

## **Eurobonds past and present: a comparative review on debt mutualization in Europe**

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**Abstract:** This paper reviews the economic and historical literature on debt mutualization in Europe with reference to pre-1914 guaranteed bonds and current Eurobonds debate. We emphasize that, notwithstanding the differences in scale and nature, debt mutualization solutions similar to Eurobonds were tried before, and the closest historical examples to the present debate are the pre-1914 guaranteed bonds. We highlight three key characteristics of debt mutualization, which are apparent both in the current debate and in history: moral hazard, debt dilution and conditionality. We show that the fears about short-run dilution and moral hazard were not unknown to pre-1914 market participants. These problems were partly addressed by mechanisms of conditionality such as international financial control. The historical evidence suggests that the dilution of outstanding obligations may be overplayed in the current debate. On the contrary, creditors' moral hazard (ignored in current debt mutualization proposals) was as problematic as the usual debtor's moral hazard –especially when the groups of countries guaranteeing the bonds and the creditor nations did not overlap entirely.

**Keywords:** debt mutualization, debt dilution, moral hazard, conditionality, pre-1914

**JEL Classification:** F34, H63, H77, N24, N44

### **1. Introduction**

The recent debate on the European sovereign debt crisis has attracted different proposals in policy fora. These involve mostly unpopular solutions ranging from structural reforms, stronger federalism, quantitative easing and debt mutualization. Having appeared under different labels and guises and commonly known as Eurobonds, the debt mutualization proposals, in essence, recommend the governments of the EU countries to pool all or a certain portion of their debts together. This would presumably reduce borrowing costs for sovereigns and induce much needed stability to the European sovereign debt market. Although the proposals found some support, they also attracted strong criticisms for its potential negative impacts, particularly the risks of moral hazard and the dilution of current outstanding debt.

Compared to other tried solutions for fiscal crises, such as debt restructuring or default, inflation and devaluation, possibly combined with liquidity assistance and stabilization plans from multilaterals, there is precious little evidence on the potential effectiveness of the Eurobonds proposal. The bailout and recapitalization programs organized since 2010 offer some suggestions of how Eurobonds could fare in the market, particularly after the reduction in mid-2011 of the interest paid by program countries to close to the effective cost of funding the associated multilateral loans. However, it is questionable whether the relatively short experience with these loans is a good estimate of the consequences of debt mutualization for the future of European financial stability. The debate has therefore been mainly informed by untested hypotheses about the behavior of financial markets and sovereigns after the issue of Eurobonds (Claessens et al. 2012).

This paper aims to review the relevant economic and historical literature on debt mutualization by drawing on the history of guaranteed bonds before 1914. We highlight parallels between current and historical debates around the questions of debt dilution, moral hazard and conditionality and provide an overview of the economic and historical studies. We place at the center of our review five bonds, which were issued during the 19<sup>th</sup> century with the guaranty of other sovereigns, usually a combination of the great powers of the time (Britain, France, Germany and Russia). Unlike the current European program bonds (EFSM, EFSM and ESM), these issues were perceived by the market as instances of debt mutualization, which allows for a direct comparison with the current proposals for the issue of Eurobonds. Perhaps because of the risks involved, these loans were raised very sparsely and often only after overcoming considerable political opposition within the guarantor countries themselves. Somewhat ironically, these operations started with a Greek loan in 1832, which can arguably be considered the first Eurobond in history. After the first Greek loan, there were four other guaranteed loans issued before 1914 – for Turkey (Ottoman Empire) in 1855, Egypt in 1885, China in 1895, and Greece again in 1898. Elsewhere, we use the long historical record of these loans to address three main questions – how the introduction of guaranteed bonds impacted existing creditors, how they were initially received by the markets, and how markets priced guaranteed debt relative to the other financial liabilities of the nations involved (Esteves and Tuncer 2016).

Part of our review also compares the guaranteed bonds with their historical relatives in the pre-1914 period, namely, sub-sovereign borrowing (colonial bonds) and bonds issued under international financial control. Our presentation, therefore, places the pre-1914 guaranteed bonds in the broader historical context of the governance of the sovereign debt market.

The paper is structured as follows. The next section describes and compares the current proposals for the issuance of Eurobonds with reference to the debate on debt dilution and moral hazard. Section 3 provides the corresponding debate in the nineteenth century, emphasizing the similarities and differences between the two periods. Section 4 provides historical detail on the five guaranteed bonds to highlight the individual context for each bond issue. A brief conclusion follows.

