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Response to 'Duplications' by Drelichman and Voth

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In this response, we demonstrate that Mauricio Drelichman and Hans-Joachim Voth, in their 2015 *Economic History Review* note 'Duplication without constraints: Álvarez-Nogal and Chamley's analysis of debt policy under Philip II', provide a misconceived and inaccurate account of our argument about the finances of Philip II in 'Debt policy under constraints: Philip II, the Cortes, and Genoese bankers' (*Economic History Review*, 2014). Here, we summarize our position in the context of the current literature and provide a few comments on data gathering.

The interpretation of the finances and the financial crises of Philip II that we presented in our *Economic History Review* article, 'Debt policy under constraints: Philip II, the Cortes, and Genoese bankers',[1] which has been reinforced in our more recent work,[2] is different from most of the recent literature in economic history on the financial crises of Philip II.[3] That literature, including the work of Drelichman and Voth, has taken as a standard reference current models on sovereign debt between a borrower and lenders. In 2011 Drelichman and Voth wrote:

> We argue that bankers' ability to cut off Philip II's access to smoothing services was key. A form of syndicated lending created cohesion among his Genoese bankers. As a result, lending moratoria were sustained through a 'cheat-the-cheater' mechanism. Our article thus lends empirical support to a recent literature that emphasizes the role of bankers' incentives for continued sovereign borrowing.[4]

The relation between Philip II and the Genoese bankers was not of the standard sovereign debt type. We have been very much influenced by the historians Fortea-Pérez, Ruiz Martín, and Elliott,[5] and we place the domestic conflict between Philip II and the cities of Castile in the Cortes at the centre of our interpretation. Note the order of the protagonists in the title of our initial article. Our interpretation

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[1] Álvarez-Nogal and Chamley, 'Debt policy under constraints'.

[2] Álvarez-Nogal and Chamley, 'Equity short-term finance under Philip II'; Álvarez-Nogal and Chamley, 'Philip II against the Cortes'.

[3] Lovett, 'Castilian bankruptcy of 1575'; idem, 'General Settlement of 1577'; Conklin, 'Theory of sovereign debt'; Drelichman and Voth, 'Sustainable debts'; Drelichman and Voth, 'Lending to the borrower from hell'; Drelichman and Voth, 'Serial defaults, serial profits'.

[4] Drelichman and Voth, 'Lending to the borrower from hell', p. 1205.

[5] Fortea-Pérez, *Monarquía y Cortes en la Corona de Castilla*; idem, '¿Impuestos o servicios?'; Ruiz Martín, 'Las finanzas españolas?'; Elliott, 'Europe'.

contradicts the various interpretations of Drelichman and Voth: focusing on the Crown–bankers relation, they first argued for 'liquidity crises';[6] later, they went for a risk-sharing mechanism with debt reduction after a shock.[7] We cannot at the same time refute and duplicate.

Drelichman and Voth complain first that we do not cite them for their statement that 'The boom-and-bust cycles of the sixteenth-century Spanish monarchy reflect the efficiency and flexibility of private-order institutional arrangements'.[8] Álvarez-Nogal had considered the relation between Philip II and the bankers as part of a system many years before Drelichman and Voth began their work. He presented the 'institutional arrangements' argument in 2003:

> In order to explain the Spanish Monarchy's case, this paper presents a model focused on the sovereign's incentives to extend cooperation over time rather than on the lender's power to punish him or the existence of an institution to control him. Here we consider two important elements: First, the powerful self-enforcing nature of the value that a stable cooperation with the bankers over time had for the sovereign. It does not depend on the lender's penalty but on the conditions that make the credit cooperation an essential part of the financial system of the Crown. And second, we show the importance of the banker's beliefs about the true interest of the king in keeping his promises.[9]

