

Asientos between Philip II and the Genoese:
from disparate revenues in Castile to steady streams of expenditures in Flanders

Carlos Álvarez-Nogal¹ and Christophe Chamley²

July 11, 2019

Abstract

Philip II, attempting to preserve an inherited empire of dispersed territories, used Genoese merchant-bankers to channel disparate sources of revenues in Castile and from the Americas into steady streams of cash deliveries for military operations, especially in Flanders. The multiple services provided by these essential money men, exchange rate conversion, collection of fiscal debt of the king, steady cash deliveries, refinancings of short-term into long-term debt were formalized in contracts, *asientos*, that do not fit the sovereign debt model which has been used in previous studies. We analyze these activities in a representative contract. Other examples are provided.

Key words: flexible debt contract, sovereign debt, exchange rate, asientos, juros, archival documents.

JEL classification: N01, N13, N23, N43.

¹ Universidad Carlos III, Madrid.

² Boston University and Paris School of Economics.

Philip II (1556-1598) inherited from his father Carlos V in addition to Castile (roughly current Spain), an array of territories, in Italy, in the Eastern part of what is now France, and Flanders which include today's Belgium and Netherlands. These lands had not been gathered by conquest but through inheritances, marriages, births and deaths in the “game of thrones” that was played so skillfully by the Habsburg family. Flanders, perhaps the most prosperous region of Europe, had welcomed the new king Philip II as a protector against the ambitions of the king of France. Spain was the superpower of its time and included an overseas empire over the recently discovered New World and the Philippines.

In attempting to maintain his rule over this assemblage of territories, Philip II faced a growing set of military commitments at a time when their cost was greatly increased by the “military revolution”.³ The greater part of the military spending took place away from the revenue base in Castile where the fiscal structure and administration had not grown out of traditional practice to meet the new spending commitments. The fiscal administration focused on the monitoring of the collection of revenues and not on the actual collection and its enforcement.⁴ There was significant income from the Americas, but it arrived once a year, around the month of October, through a convoy, the fleet, and was subject to the external shocks of the weather and the English.

Given the context of institutions, markets, revenues and military expenditures at the time, Philip II had a critical need for experts and agents to transform the scattered and variable revenues into steady expenditures for the military, and this on a scale with no precedent. The Genoese had built such experience over centuries.⁵ They had built an empire of trading posts in the Mediterranean sea and up to the Black Sea. The city of Genoa was ideally located at the beginning of the “Spanish Road” that led to Flanders. The *Casa di San Giorgio*, founded in 1407, implemented a consolidation of the public debt with equity, an operation that started the financial revolution in England only three centuries later. The same institution had the power to

³ Parker, *Military Revolution: Military Innovation and the Rise of the West, 1500–1800*, 2nd. Ed. Press Syndicate of U. of Cambridge,

⁴ We have explained in a previous paper (ANC ***) how this decentralization of internal revenues provided some financial benefits to the Crown as it enhanced the safety of the long-term public debt, the *juros*.

⁵ Ref

collect taxes and was therefore well informed on the practices of the collection of a variety of tax dues. The needs of Philip II and the expertise and the position of the Genoese provided a natural match, in a standing relation. Throughout the reign of Philip II, the Genoese merchant-bankers were his indispensable money men,⁶ whose services were formally set in contracts, *asientos*.

Asientos, have been studied from the point of view of "sovereign debt".⁷ This view is, to a large extent, incorrect and misleading. The debt component of an *asiento* was only one of these services and it was a natural consequence of the differences between the timing of steady cash deliveries by merchant-bankers and the collection of scattered and variable revenues in the fragmented empire of Philip II.⁸

The texts of *asientos* provide critical insights into the relations between the Crown and the bankers. A center piece of evidence is provided here by an *asiento* that was signed between the Crown and a Genoese banker, Tomás Fiesco in 1595. The amount of the contract is for 340,000 ducats in a year for which we estimated the total amount of *asientos* at *** ducats.⁹ We also discuss the evidence of this contract in relation with other contracts of the same year.

We identify here eight types of financial services within the Fiesco contract.

1. *Currency exchange*: Disbursements were made in Flanders were specified in a currency that was used by the army, Italian escudos for the Fiesco contract, and the merchant-banker was repaid in the currency of Castile, the ducat. The Fiesco contract

⁶ The growth of the financial market in England during the 18th century was not an exogenous or political event. It depended on the activity of money men who were driven the profit opportunity during the wars (Dickson, 1967).

⁷ Ref** ** *

⁸ . To this day, there is no reliable series of the stock of the debt through *asientos*. As will be clear after reading the evidence that we present here, a tabulation of this debt would require a major effort in reading all the *asientos*. In Drelichman and Voth (2010, JEH), Figure 3 p. 821, the loan component of *asientos* is near or equal to the total amount of the contracts between 1587 and 1591, and it is equal to 100 percent of all the contracts for each year between 1592 and 1596. We show in ANC EHR (Figure 1) that in the Maluenda contract signed in July 1595, because of the banker's sales of *juros*, the Crown was debtor of the banker only for the last two monthly disbursements (about 15 percent of the total amount of the contract). Compare also our interpretation of the Fiesco contract in this paper with the one in (DV Cliometrica).

⁹ At the time, the annual income of unskilled labor was about 50 ducats. The Fiesco contract refers to a daily wage of 1.25 ducats when legal help is required. IN the 1590s, the yearly amount of the *asientos* was about 3 million ducats, with some large fluctuations.

sets a fixed exchange rate for the repayments by the Crown and the banker's profit depended on the difference between the rates in the market and in the contract.

2. *The transformation of scattered revenues in Castile into large stable streams of expenditures in Flanders (mesadas)*: Philip II had to fill the gap between the military expenditures in Flanders that required steady flows of disbursements and the myriad of revenue sources in Castile, indirect taxes that were managed by cities, farms, sales of offices and lands, etc..., in addition to the highly variable inflows of silver from the Americas. The Fiesco contract transformed filled that gap. The merchant-banker is committed to deliver constant monthly payments, *mesadas*, over a period of about a year. These payments had to be reliable and steady for the pay of the army. The revenues in the domestic base were fragmented in numerous dues that were legacies of previous obligations and often controlled by local authorities. Some of them were mortgaged on previous liabilities. This fragmentation of the revenues was the result of the agglomeration of territories in a historical process but it could also improve the credibility of Crown liabilities that were serviced by earmarked taxes. Under Philip II, there was no central collection of revenues and no central authority for the enforcement of the collection. The royal administration focuses on the monitoring of the collection.
3. *Credit*: The matching of expenditures and revenues required some intertemporal transfers most of them in the form of loans from the bankers, but these loans were the results of temporary fiscal shocks over a relatively short time horizon, in general between one and two years. They were not the long-term loans that are the financial instruments in the "tax-smoothing" process by which the cost of a war is spread over the long-term (Barro **, Chamley **).
4. *Transfer of funds*: The Crown used asientos for straight transfers from Castile to Flanders. In the Fiesco contract, the first payments by the banker in Flanders are covered by simultaneous payments of the Crown, with no interest. They total about one third of the contract.
5. *Clauses on the fleet*: The revenues from the Americas were highly variable as the silver came through an annual convoy that was subject to the external shocks of the weather and the English. Clauses in a contract took this variability into account.
6. *Flexibility*: The variability of the silver revenues had to be smoothed out for the steady deliveries in Flanders. In addition, the various fortunes of war may have also required some flexibility for expenditures.

7. *Debt refinancing into long-term annuities*: An accumulation of short-term shocks on the budget make a permanent shock. These were absorbed by long-term annuities, most of them redeemable, either perpetual or for a life-time of one or two people. These annuities were tradeable.¹⁰ The issuance of these annuities was the business of financial specialists and who could be in a better position than the Genoese bankers. An *asiento* was thus a natural vehicle to refinance short-term debt into long-term debt.¹¹ Many contracts included a clause by which the banker could get reimbursed through the sale of long-term annuities. These clauses took the form of an option that could be exercised by the banker and thus added flexibility to the contract.
8. *Other financial services*: As an example of services we will see how Tomás Fiesco is put in charge of settling an old debt of the Crown, with another *asentista*, through the sale of long-term annuities.

The kernel of the large *asientos* in the second half of the reign of Philip II was the procurement of steady financial means for his army in Flanders, far from Castile, while his resources were drawn in a different currency from domestic sources that were spread in space and time. That was the core business of the contracts with the Genoese merchant-bankers.