## **2. Moral hazard and debt dilution in Eurobonds**

Although the idea of increased coordination of public debt in Europe had been floated around the introduction of the Euro, it did not get much mileage at the time. The report of the Giovannini Group (2000) was mostly skeptical about the purported benefits. The proposal re-emerged in the very different context of the Euro crisis. Whereas the Giovannini group had concentrated on the long-term or steady-state costs and benefits of mutualization, the new debate focused more on stabilizing the European market for sovereign debt and the financial system (Brunnermeier et al. 2011, Angeloni and Wolff 2012).

Since September 2008 a half-dozen alternative plans to implement some version of Eurobonds emerged in the literature from academics, trade associations and official organizations. All aim to fulfill a combination of four objectives: manage the current crisis, reinforce financial stability and facilitate the transmission of monetary policy in the Euro area, improve market efficiency, and enhance the international role of the Euro. Despite the commonality of objectives the various plans diverge on several levels, especially on the questions of coverage and guaranties.

The majority of plans recommend that Eurobonds cover only partially the funding requirements of member countries to discourage fiscally weaker states from using these bonds to overborrow. The exceptions are Dübel (2011) and Beck, Wagner and Uhlig (2011) and Brunnermeier et al. (2011), who propose to swap the entirety of existing debt into two tranches of joint bonds.<sup>1</sup> A related question is whether Eurobonds should be issued only in the primary market or also to swap for existing debt. In the first case, only the marginal cost of funding would be affected for participating countries, whereas in the second the average cost would also fall if yields on Eurobonds were lower, as expected. The most salient proposals for the partial issue of Eurobonds are the ‘blue/red bonds’ of Delpla and von Weizsäcker (2010) and the ‘safe bonds’ of Bofinger et al. (2011).

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<sup>1</sup> However, only the first or senior tranche (ESBies) would be virtually safe from default, whereas the second tranche of junior bonds (EJBs) would take any losses first.

The two have diametrically opposed approaches. Blue bonds, jointly issued would be capped at a fraction of GDP (possibly 60% as in the Maastricht criteria), whereas any excess debt would remain the responsibility of individual countries that continued to issue their own ‘red’ bonds. Bofinger et al. (2011) propose mutualize only the excess debt above 60% of GDP, though in the context of a redemption plan to extinguish it over the medium-term.

The second main distinction between proposals has to do with the legal nature of the guaranty of common bonds. If the guaranty is only several, each guarantor state is expected to take the responsibility for only a share of the loan in case of default, whereas with a joint guaranty participant countries are individually liable for the full amount. Some proposals require joint responsibility for common bonds, despite its likely violation of the no-bailout clause of the European treaties (Delpla and von Weizsäcker 2010, Jones 2010, Barclays Capital 2011, Favero and Missale 2011). Precisely because of this, other authors consider that several guaranties would be enough (De Grauwe and Moesen 2009, Brunnermeier et al. 2011). Some authors provision for further guaranties in the form of seniority clauses over pre-existing debt, or credit enhancements, such as shock-absorbing collateral (cash or gold reserves) – particularly with a view to ensure that the new Eurobonds would be rated AAA by credit ratings agencies.

Given the breadth of these proposals it is not surprising that the expected impacts of their undertaking also vary considerably, namely when compared with the four objectives listed at the beginning of this section. The most obvious beneficiaries are the ‘weak countries’ currently facing a widening of spreads.<sup>2</sup> Either through pooling, diversification, seniority or credit enhancements, the new Eurobonds are expected to pay lower yields than most national debts, thereby allowing countries a cheaper access to funds. This is especially important during financial crises, when markets can no longer price risk efficiently and may spread financial trouble through contagion, a problem to which the Delors (1989) report already alerted.

