative but rather aid its expansion, because they benefitted from it if they increased the number of transactions. The problem arose when the ruling class preferred to increase its revenue in the short term to achieve their political and military objectives without concerning themselves with the damage their decisions

[12] Smith (1984), De Vries (1976: 116).

[13] Felloni (1978), Milgrom et al. (1990), Ruiz Martín (1994), Marsilio (2008), Casado Alonso (2007).

[14] De Roover (1953, 1974), Van der Wee (1977, 1991).

could do to economic activity. Cooperation between authorities and economic elites was essential for maintaining the incentives that promoted transactions. Efficient economic institutions emerged only when this cooperation was achieved and open competition among its agents existed without regard for its origin.

From these markets arose financial institutions designed by the own merchants to facilitate their trade and the use of money. The "Casa di San Giorgio" in Genoa and the "Banco della Piazza di Rialto" in Venice were financial institutions in the Mediterranean,[15] similar to the Bank of Amsterdam created in 1606 and the Bank of England established at the end of the 17th century. In all of them, private initiative was reinforced by the privileges received from the government authorities. The idea for the government protecting these institutions or behind companies as the New East India Company (1698) or the South Sea Company, was to obtain finance from private investors at a low rate of interest in exchange for equity holdings in a privately owned company with monopoly privileges.[16]

The Limits of Absolutism in Spain

In a context where cooperation was an essential element, what role did rulers play? And which were the limits of their power? Five hundred years ago, there was no authority or government in Europe that had unlimited power. The first limitation which any government faced was the one posed by its ability to finance itself. A strong central power was an advantage for economic activity in a territory because, within a context of great uncertainty, it could better defend its subjects. However, that same strength was dangerous if the king used it to squeeze money out of them. Instead of investing in the creation of institutions and public goods that reduce transactions costs, it could increase them.

Many authors have identified the "absolute" ruler, a characteristic of the Modern Age, as a key element for understanding some problems of incentives. However, as Nye points out, the presence of a great power is not in itself enough to reduce "efficiency" in a context of great competition.[17] In the event that the sovereign had the ability of perfect coercion without costs, something highly unlikely around the year 1500, the result would be the same as in the case of a perfect monopoly capable of discriminating prices. If the ruler could extract what in economics is called "consumer surplus" from his subjects in a perfect way and without costs, the economic intervention of this type of sovereign would not entail any inefficiency in the global result of the economic activity. All that would be affected would be the distribution of the revenue, which would shift from the consumers to the sovereign. The problem is that control and extraction of income are not

[15] Felloni (2010), Mueller (1997).

[16] Stasavage (2002).

[17] Nye (1997: 122).

cost-free activities, so extraction of income creates inefficiencies for the producer and the ruler alike. Kings in the Early Modern Age were not perfect monopolists. They endured competition from other kings and within their own territories were restricted in the use of force.

There were two extreme types of rulers. One of them was an utter parasite and the other only existed to offer public goods.[18] In the first case, subjects would enjoy greater wealth without him, just the opposite of the case of the purely administrative ruler. Kings were somewhere between the two extremes. To the subjects, the rulers seemed desirable because they were able to guarantee and offer public goods more efficiently and economically than the private sector.[19] However, these same rulers were occasionally undesirable, because they tried to appropriate what was not theirs, abusing the power with which they had been entrusted. The chief public good that all these monarchs and governments offered was defence against enemies, or the defence of property rights among individuals. For centuries, this function justified the payment of taxes; it accounted for 80 % of the government's expenditures.

In analyses of the Spanish case, the negative version has predominated up to now, viewing the king as a mere predator and denying the existence of institutions capable of promoting economic growth. In many debates about long-term institutional quality, Spain is the counterexample of the successes achieved by the Netherlands and England. Some economic historians have long held that Spanish political and fiscal institutions were ill configured for the long-term economic growth of either Spain or its colonies. Spanish fiscal and political institutions have been defined as absolutists, interventionists, centralists and bureaucratic.[20] North is the most celebrated source of these type of arguments. Though Spain has not been the principal focus of his historical work, he has drawn regularly on the Spanish case for comparative insights in support of his arguments about the importance of good institutions for economic growth.[21] His view is that Castile in particular and Spain in general, were excessively centralist and absolutist.