I. The overall structure of a contract

The main purpose of the contract with Tomás Fiesco, hereafter TF, that was signed on February ** 1591, is to generate a steady flow of monthly incomes, *mesadas* (month is *mes* in Spanish), to supply the army in Flanders. The disbursements in Flanders are specified at the beginning of the 24 page contract, in one page and a half. After an initial cash transfer, with no credit, Tomás Fiesco had to make constant *mesadas* from May 1591 to January 1592 (subject to some contingency to be analyzed below). The total amount of the cash deliveries (which include a lump-sum transfer in April 1591) is for 300,000 Italian escudos, 200,000 to be disbursed in Flanders (Antwerp, Dunkirk, Lille or Namur), and 100,000 in places chosen by TF either in the same cities of Flanders or in Burgundy (Besançon, Gray), or Savoy (Chambery, Monluel).¹² The Italian escudo was a standard currency for disbursements in Flanders.

¹⁰ See ANC ** **

¹¹ See ANC **

¹² All these places were on or near the “Spanish road” that was taken by the troops from Italy to Flanders across territories that either belonged to the empire of Philip II (Burgundy which was part of the



All these places were on or near the “Spanish road” that was taken by the troops from Italy to Flanders across territories that either belonged to the empire of Philip II (Burgundy which was part of the inheritance from Carlos V), or were allied (e.g., Savoy). Antwerp, Dunkirk, Lille or Namur were in Flanders, Besançon and Gray, in Burgundy, were important trading centers. Chambery and Montluel were in the duchy of Savoy. Montluel was not directly on the Spanish road but provided a convenient place on the border of Savoy near Lyon and its important fairs.¹³

The merchant-banker will be paid in the currency of the revenues of Philip II, the Castilian ducat. Hence, immediately after the specification of the disbursements in escudos,

the contract converts them in ducats at a fixed exchange rate, 300,000 escudos into 340,000 ducats. We will show later that the constant contract exchange rate overvalues the escudo in comparison with the market rate, which did fluctuate. We postpone the analysis of the exchange rate because it is technical. Suffices to say here that the margin between the contract and the market rate was between 4 and 9 percent.

Except for some initial transfer of 69,700 ducats in April 1591, each *mesada* that is disbursed by TF is equal to 30,033 ducats and the repayments by the Crown are also specified in units of 30,033 ducats. We will see that the disbursements by TF in April and June are covered by an immediate repayment by the Crown. They are just a transfer of funds from Castile to Flanders and no interest is due in the contract.

inheritance from Carlos V) or were allied (Savoy). Antwerp, Dunkirk, Lille or Namur were in Flanders, Besançon and Gray, in Burgundy, were important trading centers. Chambery and Montluel were in the duchy of Savoy. Montluel was not directly on the Spanish road but provided a convenient place on the border of Savoy near Lyon and its important fairs. **VER PARKER Spanish Road**

¹³ <https://www.xn--elcaminoespaol-1nb.com/blog/su-historia/>

The main part of the contract begins after the transfers, in June 1591. It concerns eight equal *mesadas* until January 1592 with a total of about 240,000 ducats. The associated liabilities of the Crown last until November 1592. All the payments in the contracts, both from the merchant-banker and from the king are in units of a *mesada* of 30,033 ducats. This facilitated the monitoring of the contract by the royal accountants. We can therefore have a synthetic view of the contract that is presented in Table 2. The details about the items are important and they will be discussed in the following sections.

Column 2 reports the disbursements by TF, in units of *mesada* (30,033 ducats). The disbursements and payments for the last three months of 1591 are subject to an option that will be analyzed later. The interest is paid lump-sum, in the last row, and we will analyze the implicit rate of return on the credit.

Column 3 presents the contractual payments by the Crown, also in units of 30,033 ducats. While the dates of disbursements are clearly set, the contract may only specify a deadline for the payments by Crown. For example, the *mesada* of June 1591 should be paid before the end of 1591. We will provide a detailed analysis of this particular payment.

Column 4 presents the balance due (always in units of *mesada*) under conservative assumptions. Column 5 provides a succinct summary of the sources that the Crown uses for repayment. The last column presents the relevant pages of the contract that is available on line (original, transcription and translation).

The last three *mesadas* of 1592 (October-December) are included in a clause that is contingent on the arrival of the fleet that was schedule to arrive each year around the month of October to bring the silver from the Americas.

Table 2: Disbursements by TF and payments by the Crown in units of *mesada*

(The transfer is in grey, the fleet option in green and items with more details in the text are in pink).

1	2	3	4	5	6
Date	By Fiesco	By the Crown	Debt	Method for repayment	Page
4/91	2.32 (69,700)	2.5 (75,000)	0	Cash transfer	2
5/91	1 (30,033)	0.82 (24,733)	0	Cash transfer	3
6/91	1		1	Not later than 12/91	4-5
7/91	1		2		
8/91	1		3		
9/91	1		4		
10/91	1 (0)		4		
		3 ¹⁴	4	option for the Crown: - if the fleet arrives, Crown either pays or drop payment and disbursement of three units - If the fleet does not arrive, the Crown pay from other sources from other sources (Millones/alcabalas, etc...) with monthly interest rate of 1%	6-9
11/91	1 (0)	1 ¹⁵			10
12/91	1 (0)	1 ¹⁶	3 ¹⁷	Sales of lands, offices, <i>jurisdicciones</i> .	
1/92	1		3		
2-4/92			12	Total balance for 3 months each with 3 units	
5/92		1 ¹⁸	3	8 Millones /alcabalas or other revenues	11
6-9/92			8	4 months with balance of 2 units	
10/92		1 ¹⁹	2	Crusade, Subsidio and Escusado, description of revenues to be collected, guarantees.	11
11/92		1	1	Crusade, Subsidio and Escusado	12
Total (ducats)		8 (240,264)	50		
Interest		11,936		Sales of lands, offices, <i>jurisdicciones</i> , not later than 12/91	12-13

¹⁴ Pages 6 and 7. The payments on the fleet are in italics. See the text for a discussion.¹⁵ First half of 60,066 ducats (p. 9-10), the second half is paid in May 1592.¹⁶ Item (c), page 4.¹⁷ Interest (lump-sum)¹⁸ Item (c), page 4. We have taken the deadline for the payment, but the item is paid from the collection of debts that could take place earlier in the year.¹⁹ Page 11. Ditto for the payment in 11/92.

II. The amalgamation of revenues

The main part of the contract is devoted to the means of collecting revenues for repayment. A central argument in this paper is that large *asientos* provided the contractual means to merge many sources of revenues, some of them very small, into steady streams of disbursements. This process is illustrated with two items in the contract.

Payment from the Treasury toward a transfer

The first two disbursements, in April and May, should be considered separately because they set a straightforward transfer of funds. In April, TF disburses 69,700 ducats in Flanders and the Treasury pays at the same time 75,000 ducats in Madrid. At the end of April, the Crown has a credit of 5,300 ducats. In May, TF pays a first *mesada* of 30,033 ducats and the Crown pays another 24,733 ducats in the same month May (from tax revenues, to be discussed later). For these two months, the total transfer is equal to 99,733 ducats. The disbursements are specified in escudos in the contract but we convert them into ducats, at the contractual exchange rate of 17/15, we find that the sum of the disbursements for April and May 1591 matches exactly the sum of the payments by the Crown (that are specified in ducats). This confirms that the first two disbursements are a transfer of funds for which no interest is due, and there is no mention of such an interest. For all the other disbursements by TF, an interest will be stated explicitly.

Final payment on the transfer (May 1591)

The Crown had to pay 24,733 ducats by the end of May 91 to cover the rest of the transfer by the TF who had disbursed 69,733 in April (covered by 75,000 ducats) from the Crown and would disburse the first *mesada* of 30,033 by the end of May 91. Since these operations were transfers without credit, the payment by the Crown had to meet the deadline. On page 3 of the contract,

“24,733 ducats from the service of the 8 millones that were conceded to me by my kingdoms in the payment at the end of May of the present year in the parties of he choice, and should he not receive it from that service, he will be paid in alcabalas or any farmed income that are administrated in my kingdoms and without lien for the said day at the end of May from the parties that he would request.”