‘Strong countries’ with normal access to wholesale markets would also benefit indirectly, and perhaps even directly, from the creation of Eurobonds. The main indirect benefits are financial stability and greater efficiency in monetary policy transmission within the Eurozone, once the home bias in banking portfolios of sovereign debt is replaced with the issue of a safe(r) asset on which the whole financial system can base itself. More pointedly, Jones (2010), Brunnermeier et al. (2011) and Varoufakis and Holland (2011) consider that Eurobonds would be an

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<sup>2</sup> Nevertheless, all proposals exclude the program countries, undergoing bailout arrangements with the ‘troika’ (ECB, EC, and IMF), at least until these programs are completed.

efficient way of recycling surpluses within the Eurozone without destabilizing current accounts, and allowing countries such as Germany to continue pursuing their export-led growth. Direct benefits would come in the way of greater liquidity of the joint bonds, as well as a greater international role for the Euro.<sup>3</sup> Interestingly, although mentioned by all proposals, the estimates of liquidity gains are very limited, ranging from 30 to 70 basis points in the more optimistic assessments to close to nothing in the more conservative estimates of the European Commission's (2011) Green Paper and Favero and Missale (2011).<sup>4</sup>

This raises the question of how to motivate the participation of stronger countries in the Eurobonds issuance, as the liquidity gains might not compensate for the increase in funding costs from pooling risk with weaker nations. Several proposals address this issue by including explicit mechanisms to redistribute a share of the gains to the stronger nations, such that all participants benefit from the system (De Grauwe and Moesen 2009, Boonstra 2010, NATIXIS 2011). Although theoretically and algebraically conceivable, these redistribution rules raise practical implementation questions. Two of the most important are the time consistency of these rules and their consistency with fiscal stabilization in the Eurozone.

Moreover, there is also considerable skepticism in the literature about the net advantages of the Eurobonds proposals, not to mention about the political feasibility of the idea currently in Europe. Starting with tranching and seniority, several studies point out that a Modigliani-Miller effect may apply with negative consequences for nations' ability to roll over their stocks of 'red debt.' By virtue of the issue of Eurobonds nothing is changed in the underlying fiscal position of individual countries, consequently if a tranche of 'blue', 'safe', or 'synthetic' bonds is carved out of their debt stocks with seniority and enhanced guaranties, the remaining debt stock will have to bear the brunt of greater illiquidity and risk premia (Kopf 2011, Brunnermeier et al. 2011, Claessens et al. 2012). The obvious way of avoiding this would be to swap the full stock of 'legacy debt' with Eurobonds, but that raises equally obvious concerns about moral hazard. However, the maintenance of stocks of national debt is seen as a way of distinguishing between liquidity and risk premia, since the latter would continue to be priced by the markets. An intermediate solution requires a careful calibration of the relative size of multilateral and national bonds. The share of 'blue bonds'

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<sup>3</sup> The two are related in the sense that some authors consider that the role of the Euro as reserve currency is hampered by the fragmented issue of sovereign bonds in the Eurozone that does not allow for the creation of a benchmark asset comparable to the US T bonds.

<sup>4</sup> However, the latter estimates may be contaminated by the fact that the German Bunds and the bonds of other AAA Euro-members have already benefited from a 'safe haven' status since 2009.

has to be large enough to improve fiscal sustainability ratios, but small enough to allow countries to maintain market access at affordable interest rates (Gros 2010).

Moral hazard concerns loom large among the criticisms of Eurobonds, particularly since the recent experience of the SGP implies that even ex-ante firm rules are time inconsistent in the context of a financial crisis, and all the more because of the high level of cross-border financial integration in the EU (see Issing 2009, Gros 2011 and Favero and Missale 2011, among many). Kopf refers to this as “an illusion of seniority that cannot be enforced in times of crisis. In the end, member countries that wish to remain current on their own obligations may end up having to pay for Portuguese, Greek or Irish sovereign debt.”<sup>5</sup> This incentive problem might completely negate the expected liquidity gains of a common Eurobond benchmark issue. In a survey conducted in 2008, primary market dealers and credit rating agencies were uniformly averse to joint guaranties of Eurobonds, as well as to insurance mechanisms that pool risk between strong and weak nations (EPDA 2008). These mechanisms were seen a new incarnation of the structured products behind the financial crisis of 2008. However, Eurobonds with several guaranties are not immune from problems either, as credit rating agencies such as Standard & Poor’s have warned that their rating may not be above (as desired), or even at the level of the average ratings of the participating nations, but in fact below, and possibly as lower as the lowest individual rating. This has a counterpart in the convexity of risk premia, which may rise more than proportionally than underlying risk factors, such that the average risk premium of a portfolio of bonds may be higher than the premium charged to an individual country with the same average risk.