North and Weingast have argued that the institutional changes of the Glorious Revolution allowed the British Crown after 1688 to borrow unprecedented sums at significantly lower interest rates than had prevailed before the Revolution. Because France and Spain were powerful central states, they faced a higher risk of defaulting on their sovereign debt. Promises by absolutists to repay loans were less credible precisely because absolutists brooked little opposition to their authority to spend, debase the currency, and repudiate debt. Prone to impressments, confiscations, and default, absolutists confronted low debt ceilings and credit rationing and had to pay hefty risk premiums on loans, all of which compounded their fiscal inadequacies.

[18] Nye (1997: 129).

[19] Coase (1960).

[20] North (1989: 1328).

[21] North and Thomas (1973: 127–131), North (1981: 150−153), North and Weingast (1989: 808): "Absolutist states which faced no such constraint, such as early modem Spain, created economic conditions that retarded long-run economic growth".

Absolutist states such as France and Spain suffered both lower tax yields and poorer access to credit than did states where the sovereign's power came to be formally constrained by representative institutions, such as in England and the Netherlands.[22] Whether a state had well-defined institutions for setting tax policies was a key determinant of whether it met its fiscal needs while supporting the development of markets, or instead undermined efficiency through predatory measures.[23]

One circumstance that is most often used as evidence of the Spanish monarchy's absolutist nature and its lack of efficient financial institutions is the famous "bankruptcies" of the Crown. Everybody think that Spain was in a permanent default. If this were true, it is hard to understand why the most important bankers of Europe were lending large amounts of money to the Spanish Crown for decades. It is also difficult to understand why interest rates in the Crown's credit contracts were falling down like in other parts of Europe.

Some authors have already demonstrated that it is incorrect to use the term "bankrupt" to define the moments when the relationship between the monarchy and its bankers went through a crisis.[24] What is certain is that the Spanish Crown was able to finance itself permanently within and outside of Spain for more than 150 years. The Crown's biggest debt came from issuing public debt bonds at interest rates ranging from 7.14 to 5 % around 1550. Castile was the first country with a large nation-wide domestic public debt at that time. This is much less known than the famous asientos with the bankers but much more important. The credibility of this type of debt, mostly in perpetual redeemable annuities, was enhanced by decentralized funding through taxes administered by cities making up the Realm in the Cortes.[25] The way that the Spanish Monarchy designed a system to sustain credibility for this domestic debt with many constraints was a great financial innovation. [26]

In the second half of the 16th century, that debt came to account for over 50 % of the Spain´s GDP. This figure can only be explained by the great reputation that the Crown's debt enjoyed, such that it attracted a large number of foreign investors for decades. The Spanish Crown did not stop paying interest on its public debt until 1621 when it established a maximum of 5 % on the return of all bonds.

The poorly-termed "bankruptcies" formed part of the strategy designed by the Crown to negotiate tax reforms with the main cities of Castile. The decrees that temporarily suspended payments to bankers only affected a small proportion of the Crown's debt. For example, in 1575, the debt with bankers was not more than 9 % of the Monarchy's entire debt (Fig. 1). The service of the remaining 91 % continued to be paid punctually. A review of the accounts with bankers showed that the Crown did not accumulate large arrears with them, and in 1577 they agreed to pay them what was still pending.

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[22] Summerhill (2008: 222).

[23] On the definition of rules as institutions see North (1981: 201−203).

[24] Thompson (1994).

[25] Álvarez Nogal (2011a, b).

[26] Alvarez Nogal and Chamley (2014).

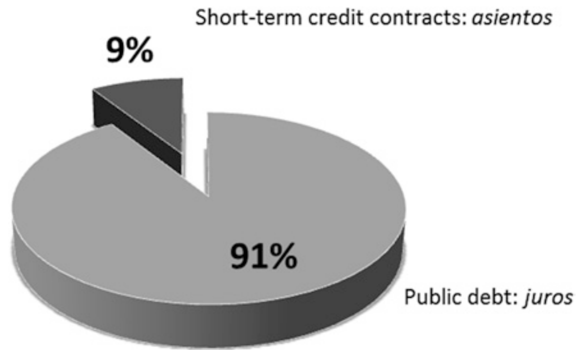

Fig. 1 Principal of Spanish Crown's total debt ("juros": short-run and "asientos": long-run) in 1575. *Sources* Carlos Morales (2008), p. 136; y Ulloa (1977), p. 791

Apart from a superficial view of historical reality, data show that the Crown had enough resources to cover its short and long-term debts during the 16th century.[27] Proof of this was that in spite of the financial crises, the economy kept growing and the Crown never became shy about borrowing money. The Spanish Crown depended very deeply for financial services on foreign bankers. Financial services were needed to pay military expenditures and also by the private sector (trade was growing during the 16th century with Europe and America, and the access to good sources of credit was essential for this expansion). International bankers provided the best information and financial services all around Europe. Bargaining with these bankers in Madrid was a good strategy for the Spanish Monarchy and a proof of the great attraction that Spanish markets had for foreign investors around Europe. It shows that the Spanish economy was open and very well connected with other financial and commercial centers in Europe. Only when Spain entered deep decadence during the 17th century, all these international bankers disappear.