That clause is emblematic of the issue in this section. The millones had been voted by the Cortes in 1590 after the disaster of the Great Armada, as an extraordinary tax of 8 million

ducats in total over 6 years. The clause acknowledges that the Crown cannot be certain that payment can be made from that source of revenue. Hence, other sources of revenues accessible through the contract. However, which source can be tapped, free from a lien or other commitments, that is also uncertain at the signature of the contract. The alcabalas were the most stable source of revenues. These sale taxes were administered by the cities that were bound by contract in the Cortes to deliver a fixed amount per year, the *encabezamiento*. The *encabezamiento* of a particular city was a tax that was subjected, as a first claim, to the service of *juros*, long-term annuities, that were specifically written on that city. Often the same office collected the *alcabalas* and paid the coupons of the *juros*. People in charge of tax enforcement had also a strong interest in receiving the income from the *juros*. The alignment between the interests of the bond holders and those of the tax collectors made these bonds the safest government liabilities.²⁰ The Crown could claim revenues from some *alcabalas* only after the service of the attached *juros*. Because of the decentralization of the system, some *alcabalas* could be fully committed whereas some others would still have an available surplus after the service obligation. From the text of the contract, we see that which *alcabalas* were available was not known at the signature of the contract. The availability of funds had to be verified by the royal accountants.

But contract also recognizes that no fund can be found in *alcabalas* either. In this case, the merchant-banker could turn to “any farmed income without a lien from the parties that he [TF] would request” should be used. The sentence reflects a fiscal system that is decentralized. Fiesco had a long standing relation with the Crown and had accumulated knowledge on the fiscal system of Castile. Without that knowledge, he would not have signed the contract that enable him to claim income “from the parties that he would request.” He accepted the lack of precision in the contract because of the practice in a standing relation and also because he was given legal guarantees.

Both the Crown and the merchant-banker knew that the search and the collection of debts could require some expenses. Legal assistance is provided by the next paragraph in the contract:

“... he will be given judges if he requires assistance, at the the rate of 500 maravedis of wages for travel expenses to his satisfaction.”

And this may not be sufficient! The next paragraph opens another direction for the repayments:

²⁰ See ANC ***

“and if the said payment orders do not suffice from the parties to which they are issued and if they remain uncertain or cannot be collected for any cause, then the shortfall and the part that remains uncertain has to be assigned [librar] to the said service or to any of the other farmed revenues that there could be for the said term or as soon as possible thereafter from the parties that he would request. He should be given the necessary *libranzas* (payment orders) and collection orders.”

The contract reveals a tangle of mortgaged revenues of the Crown about which the parties in the contract have little information at the time of the signature. The next paragraph protects TF once he has found some of the Crown’s revenues without lien from the claims of other creditors:

“These claims should have seniority over other claims issued or altered at a later date and the payments should be labeled in gold or silver and in no other money or tax anticipation of the usual form, without any delay.”

The first payment by the Crown in the contract (due not later than December 1591)

The payment at the end of May had a tight deadline because it was part of a transfer agreement. The other payments by the Crown were due much later. For the first of them, the contract did not include a specific date but it set a deadline, at the end of the year 1591. The payment covered one unit in the balance (*i.e.*, one *mesada* of 30,033 ducats), and a lump-sum payment of 11,936 ducats for the interest of the entire contract.²¹ The payment is the sum of the third and the last line in Table 2. The scope of the potential cash sources is wider than for the first payment. On page 4,

“30,033 ducats from what is owed to me without lien in all of this year of 591 from the first of the current month of April until the end of said year in waste (uncultivated) land and the sale of local government positions, the knights tax, rights for tax exemptions of villages and small villages, positions in the Military Orders and any other extraordinary income that in any manner could be owed to me now or in the future. These are to be chosen by TF or his proxy for liquidation.”

As for the May payment, because of the fragmentation of the sources of revenues which could be frozen by some lien from another debt, the contract had to include some flexibility, which

²¹ We will see later that additional interests could be collected on special account that was related to payments from the silver that was brought by the fleet.

was accepted by the experienced banker. As before, legal protection is provided in the next paragraph:

“And for the collection, TF will be provided without further ado the required cédulas and instruments for collection at his convenience, so that he or any proxy for him may recover what is due in the manner that I could do at the required dates according to the terms of these debts. For collection, TF will have executors who will have full jurisdiction (*vara alta de justicia*), days and wages necessary to pay the expenses to collect any payments from the payers, guarantors and all who have to pay.”

And even with help of these executors, TF may fail to get the payments. Hence, the following paragraph provides more contingent guarantees.

“It is declared that if any of the said obligations should turn out to be uncertain and TF could not collect them, others will be given, but he has to return the uncertain obligations back to the Royal Finance that he could not collect. He will receive new orders to collect the payment in other places, chosen by him, to receive the money in all this said year, as it was said, or as soon as possible in available revenues. If TF goes to justice to force the persons or municipalities to pay, and the sentences commanded that TF or his proxy has to give a security (*fianza*) according to the law of Toledo, it is my will that nobody should ask him for it, he will not have obligation to give it and there is not appeal to no one, except to my Council of Finance.”

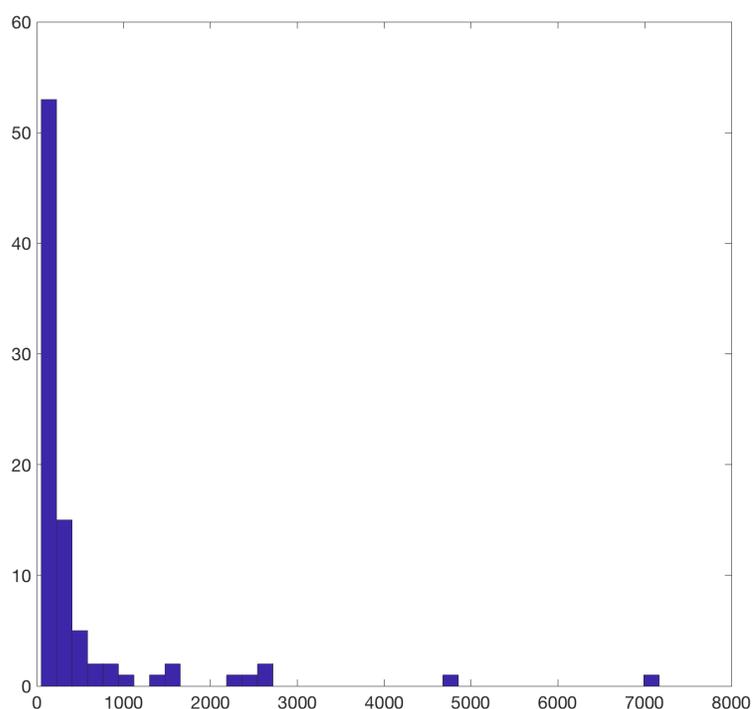
For all the other payments of the Crown, these clauses are repeated, *verbatim* in most cases, as can be verified with the complete contract in the Appendix C. These clauses specify a wide range of local revenues that are admissible for the payment of the debt to the merchant-banker. They provide legal assistance and contingent plans for other searches if a first attempt turns out to be unsuccessful, and they provide right of seniority over other claims if necessary. All these clauses confirm the lack of information from the part of the fiscal administration at the time of the signature of the contract. Given the ongoing relation between the Crown and the merchant-banker, the details of these revenues did not have to be specified in writing.

The implementation of the first payment by the Crown (not later than December 1591)

We can now turn to the implementation of these clauses. An attachment to the contract in the archives of Simancas provides an exhaustive description of the payments that were made on

the first tranche with the deadline at the end of 1591.²² All the funds came from the purchase of an office or free lands. The attachment lists, for each individual payment, the month, the amount, the purpose of the purchase, the name of the buyer and his place. The complete list is presented in Appendix D (on line). The total of 41,970 ducats is made of 87 individual payments, most of them small or very small. The mean of the payments is equal to 482 ducats, and the median to 150 ducats. There are 53 payments of only 50 ducats, each for the purchase of a notary office.

Figure 1: The distribution of the amounts of the payments in the first tranche
(not later than 12/91)



The information about the implementation of the payments is summarized in Figures 1 and 2. Figure 1 presents the distribution of the amounts. It is highly skewed towards small amounts. Figure 2 presents the geographical distribution. The small payments are scattered throughout Castile. These small contributions by an remarkable process, are funnelling through the *asiento*

²² All the large *asientos* that were signed during the period that we consider here are neatly preserved in the archives of Simancas in the castle that was set by Philip II himself for the preservation of his archives. Most of these *asientos* are joined with attachments that have been written by the royal accountants that monitored the implementations of the contracts.

into a steady stream of regular monthly payments in Flanders. The figures illustrate the key role of the merchant-bankers in the finances of Philip II.