As a solution to the moral hazard problem, a number of authors propose “conditional Eurobonds”. The range of conditionality varies significantly from structural reform programs, which impose fiscal discipline, to making the Eurobonds accessible to only a group of AAA-rated countries. (Erber 2012, Boonstra et al. 2013, Hild et al. 2014). In a recent study modeling the impact of conditionality on the form of structural reform programs, Beetsma and Mavromatis (2014) highlight that making the guarantee conditional on sufficient reforms may create positive incentives for both “core” and “periphery” governments and increase the welfare of the “union”. Alternatively, the yields effectively paid by participating countries could be adjusted relative to the cost of funding of the Eurobonds-issuing agency so as to incentivize fiscal consolidation (Bonstra 2010, Dübel 2011, Muellbauer 2011 and 2013, European Commission 2011). Countries pursuing ‘bad fiscal policies’ would face an increasing schedule of funding costs, whilst others would be compensated for their fiscal efforts. This

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<sup>5</sup> Kopf (2011: 9).

would also help preventing the build-up of unsustainable debt problems, similar to what happened after the introduction of the Euro when markets were not able to screen sovereign risk adequately. In the next section, we turn our attention to the historical debate on debt mutualization and revisit the issues of moral hazard, debt dilution and conditionality in the context of pre-1914 guaranteed bonds.

### **3. Debt mutualization and guaranteed bonds before 1914**

Although the discussion over Eurobonds has taken place with very limited historical reference, the sovereign debt market before 1914 had several striking parallels to the proposals listed above. The emergence of an international bond market and the boom in foreign securities during the 1820s marked an important milestone in the evolution of sovereign bond contracts to reduce the risk of default. This was also the case after the sovereign debt crises of the 1870s, which led to new ways of dealing with defaults (Wynne 1951, Suter 1992, Neal 1998, Neal and Davis 2006, Flandreau and Flores 2009, Tuncer 2015).

One common way of ensuring repayment of government bonds was to link each issue to a form of security. These security clauses served the interest of creditors, as they safeguarded the interest and capital payments of a loan in the absence of a multilateral enforcement mechanism. Similarly, borrower governments had positive incentives to provide such securities given that they could be an important determinant of the cost of credit. From the 1820s to 1914 there was considerable variation in the methods for securing sovereign bonds. One approach was to use the real estate of sovereigns as a way of guaranteeing the payment. The major legal problem with this type of security was the confusion between private and public sphere in terms of liability in the case of a default.<sup>6</sup> A similar but more widespread tool was to use tangible assets and commodities such as precious metals or raw materials (Borchard, 1951). Another category still was to assign part of or the entire state revenues of the debtor as a pledge. These revenues could be from any source. State monopolies, customs and railway revenues, or even tithes could be used to secure new loans. For instance, the Greek independence loans of 1824 and 1825 were both secured by “all revenues and the whole national property of Greece”.<sup>7</sup> Although assigning government revenues looked like an attractive solution to increase the credibility of a sovereign, it could also reduce its future borrowing capacity especially if the entire state revenues had already been pledged for the service of previous loans.

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<sup>6</sup> See Hoyle (1986), Cannon (1972) for a discussion of case of Egypt, where the Khedive pledged his personal estates to contract the loans of 1870 and 1877.

<sup>7</sup> Wynne (1951: 285).

Moreover, this issue of debt dilution could lead to legal problems in the case of a default or debt readjustment as the seniority between bonds was not clearly assigned.

Sovereign immunity also raised questions about enforcement given that creditors often did not have direct control over the specific assets or revenues pledged. In the second half of the nineteenth century these enforcement problems led bondholders to create permanent organizations to overcome collective action problems when negotiating with a defaulting sovereign; the best known of these organizations with the British Corporation of Foreign Bondholders (Mauro et al. 2006, Esteves 2013). After some defaults, creditors were able to gain access to the revenues assigned for the service of the debt. In certain cases, this access involved the direct collection of the assigned revenues, while in others the revenue collection could be handled by autonomous or private organizations, which functioned independently from both governments and creditors. In either case, the arrangement meant a partial loss of fiscal sovereignty. Although international financial control organizations had a positive impact on the credibility of debtor countries and increased their borrowing capacity, their success relied on the cooperation of debtor governments, thus they did not *guarantee* any future repayments for creditors. Comparative studies of international financial control suggest their capacity to collect assigned revenues for the purposes of debt repayment depended critically on local political conditions and the type of revenues in question.<sup>8</sup>