Economic Growth and Institutional Innovations in Spain

The institutional framework of the Spanish Empire did not change significantly between the 15th and 17th centuries. At the end of the Middle Ages, it had contributed to sustained economic growth, creating one of the highest levels of income per capita in Europe. However, between 1590 and 1690, there was a long and severe decline in absolute and relative terms compared to other European countries. Why did Spain cease to have a prosperous economy? (Fig. 2). Why did the crisis last so long? It is not reasonable to blame the inefficiency of some economic institutions and policies which until then had been responsible for economic growth.

[27] Sources of income by Ulloa (1977), debt amounts for service of long-term debt (juros) by Ruiz Martín (1965), Toboso Sánchez (1987), Domínguez Ortíz (1960), and short-term debt (asientos) by Drelichman and Voth (2010).

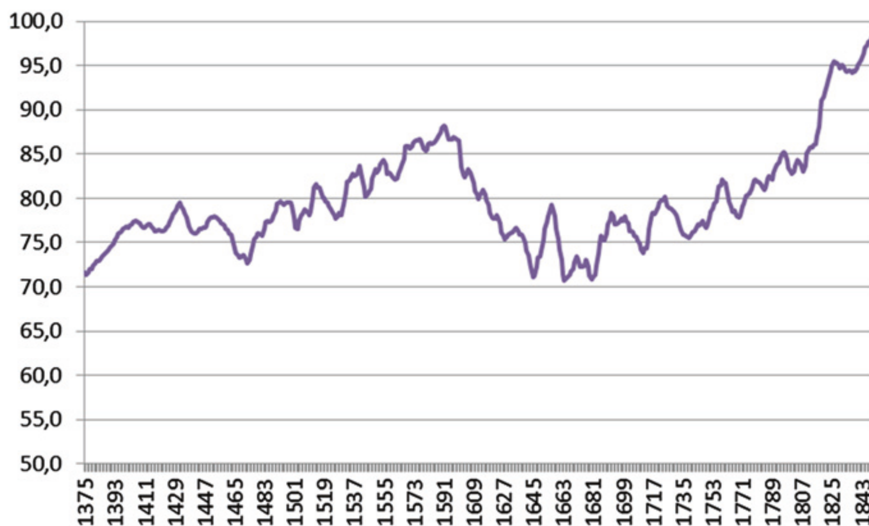

Fig. 2 Real output per capita in Spain (1375–1850) (1850–1859 = 100). *Source* Álvarez Nogal and Prados de la Escosura (2012)

The origins of Spain's economic growth date to the Middle Ages. They were based on the opening of its economy to international trade. Spain had a very low population density which promoted the expansion of cattle raising over agriculture. The primary sector specialized in the production of high-quality wool which soon was exported to more populated European cities, where the flourishing textile industry needed raw materials. As its international price increased, the export of wool permitted the import of high-quality textiles and manufactured goods. This traffic of goods between Castile and the Low Countries spurred trade within and outside of Spain, generating an expansion of the service sector which depended on it (transportation, construction, insurance, banking, etc.).

Castile's connections with the Islamic world and the flow of gold coming from North Africa enabled it to control the distribution of this precious metal within Europe. Gold was in great demand at the time as Europe's economic growth intensified. As of 1492, the discovery of America brought new opportunities for trade, in this case from the Atlantic. The import of precious metals from the New World was only one of many consequences of colonial expansion.

All of this intense trading, well-connected internationally with the rest of Europe, consolidated the Iberian Peninsula as a center of flourishing international trade. Goods arrived in Castile from different parts of Europe, contributing to the growth of the economy, especially in Castilian cities. Around 1500, Castile had one of the highest urbanization rates in Europe, competing in this aspect with the north of Italy and the Netherlands.[28] This urban expansion occurred in the center

[28] De Vries (1984).

of the peninsula, an area with difficulties for communications, far from the sea and without navigable rivers that facilitated the transportation of goods. These problems did not prevent the population from increasing in urban places, as did monetary circulation, the transfer of economic information, credit and the development of the service sector. Urban populations demanded more agricultural products and drove local industry.