Figure 2: the geographical distribution of the payments for the first tranche



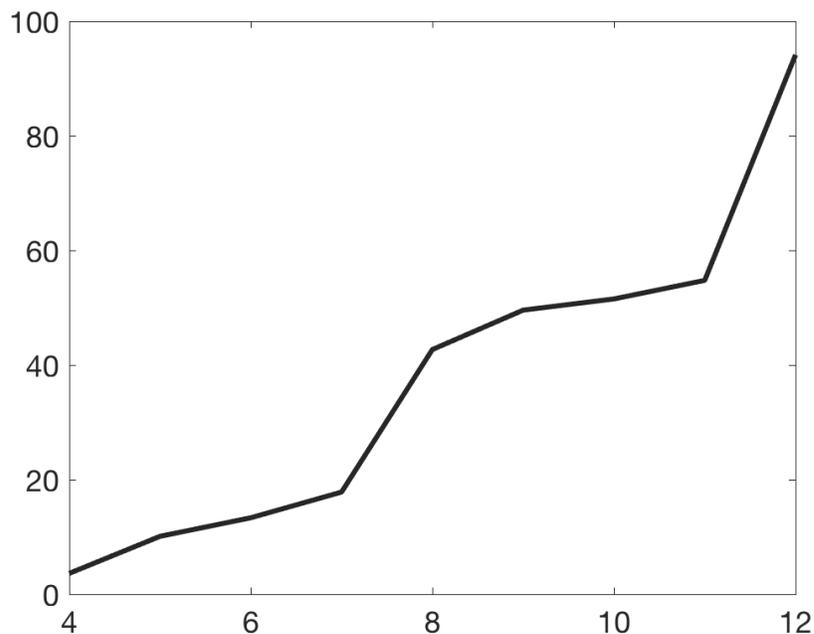
We have highlighted before that the sources for the payments towards the first tranche could not be specified accurately in the contract. The archival evidence about the implementation of the contract demonstrates why these sources could not be identified *ex ante*. Given the lack of specification, the number of the payments and the geographical dispersion of the funds throughout Castile, one could perhaps expect that these payments were subject to significant delays. The evidence shows that the opposite is true.

First, a small number of payments had to be transferred to other sources. They are listed in the attachment and reported in Appendix B. There were 11 payments, for a total of 2,753 ducats (out of the total 41,970 ducats) that had to be made up.

Second, from the list in Appendix D one can construct the cumulative distribution of the payments. It is presented in Figure 3 as a fraction of the total amount due. The payments started already before the first *mesada* that was paid in June! At the end of August, half the payment

(that was due only at the end of December) had been made. According to the contract, the maximum length of credit for the payment of the June *mesada* was six months. Given the schedule of repayment in Figure 3, the actual length of the credit was only between 3.5 and 4 months.

Figure 3: the time profile of the payments for the first tranche (not later than 12/91)



The three months between February and April 1591 are aggregated in one line since there is no payment during that time. Likewise for the 4 months between June and September 1592. Column 5 provides a succinct indication about the sources of the Crown's revenues that are tapped for payments. This part of the contract will be central in this paper. The last column refers to the relevant page of the contract.

The rate of interest on the debt

The three *mesadas* that are disbursed in the last quarter of 1591 are treated separately in the contract, as we will see below. We should ignore them for the computation of the interest. The implicit monthly rate should be computed on the balance from five *mesadas* that were disbursed from June to September 1591 and in January 1592. The accounting of the balance is greatly facilitated by the use of a *mesada* of 30,033 ducats as a unit of transfer both for the merchant-banker and for the Crown. Following the standard practice at the time interests were

not compounded in this type of contract. Hence, we only need to add the “month-unit” of the balances, in Column 4 of Table 1. We make the convention, that was used in other contracts (e.g., the Maluenda contract) that the interest is computed on the balance at the beginning of a month and includes the disbursement in the same month while the payments of the Crown are credited only at the end of the month. The method generates an upper-bound on the *ex ante* debt balance (according to the contract) that is equal to 50. If the disbursements and the payments of the Crown are credited at the same time, we only have to reduce this number by 5 and the total is 45 month-units.

The contract sets a fixed lump-sum payment of 11,936 ducats,²³ to be paid not later than 12/91 (pages 12 and 13), although the final debt is paid only in November 1592. One unit is paid at the end of May 92 (page 10),²⁴ and the remaining two units are scheduled for October and November 1592 (page 11).

If we take a total balance of 50 units, the monthly rate of return is therefore $r = 11,936 / (50 \times 30,033) = 0.79\%$. If we take a balance of 45 units (where disbursements and payments are counted at the same date, the rate is 0.88%. If we take that number and adjust for the fact the the interest payment (in December 1591) anticipated the end of the contract by 11 months, the *ex ante* rate becomes 0.98%. We have seen that the first tranche of 30,033 that was due in December 1591 was paid in half already by the end of August, four months before. That reduces the total balance by two units and increase the *ex post* rate by 0.04%.

We will see that the additional interest that is paid on the last three *mesadas* of 1592, if the fleet does not arrive, is 1 percent per month. From these numbers one can safely concluded that the contract followed a usua practice at the time. In most *asientos* at the time, the standard rate on the balance due was equal to one percent per month.²⁵

²³ We do not know why the amount was of 11,936 ducats, instead of, for example 12,000 ducats. Accountants did not use the ducats but maravedis. 11,936 ducats are valued at 4475000 mrs, but 12,000 ducats are equal to 4500000 mrs. Perhaps some other transfers were made informally.

²⁴ These payments take place relatively late because the taxes called millones (8M mrs) are paid in November and May.

²⁵ The rate has the same value in the Maluenda contract (ANC ***). A monthly rate of one percent was standard around 100 A.D in the Roman empire.

III. Other services

The option to reduce the size of the contract

The contract provides the Crown with an option to reduce the number of disbursements by TF and the associated repayments (Pages 6 and 7). The amount of the option is three units of payments, equal to three *mesadas* to be paid out of income from the fleet at the time of its arrival. At the bottom of page 6,

“90,100 ducats with first claim on the first gold, silver or reales that will arrive for me from any part of the Indies or their islands to any part or harbor from my kingdoms and in Portugal of the current year of 91. These have to be paid soon [luego] after the arrival of the ships...”

The option can be exercised at that time of arrival of the fleet. Continuing at the top of page 7,

“...with the express condition that if 30 days after the arrival, what is expected from the Indies of this current year is not collected by TF, because one has decided not to pay him, he is not obliged to disburse the last payments from the end of October on in this current year of 591.”

If the option is exercised, TF is not paid 90,100 ducats and he does not pay the three *mesadas* of October, November and December 1591, with total of 90,100 ducats.

The last possibility is that the fleet does not arrive. In that case, the option does not apply and TF should disburse the three *mesadas* of the last quarter in 1591. Since there is no income from the fleet, the contract has to guarantee that the Crown will have to pay for these disbursement. Furthermore, since there is no income from the fleet in the month of October, the collection of the funds for payment is likely to take time. Therefore, the contract states explicitly that a special account will be opened to track the balance due on these *mesadas* and that an interest of one percent per month will be charged on the existing balance. The previous quote is followed immediately by:

“If at the end of October of the current year, TF, because the fleet has not arrived, wants the 90,100 ducats to be paid on the Crusade, Subsidio and Excusado or on the ordinary and extraordinary service of my kingdoms that are paid to me, or from any

debt that are owed to me, he may request that the 90,100 ducats should be paid on all these revenues, the payment orders have to be given to him with in addition, an interest of one percent per month, counted from the said day at the end of October of this current year until the days the payment orders are effectuated.”

Our analysis of an *asiento* with the Maluenda brothers has shown how a similar clause was implemented when the merchant-banker collected payments on the fleet. Using the archival documentation from the *ex post* monitoring of the contract, we showed that the payments were staggered over a few weeks. The documentation showed how the accountants computed the interests on the balance due, at the same rate of one percent per month, pro rated to the exact days of the payments by the Crown.²⁶ That rate is therefore not a “penalty.”²⁷ One percent was the standard rate at the time on unfunded debt. It is about the same as the rate on the overall contract (see above).