It should also be noted that 'stable and effective system for financing' is a bit vague.[10] We would like to stress that 'effective' should be defined with respect to some constraints and objectives. It takes a very different meaning in our argument. The best way to follow this argument is to read our papers. Many important features are necessarily omitted in a summary. In the abstract of our *Economic History Review* article, we write:

> The credibility of the debt, mostly in perpetual redeemable annuities, was enhanced by decentralized funding through taxes administered by cities making up the Realm in the Cortes. The accumulation of short-term debt depended on refinancing through long-term debt. Financial crises in the short-term debt occurred when the service of the long-term debt reached the revenues of its servicing taxes. They were not caused by liquidity crises and were resolved after protracted negotiations in the Cortes by tax increases and interest rate reductions.[11]

The argument begins with the domestic debt, the *juros*. That debt was not a modern domestic debt with a centralized government. The best *juros* were serviced by each of the 18 cities that were represented in the Cortes of Castile. They voted on their contractual annual contribution, the *encabezamiento*. The service of the *juros* issued on a city (and not by a city—*juros* were issued by the Crown) had a

[6] Drelichman and Voth, 'Sustainable debts of Philip II'.
[7] Drelichman and Voth, 'Risk sharing with the monarch'.
[8] Drelichman and Voth, 'Lending to the borrower from hell', p. 1225.
[9] Álvarez-Nogal, 'Role of institutions', p. 7.
[10] Drelichman and Voth, 'Duplication without constraints', p. 2. The view that the 'bankruptcies' of Philip II were not bankruptcies in the standard sense has been presented by Thompson, who should receive due credit. See our quotation of Thompson in Álvarez-Nogal and Chamley, 'Debt policy under constraints', n. 75. In the same paragraph that we quoted in our n. 75, he adds the following about the bankruptcies: 'Until their nature changed in the second half of Philip IV's reign—perhaps the real mark of "crisis" —they were paradoxically symptoms of the Crown's creditworthiness'; Thompson, 'Castile', p. 160.
[11] Álvarez-Nogal and Chamley, 'Debt policy under constraints', p. 192.