Money has no borders and economic agents have always looked for the best way to use it in those places where it garners the largest profits. If a territory does not offer the right conditions for doing business, individuals look for alternatives. Although mercantilism extended the idea that gold and silver represented true wealth and monarchies tried to slow down the transfer of capital between individuals, the political interests of these same governments promoted the international transfer of precious metals.

The same happened in mercantile communities.[29] Groups that shared the same origin, culture and history developed institutions on the basis of strong interpersonal relationships to reduce their transaction costs. Coalitions were one example. In the main cities, ports, fairs and, in general, in the main European markets, groups of merchants settled: Genoeses, Venetians, Flemings, Portuguese, etc. The Castilians also created mercantile communities in the main centers of European such as like Lisbon, Antwerp and Lyons.[30] This expansion through networks of merchants helped spread financial techniques and instruments to other parts of Europe. The Spanish merchants imitated such advances in banking and credit, something clear studying the bankers in fairs of Castile in Medina del Campo.

In Spain different types of banks were created (bancos públicos, bancos de Corte, bancos de feria…), offering credit to private clients as well as to the Crown itself and accepting deposits from many small investors. Trade companies were created on the model of the Italian examples. Insurance business expanded, with Burgos and Sevilla as the most famous centers. Trade guilds developed (Consulados de Comercio). Among the most famous were the Consulate of Burgos, dominating all the transactions between Castile and the north of Europe, and the Consulate de Sevilla, connected to trade with America. The Crown also intervened to help the private sector, regulating the currency. The Catholic Monarchs introduced a silver coin (real de a ocho) whose content in precious metal was respected for decades. Mercantile legislation and the figure of the notary were regulated to protect private property rights. Fleets and armadas were formed to defend trade with America and traffic in the Mediterranean and the English Channel.

Institutions like the Casa de la Contratación created by the Crown fostered trade with America by facilitating merchant activities in the colonial convoy system, and they allowed the Royal Treasury to levy taxes on American trade. The laws passed to regulate trade with America were designed to perform both

[29] Greif (1989, 1992).

[30] Casado Alonso (2005).

functions, and as such, none of them was indifferent to economic activity. The Casa de la Contratación contributed in different ways to reducing transaction costs and generating incentives to promote trade with America, at least in its initial phase. Apart from establishing general rules and unifying standards like weights and measures, it was also in charge of organizing the defence of trade: the fleet system. It supervised the fulfilment of contracts, resolved disputes between merchants and oversaw the regulation of maritime trade and insurance to facilitate credit.[31] In addition, it was responsible for the elaboration of cartographic maps and the provision of trade information to the public. Royal officials from the Casa had the power to administer justice in lawsuits related to trade and shipping.[32]

The same things that happened with trade happened with finance. The economic expansion of Castile, with a very dynamic trade sector, demanded financial services and attracted specialists in this field from all over Europe. These people came with their connections and, consequently, international networks were established. Bankers that worked in the private sector wasted little time in financing the monarchy whose need for financial services grew in line with its tax revenue and expenses. The presence of important foreign trader-bankers in Spain, especially Genoese, allowed the monarchy to have international credit services. On the other hand, thanks to the competition among different agents (Germans, Genoese, Milanese, Portuguese, Flemings, even Spaniards), the Monarchy accessed a greater amount of credit and at a lower price.

The German (Fugger) and Genoese bankers (Spinola, Centurione, Grimaldi…) usually financed in advance the Spanish military expenditures in the Netherlands, Germany and the North of Italy. They were later compensated with taxes collected around Castile and silver from the New World. Why did the Spanish Crown rely on foreign merchants for short term cash advances against future silver deliveries instead of developing a sophisticated banking system in Spain? The Spanish Monarchy needed large amounts of money every year to pay its armies and other expenses in Spain and in the balance of its European territories. Taxes were collected throughout the fiscal year while expenses had to be made monthly. The Crown had to transfer money from Castile to different places in Europe in order to pay its armies with regularity in Antwerp, Germany and Italy, far away from the centers where the main revenues were collected. If the king wanted to have credit in different places of Europe and different currencies, it was essential to have access to a vast financial network of agents able to transfer money safely and quickly to different places. The Monarchy did not have the administrative efficiency that merchant-bankers could provide, especially Genoese bankers. They had developed complex networks during the Middle Ages in order to trade, provide credit to the commercial sector and speculate in the financial sector. These networks were used by the Spanish Monarchy to gain credit and financial services more efficiently than using royal officials.