What is the meaning of this option which enables the Crown to reduce *pari passu*, the disbursements by TF and the payments to him for a quarter of the size of the contract? One should focus first on what seems to be the worst case, the no-show of the fleet. In this contingency, nothing is changed in the schedule of disbursements by TF. Of course, other means of repayments will have to be found, and that is included in the contract. These means, “Crusade, Subsidio and Excusado or on the ordinary and extraordinary service,” are similar in nature to the other payments in the contract.

We actually know the turn of events: the fleet of 1591 did not arrive on time and only a fraction of arrived, months later, in Seville.²⁸ One had learned in the summer that Drake was waiting in the Açores. As a precaution, the silver was stored in La Havana and returned to Spain aboard

²⁶ ANC (2015).

²⁷ The term is used by Drelichman and Voth (2015), here DV, who take this Fiesco *asiento* as a prime example of “contingent debt and excusable default.” Their interpretation and their quantitative reconstruction of the contract are fundamentally incorrect. Anyone can read the transcription or the translation of the contract that we provide. DV provide no other example of contingent debt and excusable default in their paper. We have never “coded” an *asiento*, either ourselves or through assistants, but we have read a fairly large number of them (as anyone else, not all of them). We have never seen an *asiento* with such a contingent debt and excusable default.

²⁸ The fleet had already lost 16 ships on the outbound because of the bad weather when entering Vera Cruz. On the return, another tempest (it was hurricane season after all), sank half of its 78 ships. The commander of the fleet, Antonio Navarro de Prado, was investigated and denounced by the merchants who had lost their ships, a usual procedure (Lorenzo Sanz, Comercio... 270-271, Pérez Mallaina, El hombre frente al mar, p. 85).

four frigates in January 1592. One may wonder whether the possible presence of Drake had been envisioned at the signature of the *asiento*.

The main feature of the option is that it enabled the Crown to rely less on the services of TF when the fleet arrived. It is possible that by that time, the Crown will have found other means of transferring cash to Flanders. There could also be little income from the fleet, which is not news, and the Crown could reduce its expenditures. However, on balance, the arrival of the fleet is better news than no fleet. Far from being a clause for contingent default, the option has a higher value when the news turn out to be good rather than bad.

The exchange rate operations

The resources used by the Crown to pay the merchant-banker were based in Castile either from domestic revenues or from the silver that arrived from the Americas in Seville. They were counted in maravedis (mrs), or ducats the currency units in Castile. A ducat had a fixed rate of 375 mrs and although many contract clauses are in mrs, we will use only the ducat. To give an order of magnitude, the annual income of a worker with a low qualification was about 100 ducats.

In a contract, after the simple presentation of the disbursements in Flanders, the first task was their conversion into ducats to determine the obligation of the Crown in paying the merchant-banker. Hence, on page 2 of the Fiesco contract (item (a) in the Appendix), the total disbursements, 300,000 escudos, are converted in maravedis, at the fixed rate of 425 mrs per escudo, for a total of 127,500,000 mrs. One escudo is converted into ducats at the rate of $425/375=17/15$ and the total amount of 300,000 escudos is equivalent to 340,000 ducats.

The exchange rate between the ducat and the escudo fluctuated in the market, not because of currency manipulations—there were none since both currencies were based on gold—but because of the variations of the liquidity requirements in different places and times. Given the fixed rate in the contract, the merchant-banker took all the risk of the exchange. The main reason for the conversion of all disbursements into ducats at a fixed rate was probably to simplify the monitoring of the contract by the royal accountants and the computation of the interest on the debt balance. We will see some examples below. It also help the Crown to plan its expenditures that depended on its resources that were denominated in ducats.

In order to compare the exchange rates in the contract and in the market, we use the data of Lapeyre (1955). The cash payments in Flanders were, according to the contract, in escudos of 57 patards, which are equivalent to 114 *gruesos*.²⁹ For the evolution of the market rate during the time span of the Fiesco contract in Table 1 we use the data of Lonchay.³⁰ The place of exchange are Medina del Campo in the middle of Castile, where the main commercial fairs took place twice a year,³¹ and Antwerp, a city close to the places of disbursement in the contract.

Table 1: Exchange rate between Medina del Campo and Antwerp

Date	Ducat (<i>gruesos</i>)	Mean	Escudo (mrs)	Agustin Spinola	Ambrosio Spinola	Tomás Fiesco
Feb-89	102	102	419.12	408		
Jun-89	104 - 105	104.5	409.09	408		
Oct-89	105 - 106	105.5	405.21	408		
Feb-90	102.6-103	102.8	415.86	408	430	
Jun-90	102 – 102.5	102.25	418.09	408	430	
Oct-90	102.5 - 103	102.75	416.06		430	
Feb-91	104.5 - 106	105	407		430	425
Jun-91	105 – 105.5	105.25	407		430	425
Oct-91	105 - 105.5	105	407			425
Feb-92	100 - 101	100	427			425
Jun-92	109.5 - 115	115	372			425
Oct-92	110 - 111	110	389			425

Source: Lapeyre (1955, Tables XV and XVI, p. 499-500) and AGS, CCGG, 90.

The exchange rate at the time of the signature (2/91), was 104.5-106 *gruesos* per Castilian ducat. Consider the first line of Table 1. We take the benchmark of 105 *gruesos*. If one has to pay in Medina 375 mrs for 105 *gruesos*, then 114 *gruesos* (the escudo of the army in Flanders) are worth 407.14 mrs. The contract's rate of 425 mrs implies a commission of 4.4 percent.

Table 1 shows that after the signature of the contract, the exchange rate did fluctuate. Below a rate of 101, as in February of 1592, the merchant-banker loses on the exchange (Column 6).

²⁹ One patard=2 *gruesos* (Lonchay, 'Etude', p. 1012).

³⁰ **

³¹ At that time, many financial contracts were contingent on the dates of commercial fairs, which acted like clocks for the contracts (see ANC, 2016). Medina del Campo had a monopoly on the trade for the exchange in Castile. REFERENCES?

However, no payment was due from the Crown in that month. In 1592, the Crown had to make payments in May, October and November, each for a unit of 30,033 ducats (Table 1) when the market value of the ducat was relatively high (Column 3). For the closest fairs, the *ex post* margin between the contract and the market was around 10 % (June) and 14% (October and November).

The market and the contract exchange rates for two very large contracts of 2.5M ducats each, at about the same time in the winter of 1589 and 1590, respectively, are presented in Table A-1. On the first contract the *ex post* margin for the Agustín Spinola is negative, except for one month. The margin on the second contract is large between 12 to 24 percent.

The option for selling *juros*: refinancing short-term into long-term debt

The contract provides Tomás Fiesco with an option to get reimbursements through the sales of *juros*, long-term annuities, on behalf of the Crown, up to a maximum of 100,000 ducats which is about 40 percent of the contract net of the transfer (p. 14). In previous work, we described in details the exercise of such an option in an *asiento* of about the same size that was signed in 1595 (Álvarez-Nogal and Chamley 2018). In the reign of Philip II, the merchant-bankers were the “money men” who were considered by Dickson as indispensable for the development of the market for the public debt in England, a century and half later. In 16th century Spain, the dominant part of the public debt (more than 85%) was in long-term annuities (perpetuals or life-annuities) that were redeemable and tradable. Perpetuals had an annual rate between 5 and 7 percent. (Recall that the so-called price revolution in 16th century Spain which was caused by the inflow of silver, generated an average annual rate of inflation of about one percent). *Asientos* filled short-term gaps between the expenditures and the revenues of the state but given their high rate, as compared to the *juros*, they were never meant to be long-term instruments. Given the fragmentation of the capital market with *juros* written on various sources of earmarked income, the merchant-bankers were the experts could exploit their expertise in the selling of the *juros*. They welcome the opportunities for such refinancing from short-term to long-term debt.