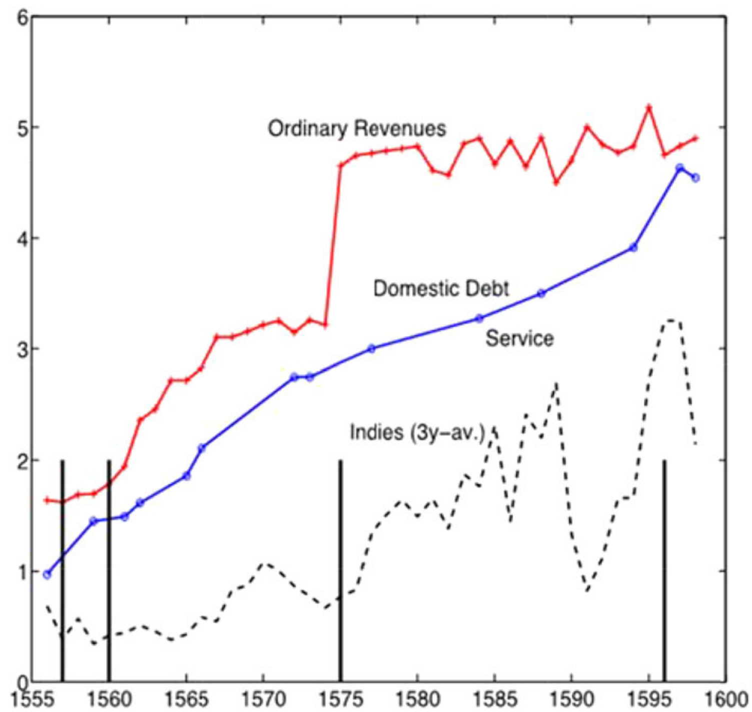

Figure 1. *Figure 2 in our original article*

first claim on the *encabezamiento* of that city. The institutional setting enhanced the credibility of the debt and lowered its cost to the Crown, but crises occurred when the fixed contribution had to be raised because of the growth of the economy and military expenditures (1557–60, 1575–7, and 1596–7). In that sense, the setting had efficient properties, at the cost of the crises. Figure 2 of our article (reproduced here as figure 1) illustrates how all the suspensions of payments on the *asientos* coincided with the times when the service of the *juros* nearly equalled the ‘ordinary tax revenues’. (The definition of these revenues is discussed around table 1 in our article.) The financial crises that apparently took place in the *asientos* were actually caused by crises in financing the *juros*. When the Cortes resisted an increase in the *encabezamiento*, they put a de facto ceiling on the service of the *juros*, and because the interest rate was almost constant, such a block was equivalent to a ceiling on the stock of *juros* and on the ability of the Crown to refinance the unfunded *asientos* into the funded debt. In particular, the main crisis (1575–7) was clearly the result of a power play between the Crown and the Cortes.[12]

A modern analogy may be helpful. In the summer of 2011, a debt ceiling crisis occurred in the US: Congress had to vote for an increase in the legal ceiling of the public debt; for the same reasons as in Castile (the nominal growth of the economy and government expenditures), that ceiling had become binding. Some partisans threatened to oppose this increase in order to limit government expenditures. The economy was barely recovering from the financial crisis. It was not the time for a

[12] Ibid.

showdown. In 1575, the contest between Philip II and the Cortes was similar, but in this case it led to a dramatic financial crisis.

Now suppose that the US government had been forced to suspend payments on its debt for a couple of years, and that, many years later, the IMF test of the sustainability criterion (which does not need to be specified) had been applied as Drelichman and Voth did for Philip II.[13] It is certain that the fiscal position of the US would have been declared sustainable and that 'the defaults of Philip II therefore reflected short-term liquidity crises, and were not a sign of unsustainable debts'.[14] The expression 'liquidity crisis' would explain nothing about the true cause of the payment stop, that is, the contest between the executive and the legislative. In their 2011 article, they repeat that 'Defaults thus reflected temporary liquidity shortfalls'.[15]

Our argument is very much in line with the 'composite monarchies' view which has been put forward in work by other scholars, whom we cited.[16] The above application of the IMF criterion makes no sense in the setting of a composite monarchy. In the words of 'Duplications', the IMF criterion for sustainability 'is the simple intertemporal budget constraint from any standard course in macroeconomics'.[17] Precisely. It is the budget constraint of a single agent, totally unlike the composite monarchy in the political economy sense that we develop.

For Drelichman and Voth, a composite monarchy seems to be a disorganized monarchy. In 2010 they wrote, 'Philip II himself—like most early modern rulers—had very limited information about the state of his finances. The decentralized nature of early modern states, combined with rudimentary information collection, hinders attempts at reconstruction'.[18] In 'Duplications', they state, 'we clearly discuss the constraints faced by the Spanish monarchy, its failed attempts to centralize control over tax collection, as well as the absence of a budget policy'.[19] These terms seem to us to have nothing to do with the idea of composite monarchies in the work of Elliott or Grafe or in our argument, which is grounded in the context of the political economy. Using economic reasoning, we show that it was in the interest of the Crown *not* to have centralized control over the collection of the *encabezamiento*. Our argument is not about the Crown's lack of information on its budget; it is about the political economy of Castile.

In our opinion Drelichman and Voth deliberately are wrong when they assert that we 'fail to do justice to the earlier, important contribution by Conklin'.[20] Conklin's work is one of the pillars of the literature that pitched the Crown against the bankers. On p. 493, he wrote: 'In 1575 when the Genoese cut off new lending, the Crown resisted their demands and broke off negotiations. The Genoese imposed an embargo'.[21]