[31] Bernal (1993: 101−117).

[32] Schäfer (1945: 157).

The growing power of the Spanish Monarchy ran parallel to the trade and financial expansion of Castile, the growth of the population and the rise of the urbanization rate. Its international influence worked in favour of the Spanish economy until 1600. Although its power was not unlimited, as has often been suggested in using the term “absolute monarchy”, it was powerful enough to control territories that were very different from each other within and outside the Iberian Peninsula. It used this power to govern a complex but efficient tax system and maintain a currency with a high silver content. The strength of its currency helped it obtain access to international credit, and with this credit it consolidated its foreign policy and hegemony in international trade.

Thanks to its tax system and its power to levy taxes in a growing economy, Charles V and Philip II were able to issue public debt (perpetual bonds) throughout the 16th century, obtaining credit from many small Castilian investors and mobilizing that capital for the financing of its international interests. The principal on that public debt rose from 3 million ducats in 1504 to 80 million in 1598,[33] while the cost of borrowing fell from an average of 10 to 5.8 % during this time. There emerged an active secondary market where investors bought and sold their bonds freely.[34] The expansion of secondary markets for this type of financial instrument paved the way for the financial revolution that took place in Castile during the 16th century. The transactions with the perpetual bonds promoted many other transactions.

Fiscal Pressure and Protectionism

Spain’s economic situation changed completely in the 17th century. Regardless of whether the crisis came from within or outside the Castilian economy, the economic recession that began in 1590 put the monarchy’s interests in direct opposition to those of the private sector. Instead of renewing the effort to keep the Castilian economy open, as had been the practice until then, the Crown adopted measures that eliminated competition and closed markets. The first sector that suffered was trade and its international connection.

The first objective of the Crown was to halt the decline in revenue that was beginning to appear in its tax system, as it was obsessed with financing itself at the same levels it had done up to then. When revenue decreased, the Crown debased the currency of Castile, minting copper coins that contained no silver but insisting they circulate with the same face value as those containing the precious metal.[35] The public initially accepted this fiduciary coin because they lacked instruments of exchange in small transactions but when there were too many copper coins in circulation, a premium was demanded in all types of transactions.[36]

[33] Alonso García (2007), Castillo Pintado (1963), Ruiz Martín (1968: 124).

[36] Serrano Mangas (1996).

[34] Álvarez Nogal (2011a, b).

[35] Santiago Fernández (2000).

The Monarchy paid its bankers with vellon and they exchanged these debased coins for silver ones. The new currency had a strong impact of the Spanish economy, especially in the commercial sector, increasing transaction cost and disconnecting commercial markets of Spain with those in the rest of Europe. This debasement of the currency was not intended to strengthen trade or make Castilian exports more competitive; it was merely designed, by means of the imposed inflation, to increase the Crown's revenue in the short term.[37] Producing copper coins that circulated officially at the same face value as those of silver meant having fast cash the king could use to pay his bankers. It was not necessary to collect it and no-one could avoid paying it. Although there were warnings that the monetary change could have disastrous consequences the Crown resorted to it to increase its revenue.

After debasing the currency, the Crown's next step was to reduce its debt, reneging on the agreements it had reached with its creditors. In 1621, a decree reduced the maximum profitability of debt bonds to 5 %. In 1625 and 1629–1630, the annual interest that the Royal Treasury had to pay investors in public debt was totally or partially seized. As of 1634, a systematic discount of 50 % was applied to all bonds.[38] The distrust was reflected in the price, which the Crown then had to pay in order to sell new debt bonds. At the end of the 16th century, annual interest rates for perpetual bonds were less than 5 %. By around 1640, they had risen to around 9 %.[39]

The public debt was not the only area vulnerable to this type of seizure. On many occasions, part of the treasure registered in the fleets from America was confiscated from individuals arriving in Sevilla.[40] When it became unviable to issue more public debt after it lost its reputation in the markets, the Crown forced everyone they believed to have income to buy bonds. As such, the salaries of many royal officials or the interest from bonds previously issued were used to buy those new debt bonds which few wanted to buy voluntarily.