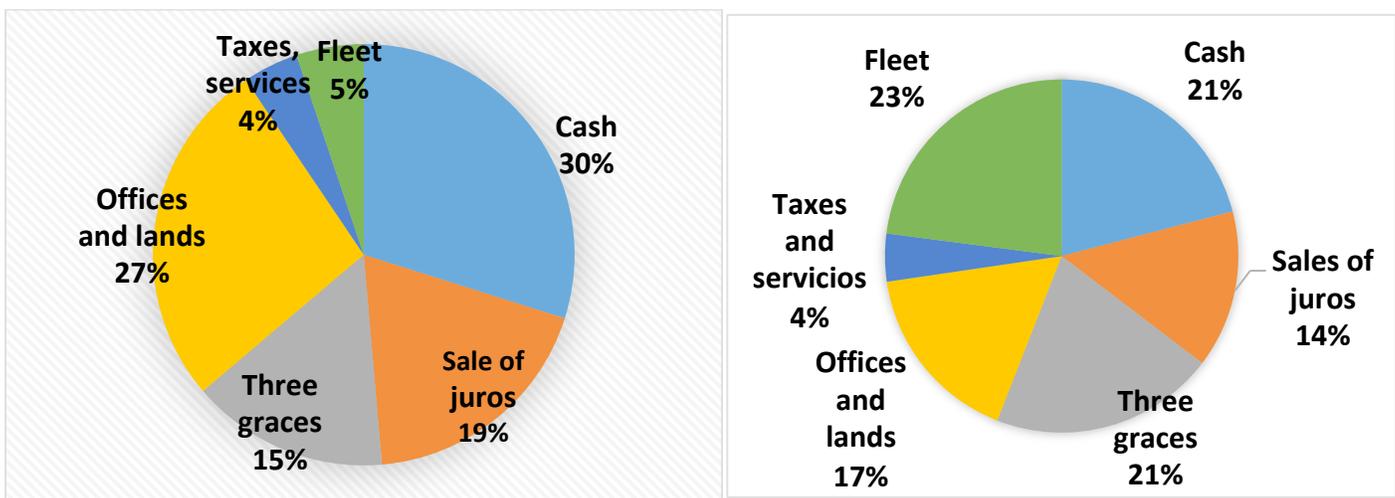
More on this? Any information from the monitoring of the contract?

IV. Other contracts

Other contracts served the same purpose. Agustín Spinola signed on March 16, 1589, a contract to deliver 13 *mesadas* between April 1589 and April 1590 for the huge total of 2.5M ducats (more than a quarter of the annual revenues of the Crown). Another contract of 2.5M ducats is signed with Ambrosio Spinola on February 28, 1590, also for 13 *mesadas*.

Sources of revenues

MORE



Agustín Spínola (03/16/89)
13 *mesadas* from 4/89 to 4/90, total 2.5M

Ambrosio Spínola (1590)
13 *mesadas* from 3/90 to 3/91, total 2.5M

Figure 4: sources of revenues for two *asientos*

V. Conclusion

CONCLUSION TO BE WRITTEN

We emphasize here, as in our previous work on the Maluenda contract, that *asientos* cannot be reduced to cash-flows at fixed dates between the Crown and the merchant-bankers. Our text-based approach to the Fiesco contract has led to the following findings. The steady stream of cash for the army of Flanders is first converted at a contract's exchange rate that plays a major role in the profitability of the contract, depending on the spread between the rates in the contract and in the market. Once that conversion is made, the rate of the contract is the standard one percent per month. The contract provides some flexibility for the repayments by the Crown, and also the option to reduce the size of the contract. There is no evidence of a contractual clause for contingent default. At this stage, there seems to be no more verified evidence of contractual contingent default in 16th century *asientos* than in modern economies.³²

³² Implicit contingent default, for which there is obvious evidence, is outside of the scope of this paper since there is no episode of payment stop in the Fiesco *asiento*.

REFERENCES

Álvarez-Nogal, C. and Chamley, C. (2014). "Debt policy under constraints: Philip II, the Cortes and Genoese bankers," *Economic History Review*, 67,1 (2014), 192-213.

Álvarez-Nogal, C. and Chamley, C. (2018). "Refinancing short-term debt with a fixed monthly interest rate into funded juros under Philip II: an asiento with the Maliuenda brothers," *The Economic History Review*, 71, 1100-1117.

----- (2016). "Philip II against the Cortes and the Credit Freeze of 1575-1577," *Revista de Historia Economica*, 1, 1-32.

Barro, R. J., "Government spending, interest rates, prices, and budget deficits in the United Kingdom, 1701–1918," *Journal of Monetary Economics*, 20 (1987), pp. 221–47.

Conklin, J., "The theory of sovereign debt and Spain under Philip II," *Journal of Political Economy*, 106 (1998), pp. 483–514.

Dickson, P. G. M. (1967). *The financial revolution in England: a study in the development of public credit 1688–1756*, London.

Doria, G. (1978). "Consideraciones sobre las actividades de un "factor-cambista" genovés al servicio de la Corona española", en Otazu, Alfonso, *Dinero y Crédito (siglos XVI al XIX)*, Madrid, pp. 279-293.

Drelichman, M. and Voth, H.-J., 'The sustainable debts of Philip II: a reconstruction of Spain's fiscal position, 1566–1596', *Journal of Economic History*, 70 (2010), pp. 814–43.

Drelichman, M. and Voth, H.-J. (2015). 'Risk sharing with the monarch: contingent debt and excusable defaults in the age of Philip II: 1556-1598, *Cliometrica*, 9, 29-75.

Grafe, R., *Distant tyranny: markets, power, and backwardness in Spain, 1650–1800* (Princeton, N.J., 2012).

Jago, C., 'Habsburg absolutism and the Cortes of Castile', *American Historical Review*, 86 (1981), pp. 307–26.

Lapeyre, H. (1955). *Une famille de marchands les Ruiz*, Paris; Spanish translation (2008), *Una familia de mercaderes: Los Ruiz*, Valladolid.

Lonchay, H. (1907). "Étude sur les emprunts des souverains belges au XVIe et au XVIIe siècle," *Bulletins de la Classe des Lettres et des Sciences Morales et Politiques et de la Classe des Beaux-Arts*, Bruxelles, [923-1013](#).

Lorenzo Sanz (1979). *E. Comercio de España con América en la época de Felipe II*, Valladolid.

Lovett, A., 'The Castilian bankruptcy of 1575', *Historical Journal*, 23 (1980), pp. 899–911.

Pérez-Mallaína Bueno, Pablo Emilio (2015). *Nafragios en la Carrera de Indias durante los siglos XVI y XVII: El hombre frente al mar*. Sevilla.

Reinhart, C. M. and Rogoff, K., *This time is different: eight centuries of financial folly* (2009).

Add one or two references to Grafe.

Others:

Ruiz Martín, F. (1968). "Las finanzas españolas durante el reinado de Felipe II," *Cuadernos de Historia. Anexos de la revista "Hispania"*, 2, II, 109-173.

González Ferrando, José Maria (1992). *Negociación de cambios y asientos*, Madrid.

Toboso Sánchez, P. (1987). *La deuda pública castellana durante el Antiguo Régimen (Juros) y su liquidación en el siglo XIX*, Madrid.

Thompson, I.A.A. (1976). *War and Government in Habsburg Spain, 1560-1620*, London.

Ulloa, M. (1963). *La Hacienda Real de Castilla en el reinado de Felipe II*, Roma, (Madrid, 1977).

TO BE INCLUDED IN SOME WAY

Asiento Agustín Spinola 16/3/1589

Clausula flota de Indias

Ytem enn qualquier primer dinero oro plata o reales que viniere para mi de qualquier parte de las Yndias o islas dellas a qualesquier partes destos reynos y desde Portugal este año de 589, 37.500.000 mrs los quales se ayan de pagar y paguen en efecto un mes después que ayan llegado los navios o zabras o otros bajeles en que vinieren o parte de los a las dichas partes destos reinos o del de Portugal y se le dara cedula mia para que el presidente jueces y oficiales de la Casa de la Contratación de Sevilla o otras qualesquier personas a cuyo cargo estén se las paguen a su satisfacción de dinero que viniere para mi en las dichas naos o zabras u otros bajeles con pacto expreso que si el dicho dinero tardare de venir más de ahsta fin de diciembre de este año de 589 se le ayan de dar y den luego consignaciones de los dichos 37.500.000 mrs en las primeras pagas que entonces hubiere desembarazadas de la Cruzada Subsidio y Escusado en lo más quisiere con más el interés dello a razón de juro de a 14 desde primero de enero del año venidero de 590 que se le ayan de dar para ello las cédulas y despachos necesarios en la forma que convenga a su satisfacción

En la siguiente clausula se le dan otros 17.000.000 mrs en las flotas, pero “con elección que le a de quedar y queda al dicho Agustín Spinola de poderlos tomar todos los dichos 17.000.000 mrs o la parte que dellos quisiere en juros de a 14 al mismo precio de a 14.000 mrs el millar en juros de a 20 a precio de 16.000 el milar por ventas nuevas en su cabeza o de las personas que quisiere para sigutar en qualesquier alcabalas o otrs rentas....