[13] Drelichman and Voth, 'Sustainable debts of Philip II', pp. 829–30.
[14] Ibid., p. 813.
[15] Drelichman and Voth, 'Serial defaults, serial profits', p. 4.
[16] Elliott, 'Europe'; Grafe, *Distant tyranny*.
[17] Drelichman and Voth, 'Duplication without constraints', p. 7.
[18] Drelichman and Voth, 'Sustainable debts of Philip II', p. 814.
[19] Drelichman and Voth, 'Duplication without constraints', p. 6.
[20] Ibid., p. 3. Conklin is cited in Álvarez-Nogal, 'Role of institutions', pp. 5, 30; Álvarez-Nogal and Chamley, 'Debt policy under constraints between Phillip II, the Cortes and Genoese bankers', pp. 5 and 16; and eisdem, 'Debt policy under constraints', p. 194, n. 11 and p. 199.
[21] Conklin, 'Theory of sovereign debt', pp. 492–3.

For Conklin, the lending moratoria of the syndicate took place when the stock of *asientos*, net of the collaterals by *juros*, reached about 10 million ducats: that amount was the financial equivalent of the penalty that the syndicate could credibly impose on the Crown. It was estimated, very roughly, at one half (because of bilateral monopoly bargaining) of the monetary value of the Netherlands (measured by the present discounted value of two million ducats per year for military spending). The word 'ceiling' (on the *asientos*) has a totally different meaning in our argument because it is centred on the financing of the *juros* and the domestic issues in Castile.

Conklin's argument may have been appealing in a mainstream journal because it fitted with some theoretical literature. It has been completely refuted, in particular by Drelichman and Voth. Moreover, Conklin's data have never been published, except for a few graphs which seem to us to be unusable and without scientific value. No one has ever published, with scientific standards, an annual series of the actual outstanding stock of *asientos*, even without collaterals. After long experience in the archives, we doubt that it can be done, and Drelichman and Voth may even agree with us on this particular point.

Our work that led to the *Economic History Review* article was presented at the EHESS conference in Paris in May 2010, to which we had invited Drelichman and Voth. The title of our presentation was 'The Crown and the towns: fiscal policy with asymmetric information under Philip II'. This work was put online as an Institute for Economic Development discussion paper (Boston University), in May 2011.[22] In October 2012, Chamley presented the work in a seminar at the University of British Columbia, at the invitation of Drelichman. This was the final revision of the article that had been submitted to the *Economic History Review* (the published version differed only by minor edits).

Immediately after that visit, Drelichman wrote a two-page e-mail with no major objection.[23] He noted some differences on technical issues. He acknowledged and liked that our main argument was one of political economy. Our argument about political economy puts the relation between the Crown and the cities at the centre of the stage. All this was normal scholarly exchange. We certainly did not ignore Drelichman and Voth. We cited them six times on pages 194 and 195. After that e-mail of October 2012, the next news from Drelichman and Voth was the first draft of 'Duplications . . . ', in June 2014.

Additional comments on the use of data

Drelichman and Voth criticize us for using their data without reference. We never used any of their data. We document in our 2015 working paper that their use of primary sources is flawed.[24] As to secondary sources, consistent with correct academic practice, we only cite work with which we are engaged directly, or which raises issues material to our argument and where failure to do so would be prejudicial to the authors of those secondary works. We do not believe any such criteria applied in this instance. We can, however, make two additional comments.

[22] Álvarez-Nogal and Chamley, 'Debt policy under constraints' (2011).

[23] The relevant electronic correspondence is included in the appendix of our working paper: Álvarez Nogal and Chamley, 'Answer to "Duplications" by Drelichman and Voth'.

[24] Álvarez-Nogal and Chamley, 'Equity short-term finance under Philip II'.