Monetary speculation did not consist only of minting large quantities of copper coins. Another strategy to obtain more revenue by playing with the currency consisted of arbitrary changes in the purchasing power of the copper coins in nominal terms.[41] On several occasions, the Crown decided to increase or reduce the quantity of this type of coin in circulation, modifying its face value. Those who coins (most were merchants or tax farmers) were the most jeopardized because they could lose half or two-thirds of its face value in one day. These continuous monetary modifications and the ease with which the Crown could change the coin's face value made it impossible to estimate the value of any investment in the medium term and paralyzed trade and credit in Castile.

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[37] Motomura (1994).

[38] Álvarez Nogal (2011a, b).

[39] Álvarez Vázquez (1987: 24).

[40] Domínguez Ortíz (1960).

[41] Ruiz Martín (1997).

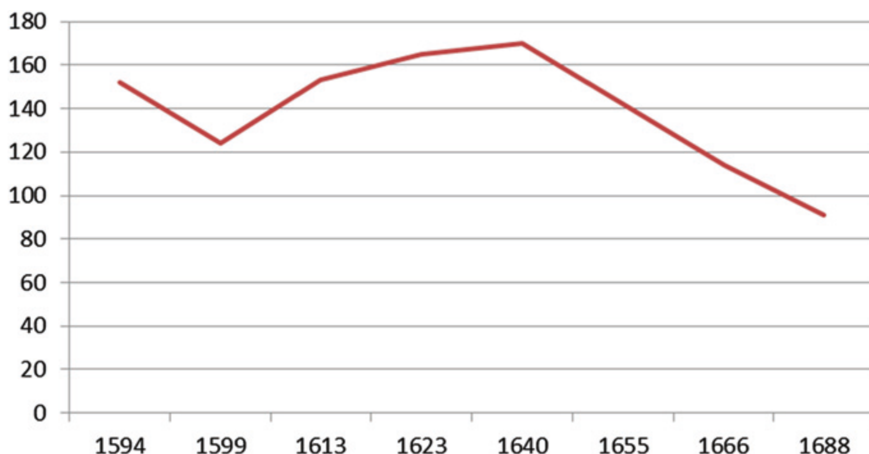

Fig. 3 Total income of the Spanish Monarchy in silver (1594–1688) (1577 = 100). *Source* Andrés Ucendo and Lanza García (2008), p. 183

Without credit at the local level, the economy could not grow, and this affected trade above all, an activity where a high volume of transactions took place with trusted clients and the reputation between the agents was essential. The deterioration of trade hurt tax collection even more, leading the Crown to implement even stronger measures to correct its deficits, but further damaging the productive sectors.

In addition, the tax revenue that was earned in silver began to be collected in copper as royal officials could not refuse to accept this currency at face value. As a result, most of the revenue in the royal coffers came to be copper, and as it lost value compared to silver, its real value decreased (Fig. 3). However, most of the monarchy's spending was still concentrated abroad, where it was necessary to continue paying with precious metal. After a few years during which the monetary modifications brought in extra revenue for the Crown, enabling it to quickly solve its liquidity problems, it very soon began to notice the harm it had caused to the monetary system.

The copper coin also hurt the credit market, eliminating some of the agents who until then had worked for the king.[42] Nicolo Balbi, one of Felipe III's most important contractors, quit negotiations in 1617.[43] In 1624, Giovannni Cambi y Jacome de Mari, two of the Genoese who maintained the galleys of the Genoa squadron went bankrupt, incurring large losses after signing trade agreements with a fixed exchange rate of 3 %, when the copper-silver premium shot to 50 %.[44]

With all these measures, the Crown tried to maintain its revenue in the short term but the first consequence was the increase in the cost of financing and

[42] Alvarez Nogal (2011a, b).

[43] His credit operations for the Spanish Monarchy started in Antwerp in 1598 Grendi (1997: 63).

[44] Goodman (1997: 62).

a significant reduction in its ability to borrow money. The impact felt by the economy can be seen in a great decrease in urbanization, the drop in tax revenue from customs, the successive bankruptcy of companies and the significant decline in the traffic of goods. Customs duties decreased in absolute and relative terms throughout the century. In 1599, they accounted for 19 % of the Crown's revenue but just 7 % in 1666.[45]

One solution would have been to reform the tax system, allowing the Crown to finance itself in the short term and fulfil its commitments while reducing its expenditures and waiting for the economy and tax collection to recover. However, such an agreement between the business elites and the Crown was not possible. The confrontation between those who collected and those who had to pay predominated. Fraud increased when the Crown made every effort to increase tax collection.