In certain cases, borrower governments could agree with their foreign creditors to use some of the revenues under foreign control to secure future loans (Tuncer 2015). It is important to note that these bond issues differed from the model of guaranteed bonds, even if two of the guaranteed bond issues on which we elaborate (Egypt in 1885 and Greece in 1898) were issued in the presence of international financial control suggesting that foreign creditors not only took control of local finances but provided additional support through guaranteed loans. A separate consideration has to do with the fact that there was not always a perfect overlap between the list of guarantors and the Powers with a say in financial control. For instance, the Greek 1898 bond was guaranteed by France, Britain and Russia and floated simultaneously with the imposition of external control, where not only the guaranteeing powers were represented but also Austria, Germany, and Italy.

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<sup>8</sup> On this see Deville (1912), Hyde (1922), Andreades (1925), Wynne (1951: 279) and Tuncer (2015).

All these different forms of securing debt had varying degrees of interference with the sovereignty of debtor states. At the extreme end of this spectrum stood sub-sovereign borrowing or the bonds issued under a status of informal colonial dependency. Two of the countries, which issued guaranteed bonds (China and Egypt) were under a status of informal colonial dependency from outside powers. Nevertheless, the guaranteed bonds of these countries were perceived differently in the market from other colonial issues, in that they were not priced entirely on the fiat of the colonial power. Colonial issues were more than guaranteed by the colonizer, as the latter reserved complete control over colonial finances. Moreover, in case of a default, the bankruptcy process would be managed from the center. These differences suggest that contemporary investors treated pricing and default probabilities of colonial borrowing in a separate category from sovereign borrowing (Accominotti et al. 2010 and 2011). In a recent working paper, Chavaz and Flandreau (2015) elaborate further on the pricing of colonial bonds and show that these bonds were priced not on their default risk but on their liquidity.<sup>9</sup> This point would require further research on colonial bond contracts. As far as our debate on Eurobonds is concerned, all these differences suggest that colonial bonds were not instances of debt mutualization similar to Eurobonds, where participants retain their political and fiscal sovereignty. Hence, in this broader context of governing sovereign debt through different securing mechanisms, the guaranteed bonds studied here, which directly relied on the credit of other states acting as guarantors, are the closest analogues to the current proposals for debt mutualization in the Eurozone.

Before we provide a more detailed historical overview of each guaranteed bond issue, we should highlight the similarities and differences between guaranteed bonds and Eurobonds. First, the issue of guaranteed bonds was usually determined by political considerations of the guarantor states themselves—mostly one or a combination of the great powers of the time, i.e. Britain, France, and Russia. In fact, all guaranteed bonds issued between the 1832 and 1914 were linked to some sort of political turmoil (Viner 1928, Jeze 1924). The guaranteed bond, issued in support of Greek independence from the Ottoman Empire in 1833 was the first example of the involvement of the great powers into such an arrangement. The Greco-Turkish war of 1897 was also the cause for the 1898 Greek loan, similarly to the Crimean War for the 1855 Ottoman loan, and the Sino-Japanese war for the 1895 Chinese loan. Even in the case of the Egyptian loan of 1885, the main cause of the financial need of the country was the payment of war expenditures and associated indemnities from the Urabi revolt. The motivation for the issue of

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<sup>9</sup> It is possible that the spreads on colonial bonds would potentially differ on the specific contractual clauses regulating repayment conditions in case of a default, but we are not aware of research on this issue.

Eurobonds today is different. This is partly due to the fact that political and financial stability were closely associated in the 19<sup>th</sup> century, especially in the Eastern Mediterranean and China where the interests of the great powers often clashed. Leading merchant banks of the time co-operated to prevent political conflict in Europe from destabilizing the capital markets (Polanyi 1944, Flandreau and Flores 2011). The real motives behind guaranteed bonds were obvious to contemporary observers. In response to the claims that the Egyptian guaranteed loan was issued on financial grounds, the *Economist* had the following to say:

“The idea that the Powers have been influenced by purely financial motives in pressing their services upon Egypt is really too absurd to be entertained. They have all of them quite enough to do to manage their own monetary affairs, and they are not so foolishly generous as to insist upon burdening themselves with fresh financial obligations, except in the hope and expectation of gaining some advantage thereby. And the advantage they expect to gain is sufficiently obvious. They are acting on the sound principle that financial responsibility involves financial control, and the control of the finances of necessity implies control of the Government.”<sup>10</sup>

Despite this acknowledgement of *Realpolitik*, guaranteeing a loan was not always a straightforward decision from the perspective of the guarantor states. For instance, while the French chamber quickly approved the guaranty of the 1855 Ottoman Loan, the consent of the British parliament hanged by a thread. The House of Commons raised serious objections to the loan given the poor credit of the Ottoman Empire at the time and the negative memory of the Greek guaranteed loan of 1833.<sup>11</sup> After lengthy discussions, the guaranty was passed by a majority of only three, despite the fact that France and Britain were at the time in an alliance with the Ottomans to fight Russia in the Crimean war.

In a recent article, Steinbach (2015) emphasizes a similar point about the debt settlement in the US following the adoption of the US constitution in 1790 and ensuing debt mutualization between the states. Not unlike the guaranteed bonds issued by European great powers he emphasizes the role of domestic stakeholders in opposing debt mutualization. Whereas the opponents usually underlined the potential moral hazard problems, proponents saw debt as a “public burden” and argued that debt mutualization was crucial given economic interdependencies and spillovers, hence sharing the debt would be beneficial for all states. The existence

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<sup>10</sup> “The Proposed Egyptian Settlement”, *The Economist* (London, England), Saturday, March 21, 1885; pg. 343; Issue 2169.

<sup>11</sup> The Greek guaranteed loan of 1833 went into default in 1836. It was finally redeemed in 1871 after a significant reduction in the outstanding interest. See Levandis (1944: 28), HCPP (1864) No. 144 and HCPP (1864) No. 3346.

of opposition to the arrangement led to protracted bargaining between the parties, especially around the idea of imposing “conditionality “ to avoid moral hazard problems.

In this regard, we have already observed that guaranteed loans sometimes infringed on the debtors’ sovereignty via some form of conditionality, particularly given their political nature. However, this interference was not intrinsic to guaranteed loans, and it could vary from none or very weak interference to foreign financial control depending on the broader political context. For instance, the guaranty for the 1855 Ottoman Loan required that the proceedings of the loan were entirely used for war purposes and a special commission consisting of British and French representatives was formed to supervise this condition (Kiray 1988, Al 2007). The 1898 Greek guaranteed loan was harsher in this regard and it coincided with the establishment of the international financial control over certain revenues of the Greek state. In the case of the 1885 Egyptian loan, however, the order of events was the other way around. This bond was issued with the extra guaranty of Britain and France, which already held the control of Egyptian finances since 1876 (Andreades 1925, Tuncer 2015).

The second distinctive feature of guaranteed loans was the intention of the guarantor states to make the debt of the borrower his own. This was clearly the case with the 1855 Turkish loan, the 1885 Egyptian loan, and the 1898 Greek loan, which were grouped together with the British funds in the official list of the London stock exchange. Therefore, guaranteed bonds were priced in the secondary market differently from other issues of the debtor, not only because of the value of the guaranty itself, but also because of the externality that their issue imparted on previous bonds, either through explicit seniority clauses, specially assigned revenues, or simple debt dilution effects. Interesting, British colonial bonds were not classed in the same category and the British government also only resorted to explicit guaranties of colonial issues very sparingly.<sup>12</sup>

The third and final characteristic was the relationship between guaranteeing powers, which also depended on their political motives. A first consideration here was how the different credit standing of the guarantors reflected on the yields of the guaranteed bonds. The worries about ‘convex scenarios’ in yields were already present in the nineteenth-century debates. The *Economist* used precisely this argument in condemning the guaranty of the 1885 Egyptian loan as disadvantageous to the UK: “It would be easy to show that the proposed international guaranty is unfair to us, because, if left to ourselves, we could raise

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<sup>12</sup> To our knowledge, the only explicit guaranties of British sub-sovereign bonds covered one Canadian bond, one Mauritius bond, several Irish land bonds and the 1885 Egyptian loan covered here.