No he encontrado para este asiento ninguna clausula de contingencia en caso de que las flotas no lleguen.

Tomás Fiesco

Tomás Fiesco fue un hombre de negocios con una dilatada experiencia previa en los negocios financieros, que fue aprovechada por la Corona para intentar mejorar su acceso al crédito internacional.

Felipe II creó el cargo de Factor General del rey en 1556³³. Su objetivo era agilizar sus pagos en el extranjero y fortalecer su poder de negociación con los banqueros. Se pretendía reorganizar de forma profunda toda la Real Hacienda para facilitar la negociación crediticia y no pasar por los apuros que había sufrido su padre. Nombró a tres factores. Uno en Castilla, otro en Amberes y un tercero en Génova. Los factores del rey eran comerciantes y hombres de negocios que conocían bien como funcionaban los mercados de crédito. A pesar de los intentos por hacerlo funcionar, el sistema fracasó al ser incapaces de

³³ Modesto Ulloa, *La Hacienda Real de Castilla en el reinado de Felipe II* (Madrid: Fundación Universitaria Española, 1977), p. 137. Su nombramiento se llevó a cabo en Gante el 22 de septiembre de 1556. Esteban Hernández Esteve, *La Historia de la Contabilidad, vía privilegiada de aproximación a la investigación histórica: Cuentas de los fondos recibidos por la Factoría General de los Reinos de España para financiar la guerra de Felipe II contra el Papa Pablo IV y Enrique II de Francia (1556-1559)* (Madrid: Real Academia de Doctores de España, 2010), p. 87.

coordinarse entre sí y con la Tesorería General de Madrid. Al no funcionar como estaba previsto, desapareció en 1560³⁴.

Con un formato distinto, pero con la misma idea de fondo, el 26 de febrero de 1592 se nombró Factor General al genovés Tomás Fiesco³⁵. Fue una segunda oportunidad. Este banquero se ofreció a cubrir todas las provisiones que el rey pudiera necesitar en un año, evitándole así tener que firmar asientos con otros banqueros³⁶. Sin embargo, al igual que había ocurrido antes, el proyecto no llegó a materializarse, en gran parte porque falleció en Madrid en septiembre de 1593³⁷.

Carlos Morales, Carlos Javier. *Felipe II: El Imperio En Bancarrota. La Hacienda Real De Castilla Y Los Negocios Financieros Del Rey Prudente*. Madrid: Dilema Editorial, 2008.

Doria, Giorgio. "Consideraciones Sobre Las Actividades De Un "Factor-Cambista" Genovés Al Servicio De La Corona Española." In *Dinero Y Crédito (Siglos XVI Al XIX)*, edited by Alfonso Otazu, 279-93. Madrid, 1978.

Dubet, Anne. "El Arbitrismo Como Práctica Política: El Caso De Luis Valle De La Cerda (¿1552?-1606)." *Cuadernos de Historia Moderna* 24 (2000): 107-33.

———. "Una Reforma Financiera Imposible: Los Erarios Públicos Y Montes De Piedad En Tiempos De Felipe II." In *Felipe II (1527-1598): Europa Y La Monarquía Católica*, edited by José Martínez Millán, 205-37. Madrid: Parteluz, 1998.

Hernández Esteve, Esteban. *La Historia De La Contabilidad, Vía Privilegiada De Aproximación a La Investigación Histórica: Cuentas De Los Fondos Recibidos Por La Factoría General De Los Reinos De España Para Financiar La Guerra De Felipe II Contra El Papa Pablo IV Y Enrique II De Francia (1556-1559)*. Madrid: Real Academia de Doctores de España, 2010.

———. "Las Cuentas De Fernán López Del Campo, Primer Factor General De Felipe II Para Los Reinos De España (1556-1560)." *Hacienda Pública Española* 87 (1984): 85-105.

Lapeyre, Henri. *Simon Ruiz Et Les Asientos De Philippe II*. París, 1953.

Ulloa, Modesto. *La Hacienda Real De Castilla En El Reinado De Felipe II*. Madrid: Fundación Universitaria Española, 1977.

³⁴ Esteban Hernández Esteve, "Las cuentas de Fernán López del Campo, primer Factor General de Felipe II para los Reinos de España (1556-1560)," *Hacienda Pública Española* 87 (1984).

³⁵ Henri Lapeyre, *Simon Ruiz et les Asientos de Philippe II* (París, 1953), p. 77. Giorgio Doria, "Consideraciones sobre las actividades de un "factor-cambista" genovés al servicio de la Corona española," in *Dinero y Crédito (siglos XVI al XIX)*, ed. Alfonso Otazu (Madrid: 1978); Carlos Javier Carlos Morales, *Felipe II: el imperio en bancarrota. La Hacienda Real de Castilla y los negocios financieros del rey Prudente* (Madrid: Dilema Editorial, 2008), p. 258. Anne Dubet, "Una reforma financiera imposible: los erarios públicos y montes de piedad en tiempos de Felipe II," in *Felipe II (1527-1598): Europa y la monarquía católica*, ed. José Martínez Millán (Madrid: Parteluz, 1998).

³⁶ Los partidarios señalan que esta idea surgió «cuando se trató de los erarios». Anne Dubet, "El arbitrismo como práctica política: el caso de Luis Valle de la Cerda (¿1552?-1606)," *Cuadernos de Historia Moderna* 24 (2000), p. 124.

³⁷ Doria, "Consideraciones sobre las actividades de un "factor-cambista" genovés al servicio de la Corona española."

He puesto la fecha de la primera letra en Bruselas			Provisión	Provisión	los escudos a 57 placas en Amberes			Consignación
first disb.	signature	merchant banker	ducats	escudos	mrs/ escudo	disb. number	place of disb	
Flanders	15/03/1591	21/05/1591 12/05/1591	Vitoria Antonio Suarez de Vitoria y Juan Luis Ambrosio Spínola	100,000	1,600,000	4308x200K	Antwerp & Cologne Flanders, Burgundy and Savoy Antwerp, Lille, Namur and Burgundy	Extraordinario Tomas Fiesco la mitad y la otra los Maluenda
		12/05/1591	Ambrosio Spínola		600,000	factoria6x100K		
		18/06/1591	Ambrosio Spínola		100,000	4302x50K	Besançon and Chambery	
Flanders	22/11/1591	02/03/1592	Ambrosio Spínola	24,988			Antwerp	
Flanders	01/02/1591	21/05/1591	Bautista de Franquis	84,000			Antwerp & Cologne	Rentas y Extraordinario
		05/04/1591	Diego de Albuquerque y herederos, Gonzalo de Salazar y Joan de Carmona	200,000			Madrid	Rentas
		23/04/1591	Francisco y Pedro de Maluenda		300,000	425	Antwerp and Besançon	Renta y Extraordinario
Flanders	01/02/1591	21/05/1591	Francisco y Pedro de Maluenda	211,000			Antwerp & Cologne	Millones
Flanders	30/09/1591	02/03/1591	Francisco y Pedro de Maluenda	136,499			Antwerp	juros y rentas
Flanders	01/02/1591	21/05/1591	Juan Luis Vitoria	60,000			Antwerp & Cologne	Rentas
Flanders	30/09/1591	02/03/1592	Juan Luis Vitoria	96,744			Antwerp	Extraordinario
Flanders	30/09/1591	02/03/1592	Julio Gentil hijo de Agustín	73,828			Antwerp	Cruzada y Subsidio
Flanders	01/02/1591	21/05/1591	Marco Antonio Obada	30,000			Antwerp & Cologne	Rentas
		30/03/1591	Maros Fucar y hermanos	600,000	200,000		Madrid, Besançon and an old debt	Cruzada
Flanders	01/02/1591	21/05/1591	Octavio de Marin	211,000			Antwerp & Cologne	Rentas y Extraordinario
Flanders	30/09/1591	02/03/1591	Octavio de Marin	51,311			Antwerp & Cologne	Rentas y Extraordinario
		01/03/1591	Pedro de Baeza vecino de Lisboa				Galleys of Lisbon for a year	
		13/02/1591	Pedro de Baeza vecino de Lisboa				Armada	
Flanders	30/09/1591	02/03/1592	Pedro de Ysunta	9,086			Antwerp	Rentas
Flanders	01/02/1591	21/05/1591	Simon Ruiz	54,000			Antwerp & Cologne	Rentas
Flanders	01/02/1591	21/05/1591	Simon Ruiz	50,000			Antwerp & Cologne	Rentas
Flanders	30/09/1591	02/03/1591	Simon Ruiz	85,186			Antwerp	Rentas
Flanders	30/09/1591	03/04/1591	Tomas Fiesco		300,000	4258x30.033K	Antwerp	Rentas y Extraordinario
Flanders	30/09/1591	02/03/1592	Tomas Fiesco	102,423			Antwerp	Rentas
			TOTAL	2,180,065	3,100,000			

One could also include the letras.