The influence of this state intervention on the economy was not so important because of the percentage of taxes applied to the productive sector, as it was for the way the collection was organized. Larger tax increases in England and Holland throughout the 17th century did not slow down the trade activity of these countries or the rest of their economies. However, the Spanish Crown lacked personnel to levy taxes. It had an efficient bureaucracy to control spending, command the army and coordinate its extensive international diplomacy but for tax collection, it depended on the cities and the trade sector.

The renewal of the Millones (a monetary contribution of the cities to the king collected on foodstuffs by an indirect tax) in 1601 is a good example. The concession of this income obliged the Crown to cede control of the collection and administration of these funds to urban oligarchies. Several years later, the Crown complained that the tax was a heavy burden for many of its subjects but hardly any of the money collected ever reached the government. The rest ended up in the hands of those who controlled the ins and outs of collection.

The Crown then maximized the increase of its collection in the short term, in detriment to other measures that favoured the growth of production and trade in the longer term. Many traders promised the Crown resources in exchange for exclusive privileges and monopolies that limited competition. To do business in Castile, it was necessary to keep strong ties with the political power. It was not only private businessmen who carried out these negotiations but also some cities the Crown had borrowed from in exchange for more local power.

Apart from the currency and the concession of privileges and monopolies, economic exclusion was accentuated when the property rights of many investors and traders ceased to be respected. The king betrayed his word and repeatedly failed to keep his promises. In addition to the mentioned seizure of American precious metals from individuals and the interest from the public debt, the goods and properties of different social or merchants groups were confiscated as a form of political

[45] Ucendo and García (2008: 176).

Table 1 Spanish urbanization rate (1300–1750)

Year	%
1300	8.8
1400	7.8
1530	9.9
1591	14.5
1700	11.1
1750	13.5

Source Álvarez Nogal and Prados de la Escosura (2012)

retaliation (moriscos, 1611, and French, 1625, in Spain, Genoese, 1654, in Naples).[46] Having money or moving it within Castile became a dangerous business.

Many merchants and investors ended up leaving the Iberian Peninsula. For example, in 1634, while discussing the possibility of seizing the interest on perpetual bonds, one member of the government warned that after the seizure of 1625, there had been a transfer of capital from Madrid to Rome and Venice worth more than 200,000 ducats, many merchants selling assets or debt bonds to transfer that money outside of Spain.[47]

The cities of Castile were the first ones affected by this type of policy. Castile's urban crisis was much more intense in the 17th century, declining by 23 %, than the crisis endured after the Black Plague, when it dropped 11 % during the economic contraction of the 15th century (Table 1). This contraction affected not only city populations but also the industries and services located in them.

Very soon the financial sector warned that investors were leaving. Castile ceased to be an attractive place for trade and for the main international banking companies that financed the Crown. As of the second half of the 17th century, the Crown endured a severe contraction of short-term credit (Fig. 4). Not only the volume of credit contracted by the Consejo de Hacienda (Treasury Board) diminished, the type of financiers it negotiated with also changed.

The financial disrepute of the monarchy obliged it to change the way it financed itself in the short term. Instead of big annual trade agreements in silver with a few international bankers, it had to settle for small credits for several months, most of those in copper, with local merchants or wealthy investors. Most of these contracts demanded the assignment of some tax revenue. In this way creditors could recover the money they advanced to the king by themselves. This explains why, as of the middle of the 17th century, most of the king's bankers were from Spain. Their lending capacity was much smaller because they were not able to raise money in international markets, and their networks barely covered the Iberian Peninsula. This process intensified throughout the 18th century, especially in financing the army.[48]

[46] Elliott (1961), Herrero Sánchez (2005).

[47] AGS, CJH, 714. Consulta, 3/10/1634, Alvarez Nogal (2011: 779).

[48] Torres Sánchez (2008).