the money at a lower rate than when our credit is impaired by being mingled with that of a country like Russia.”<sup>13</sup> Secondly, the extensive rivalry between the powers could also make the conditions of the loan more favorable for the borrower country. In 1895, following the defeat in the war with Japan, China needed funds to meet the first installment of the war indemnity.<sup>14</sup> In a seeming extension of the great power rivalry in China to the realm of finance, a competition ensued for the privilege of guaranteeing the projected loan. *The Economist* of the time put it:

“it is somewhat ludicrous to observe the struggle which is going on among European financiers for the privilege of supplying China with the money she requires to pay the indemnity demanded by Japan. Indeed, the Chinese government would be more than mortal if it missed such a brilliant opportunity of getting all the assistance it requires.”<sup>15</sup>

In the end a loan for 400 million francs was issued under formal Russian guaranty. The conflict between guarantors was more serious in the case of the Greek loan of 1833, namely because the guarantors went to war with each other in 1853! The fact that this loan was issued under a several guaranty only created the opportunity for moral hazard on the part of the creditors, rather than the debtor, as usually assumed. As each guarantor was only responsible for a third of the loan it had less of an incentive to lobby the Greek government to remain current on its obligations to the other two powers. Worse than that, the powers repeatedly supported the Greek government in selectively defaulting against their opponents or used their share in the 1833 loan to court political favor in Greece.<sup>16</sup> Unsurprisingly, this set-up did not help with the governance of Greek debt. Not only did Greece remain in default on its non-guaranteed bonds until 1879, but it also ended up paying back very little of the 1833 loan itself.<sup>17</sup>

Another source of moral hazard was the non-overlapping composition of guarantors and countries participating in international financial control organizations. The second Greek loan of 1898 is a good case in point. Germany, a country with little financial interest in Greece at the time was nevertheless very involved in the negotiation of the Greek debt workout. Despite not being one of

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<sup>13</sup> Issue of 21 March 1885, p. 344.

<sup>14</sup> FO (1895) Miscellaneous Papers, Vol. 48, p.160.

<sup>15</sup> “The Coming Chinese Loan”, *The Economist* (London, England), Saturday, June 8, 1895; pg. 749; Issue 2702.

<sup>16</sup> Levandis (1944), Kofas (1981).

<sup>17</sup> In 1864 Greece reached an agreement with the powers to retire the 1833 loan. According to Wynne (1951), by then Britain had paid £1.2 million on charges of the loan and had only received £100,000 from Greece.

the guarantors of the 1898 loan, it acquired a seat in the International Financial Commission, which controlled Greek finances from then on. In a sense, Germany got something for nothing in this operation, as the financial guaranty of the other Powers allowed Greece to pay the war indemnity to Turkey, a country in which Germany was acquiring a large investment position. Consequently, it lobbied for a harsher deal for Greece than what the guarantors-Britain, France and Russia-were initially prepared to settle for (Levandis 1944, Wynne 1951). Here too one is drawn to see parallels with the consequences of the non-overlapping architecture of the EU and the Eurozone for the evolution of the European debt crisis. Whilst financial stability in the Eurozone has positive externalities for the rest of Europe and the World, financial responsibility has mainly remained within the member countries.<sup>18</sup>

Turning to the scale of these operations, in 1833 Greece received guaranteed bonds worth 57% of its previous loans. Greece again in 1898 was granted guaranteed bonds corresponding to 19% of its outstanding debt. However, as the guaranteeing powers imposed a 61% haircut over the preexisting debt, the share of guaranteed bonds rose to close to half of the new debt stock (Esteves 2013). These fractions were even higher in the cases of Turkey in 1855 and China in 1895 and are comparable to the contemporary projects for the issue of Eurobonds. Applying Delpla and von Weizsäcker's (2010) proposal of issuing blue bonds up to 60% of GDP would imply, in 2011, a stock of Eurobonds worth 35% of the pre-existing Greek debt, and more than 50% of the Irish or Portuguese ones (see Figure 1). Where the historical cases depart mostly from the current Eurobond proposals is on the scale of mutualization relative to the guarantors' own debt stocks. The same application of Delpla and von Weizsäcker's proposal would involve a mutualization of more than 4% of the Eurozone's debt in the case of Greece and slightly more than 2% each in the Irish and Portuguese cases. In contrast, the scale of the historical operations was usually below 1% of the guarantors' joint debt stocks. The exception was the Chinese loan of 1895, which represented 2.5% of contemporary Russian debt (see Figure 2).