APPENDIX B

Sources of revenues for the payment due no later than December 1591

Year 1591		Ducats		type	buyer	location
April		50		Notary office	Francisco Arcillo Ureña	Larrede
		50		Notary	licenciado Juan Pérez de Merida	Terrados
		50		Notary	Juan Ochoa de Lariaga	Matilla
		560		Free lands		Alcalá de Henares
		516		Free lands		Medina Sidonia
		300		Free lands		Campo de Calatrava
	total		1,526			
May		87		regimiento	Pedro de Tapia	Barajas
		50		Notary	Juan Alvarez de Melgarejo	Muñoz y Guareña
		50		regimiento	Anton Sanchez	Cantin
		175		Notary	Martín Muñoz de Sancha	Arenzana de Abajo
		175		Notary	Juan Urraca de Baños	Arenzana de Abajo
		80		receptoría	Juan de Luna	Galicia
		50		Notary	Juan Ruiz de Ledesma	Mesón de Carrestro
		70		regimiento	Anton Sanchez Parejo	Linares
		50		Notary	Francisco García Ortiz	Masa
		50		Notary	Andres de Montejano	Barciales
		50		Notary	Andrés Lariz de Durango	Quintanilla
		50		Notary	Alonso Gonzlez Carrera	Alberguería
		350		alferazgo y depositaria	Juan Ronco de Parga	Betanzos
		210		alferazgo	Juan de Floresgal	Mojacar
		267		regimiento de las lanas	Francisco Ruiz Herreros	
		267		regimiento de las lanas	Juan González Serrano	
		684		tierras baldías		Alcalá de Henares
	total		2,714			
junio		1,360		tierras baldías		

julio		997		exención	villa de Villanueva de Vogas	
julio		50		escribanía	Blas Sanchez y otros	Santa María
julio		50		escribanía	Andres de la Fuente	Orejudos
julio		50		escribanía	Diego de Buiza	Ajosderrubios
julio		325		regimiento	licenciado Luis de la Tobilla	Ronda
julio		100		regimiento	Juan de Aguila	Huercal
julio		160		regimientos	García de Salazar	Zaratan
julio		50		escribanía	Francisco Tomé	Anaya
julio		50		escribanía	Blas Esteban	San Julian
julio		50		escribanía	Antón de Cespedes	San Miguel
	total		3,242			
agosto		333		primera instancia	villa de Hernan Perez	
agosto		901		correduría	villa de Fuente el Sauco	
agosto		70		escribanía	Martín de Quintanilla	Cazuar
agosto		50		escribanía	Juan de Palacio y otro	Cascajales
agosto		50		escribanía	Rodrigo de Balbuena y otros	Marana
agosto		50		escribanía	Juan de la Peña	Terrones
agosto		500		escribanía	Lázaro Martínez y otros	Hellín
agosto		115		escribanía	Pablo González y otros	Herradon
agosto		50		escribanía	Juan Sanchez de Montaful	Quercal
agosto		2,300		escribanía	Pedro de Baeza	Jeréz de la Frontera
agosto		400		3 regimientos	Francisco de Peñalosa y otros	Carbona la mayor
agosto		50		escribanía	Alonso de la Fuente	Alcazarén
agosto		50		escribanía	Gonzalo de Eslava y otros	Sancho Gómez
agosto		50		escribanía	Pedro Gutierrez y otros	Herguesuelas
agosto		50		escribanía	Luis Alonso de Riora y otros	Fuentesclaras
agosto		50		escribanía	Juan Perez Eupino y otros	Carrascal
agosto		4,695			tierras baldias	Badajoz y Merida
agosto		395			tierras baldias	Villabrájima
agosto		279			tierras baldias	Alcalá de Henares
	total		10,438			
septiembre		2,559			tierras baldias	Campo de Calatrava
septiembre		178			procuradoría de la Audiencia	Granada
septiembre		150		correduría	Blas Hernandez Aguado	Molina

e						
	total		2,887			
octubre		50		escribanía	Francisco Granjal y otro	Mencerreys
octubre		50		escribanía	Juan de Jaen y otros	Pedro Layn
octubre		300		coposición de regimientos	lugar de la Mata	
octubre		150		regimiento	Pedro Sanchez Vela	
octubre		220		4º regimiento	Bartolomé Rest y otros	Sar
octubre		50		escribanía	Francisco Tercero y otros	Domingo S
	total		820			
noviembre		50		escribanía	licenciado Juan Pérez de Merida	Terrados
noviembre		100		escribanía	Juan de Mar	Tortosa
noviembre		100		escribanía	Antonio Pérez de Lacilla	Corral
noviembre		210		alferazgo	Juan Flores	Mojacar
noviembre		400		alcaldía de carcel	Miguel Alonso de Escobar	León
noviembre		250		regimiento	Alonso Rodriguez Salguero	Santos de Maymona
noviembre		250		regimiento	Alonso Rodriguez Navarro	Villena
	total		1,360			
diciembre		2,467	no se cobró	escribanía de censos	Lázaro Martínez y otros	Madrid
diciembre		100		escribanía	Juan Diaz de Valdeon y otros	Valdeón
diciembre		325		regimiento	capitan Benardo de Villalta	Guadix
diciembre		1,500		primera instancia	villa de Totana y Aledo	
diciembre		50		escribanía	Juan de Berga	Atapuerca
diciembre		50		escribanía	Cristóbal de Ibarra	Cilleruelos
diciembre		50		escribanía	Andrés Diaz de Laynez	Santo Domingo
diciembre		125		regimiento	doctor Luis Ramirez de Arellano	Villaescusa
diciembre		50		escribanía	Francisco Arcillo	Larrade
diciembre		7,167		tierras baldías	ciudad	Xerez de la Frontera
diciembre		2,550		tierras baldías	vecinos	Arahal
diciembre		531		tierras baldías	vecinos	Talavera del partido de Merida
diciembre		181			tierras baldías	Jerez de la Frontera
diciembre		504			tierras baldías	Medina Sidonia
diciembre		326			tierras baldías	Córdoba

diciembre		659			tierras baldías	Lerma
diciembre		1,565			tierras baldías	Atienza
enero		783		procuradoría	Rodrigo de Llerena	Madrid
	total		18,983			
TOTAL			41,969			

APPENDIX C

Replacements of defective payments in the first tranche
(due not later than the end of 1592)

Initial date	Object	Place	Buyer	Ducats
12/1591	notary	Madrid	Lázaro Martínez	2.200
5/1591	lands		vecinos de Corpaquilo	171
8/1591	lands	Villa Brajima		1
12/1591	notary	Atapuerca	Juan de Vergara	50
12/1591	notary	Santo Domingo	Antonio Díaz Laynez y su mujer	50
06/24/1591	lands		Antonio del Visso y Miguel Romero	19
7/1591	notary	San Miguel de Alperones	Antonio de Céspedes y Miguel de Ayllón	50
	notary	Fuentesclaras	Luis Alonso de Nora	50
1/1591		Atienza		57
8/1591	lands	La Garrovilla	Constanza Benítez	5
12/1591	clerk	Valdeón	Juan Díaz de Valdeón	100
			Total	2.753
Actual date and transaction				
01/7/1591		Alcuesca		2.136
12/19/1591	clerk	Coyn	Rodrigo Marquez	175
01/01/1592	notary	Borona	Juan Díaz de Segovia	50
01/05/1592	notary	Erguisuelas	Pedro Gutierrez de Tras	50

08/12/1592	notary	Fuentesclaras	Luis Alonso de Nora	100
06/07/1592	notary	Borona	Juan Díaz de Segovia	50
	notary	Morana	Pedro de Valbuena	50
	notary	Domingoseñor	Francisco Ercero	50
4/1592	lands	Pezuela		92
			Total	2.753