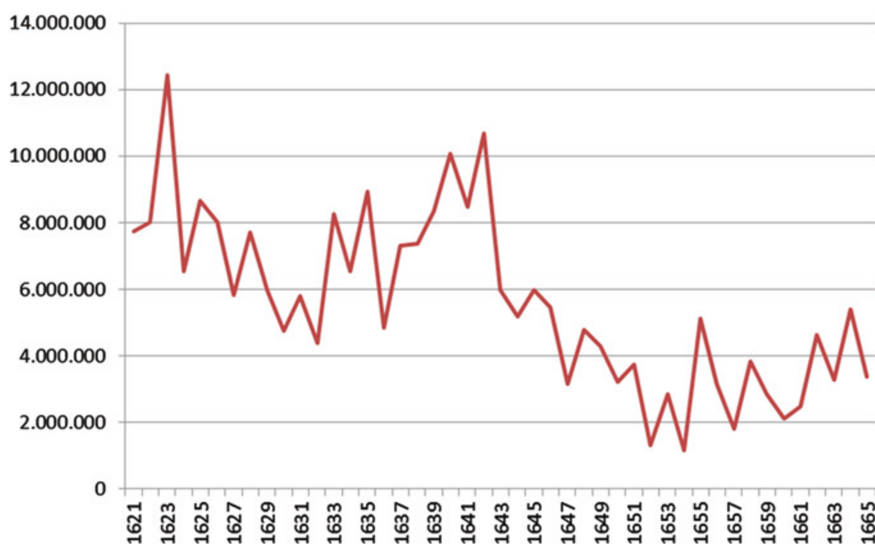

Fig. 4 Nominal amounts of short-term credit contracts (asientos) signed by the Spanish Monarchy (1621–1665) (ducats of silver and vellon). *Sources* Gelabert González (1998). Sanz Ayán (1988), p. 68

Conclusions

Study of the Spanish case shows how risky it is to judge the quality of the institutions according to the economic results of a country at any given moment. Very similar political institutions can produce very different results, and different institutions can produce the same result, always depending on the historical period. Institutional innovations that improved the functioning of economies and promoted economic growth during the Modern Age came mostly from the private sector. Independent of the type of government or administrative procedures, countries had to make an effort to keep their economy open and competitive.

Spain boasted an innovative financial system and a strong monetary system in the 16th century, along with other private and public institutions that contributed to its economic growth. This innovative capacity came primarily from the private sector and was possible because the Crown encouraged the opening of the Spanish economy, attracting entrepreneurs from all over Europe. The reputation of its currency and public debt attracted investors and developed a banking system which the monarchy and subjects could easily access. The transfer of persons and goods aided business with other European territories whose economies had also been expanding since the end of the Middle Ages.

The situation changed at the beginning of the 17th century when the economic recession reduced the Crown's ordinary income, increasing the cost of its financing through the issuing of public debt bonds. Once it had reached its debt ceiling

and lost the backing of the cities to increase it, it had to choose between either obeying the laws that had contributed to the growth or betraying some of those principles to obtain greater revenue at the cost of hurting economic agents in the short and long term. The Crown chose the latter.

The monetary and financial systems were the first to change, and the consequences eventually affected trade. The private sector no longer had incentives to generate and maintain dynamic institutions that increased production and transactions. The Crown neglected its role as a neutral arbitrator and guarantor of property rights and concentrated almost exclusively on obtaining as much revenue as they could in as little time as possible. Instead of reducing the deficit, the drop in ordinary income increased it. The need to plug this hole obliged the Crown to increase its extraordinary income to the detriment of upholding property rights.

This was the path that led to a long economic decline in the 17th century. In its origin, we find a clear lack of cooperation between the Crown and the most dynamic sectors of society. Their mutual distrust grew over time, and they made decisions that ended up hurting them. Castilian cities refused to increase their tax contributions to finance a foreign policy that had little to do with them. As the Crown was not powerful enough to obtain an increase in its tax revenue by itself if the cities did not cooperate, it chose to apply coercive measures like the inflation tax. Faced with the prisoner's dilemma, the lack of cooperation hurt both actors.

Castile did not rebel with force against the Crown, as would Catalonia and Portugal later but neither its cities nor its local elites identified with the goals that the Habsburg Dynasty pursued. Without trade and credit in Castile and with successive seizures of assets by the Crown, the population turned to subsistence activities or took refuge to fraud. The only people that the Crown's urgent need for liquidity benefitted were those social sectors that were the least interested in making reforms or proposing institutional innovations. In exchange for their money, the Crown granted them monopolies and privileges that closed the Castilian economy once and for all.

While in England and the Netherlands traders controlled the state, in Spain the ties between the government and the business oligarchies served to discourage innovations, protect local markets and close them to competition. The question is not so much whether Spain was capable of creating efficient institutions but rather why its institutions ceased to contribute to economic growth at a certain moment in Spain's history.

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