Our statement on the maturity of *asientos* was made only for context. It was intentionally vague and it was derived from works independent of Drelichman and Voth, published years earlier by Ulloa and Carlos Morales,[25] and now supported by our own research in the archives of Simancas.[26]

On the profitability of lending for the Genoese bankers, our argument was data free, with no number. It was only qualitative and relied on simple economic common sense.[27] Implicit in the argument is the issue of the bankers' equity in the *asientos*. Drelichman and Voth perhaps object to our argument because their method actually provides no precise information on the bankers' profitability. Any precise idea of the bankers' profitability requires information on the bankers' participation in each *asiento*, and the possible repartition of losses in case of default. These are not in the contracts. However, almost all the contracts contain a clause that exempted bankers from legal restrictions on the funds that they would raise in the credit markets for the business of the particular *asiento*. In addition, for some contracts (*factorias*), all the funds were to be raised on the credit markets. It appears that Drelichman and Voth confuse the reader about bankers' and contracts' profitability. They may occasionally mention the difference between the two, but in their article 'Serial defaults, serial profits', they repeatedly equate the two notions.

Drelichman and Voth allege that we replicated their data on revenues without proper citation of their 'original findings'. The reader should know that everyone uses the landmark work of Ulloa.[28] He is the only author who has done thorough archival work to establish the data on the revenues of Philip II. Anyone's data, including that of Drelichman and Voth, is just minor tinkering with Ulloa's work, and, whilst acknowledged in their earliest work, the attribution gets subsumed into a Drelichman and Voth reference in subsequent work.[29] Contrary to the work of Drelichman and Voth, Ulloa published the details of his data construction: these can be verified and compared to the archival documents. Our data on revenues is also based on the work of Ulloa. It is complemented by findings in other works and in our own research.[30] We cited all these authors in our article published in the *Economic History Review*.[31] Note that we cover more years after 1596 and that our data are very different for the years 1574–7.[32] Our classification is different.

[25] Ulloa, *La Hacienda Real de Castilla*, p. 138; Carlos Morales, *Felipe II*, p. 79, tab. 1.

[26] For example, in Álvarez-Nogal and Chamley, 'Debt policy under constraints', tab. 2.

[27] On p. 195 of 'Debt policy under constraints', we write: 'Although interest reductions were indeed conducted during the crisis resolutions of 1575–7 and 1596–7, they were not defaults, as is often alleged. We certainly do not deny that some of the debt was reduced, but we think that the quoted amounts (for example, those given by Drelichman and Voth) are overstated. More work is needed on this issue, however'. We add in our n. 18: 'A central point made by Drelichman and Voth is that Genoese bankers did rather well on their loans, ex post, in spite of the debt reductions. Our argument about interest reduction reinforces their conclusion'.

[28] Ulloa, *La Hacienda Real de Castilla*.

[29] Drelichman was clear about this in his October 2012 e-mail to us. However, Drelichman and Voth are not clear about their gathering of the data on revenues. They refer to work by Ulloa on revenues in their first paper (Drelichman and Voth, 'Sustainable debts of Philip II'), after which they essentially refer to this first paper. In Drelichman and Voth, 'Lending to the borrower from hell', p. 1208, n. 9, they write: 'For a detailed analysis of fiscal revenue during Philip II's reign, see Drelichman and Voth (2010)'. In their book (Drelichman, and Voth, *Lending to the borrower from hell*), their data gathering on revenues is described only in n. 20 on p. 82: 'The discussion of revenue sources is based on Thompson 1976; Ulloa 1977; Artola 1982, 1988. Quantitative data are drawn from our previous work in Drelichman and Voth 2010'. This seems to us to be ambiguous.

[30] Gelabert, *La bolsa del rey*; Lorenzo Sanz, *Comercio de España con América*; Martín Acosta, *El dinero americano*; Zabala Aguirre, *Las alcabalas y la Hacienda Real en Castilla*.

[31] Álvarez-Nogal and Chamley, 'Debt policy under constraints', pp. 194, 197, 198, 205, 208, 212 and 213.

[32] Ibid., fig. 1, p. 199; Drelichman and Voth, 'Sustainable debts of Philip II', fig. 1, p. 818.

This classification is derived from our own research and is essential for our main argument.

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