Having said that, a first conclusion to take from the historical data is the absence of 'convex scenarios' in the issue of mutualized debt. Not only were guaranteed bonds issued with an effective interest close to the average cost of funding of the guarantors, but in two cases the rate was below the average (Egypt in 1885 and Greece in 1898). The only possible support for the concern that the credit of more reputable countries might be mixed with that of less reputable ones is the first Greek loan of 1833. The effective interest rate of this loan (5.3%) was 126 basis points above the average cost of funding of the three guarantors.

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<sup>18</sup> With the exception of the bilateral British loan to Ireland in 2010.

However, there are two alternative candidates to explain this (see Figure 3). First is the fact that the loan only had a several guaranty. In second place, this spread may also be driven by the refusal of the London Stock Exchange (LSE) to list the new loan pending the settlement of the previous independence loans, which were in default since 1826. As shown by Flandreau (2013) the failure to list at the LSE involved a significant liquidity penalty, which the author estimates in the order of 150 to 200 basis points.

In studying the yields of Italian bonds before and after the unification of the country in 1861, Collet (2012) reaches a more pessimistic conclusion. She finds that the unified bonds were initially priced more harshly than the bonds of the legacy Italian states prior to unification. The difference between the weighted average of the pre-unification yield of the legacy debts and the post-unified yield stood at 155 basis points, which the author interprets as a unification premium. However, the initial yield post-unification was actually above the maximum of the pre-unification yields, which would imply a ‘super-convex’ scenario. More likely, this unification premium reflected other risk considerations beyond the simple pooling of risks of the legacy debts and probably overstates the convexity of the yields. In other words, Italy was initially treated by the markets as more than the convex average of its parts.

As mentioned earlier, the closest contemporary comparators are the bonds issued for the several bailouts and banking restructuring programs since 2010. The combined value of the European share of these operations is worth c. 4% of the total debt stock of the Eurozone today.<sup>19</sup> Despite the great variation in the credit standing of the nations guaranteeing these bonds, they were initially well received by the markets and were priced at yields substantially lower than the average of the guarantors and easily acquired AAA ratings. In the next section, we provide further historical detail on each guaranteed bond issue and highlight the historical context, particular conditions and evolution of each case.

## **4. Guaranteed bonds before the Great War**

### **4.1 The Greek guaranteed loan of 1833**

The modern state of Greece came into existence as a result of a lengthy war against the Ottoman Empire between 1821 and 1832, and the Greek guaranteed

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<sup>19</sup> According to Eurostat data. We added the bilateral loans to Greece and the loans organized under the EFSF, EFSM and ESM for Greece, Ireland, Portugal and Cyprus, while deducting the IMF share of the latter. The outcome is €340 billion.

loan of 1833 was an outcome of this conflict. Prior to the issuance of this loan, the Greek government had already contracted, with the support of the local Philhellenic Society, two loans in London, known as the Independence loans of 1824 and 1825 and amounting to £2.8 million. Unsurprisingly, the newly founded Greek state did not have enough resources to service the debt and very soon suspended interest payments.<sup>20</sup>

In February 1830, with the intermediation of the three powers Britain, France and Russia took the first steps towards the independence of the Greece in a conference held in London. In particular, the three protecting powers agreed to guarantee a loan of 60 million francs for Greece, which the government wanted to raise for the purpose of maintaining a military force essential to the safety of the country. This agreement was followed by a convention drafted during the London Conference of April 1832 where the three powers specifically stated the conditions under which financial assistance was to be granted. These provisions were embodied in the treaty of May 1832, according to which Russia, Britain and France granted a loan of 60 million francs under the following conditions:

1. The loan was to be raised by three installments of 20 million francs.
2. In each installment the three guaranteeing states were to become responsible for the payment of one third of the annual amount of the interest and sinking fund of the relevant installment.
3. Independently of the guaranty, the payment of the annual interest and sinking fund was first secured upon the revenues of the Greek state.
4. The service of the new bond was to be senior to the independence loans of 1824 and 1825.
5. The diplomatic representatives of the three guaranteeing countries in Greece would be specifically charged with supervising the fulfillment of these conditions.<sup>21</sup>

After the official granting of the guaranty, a loan agreement was reached with the house of Rothschild, and the contract was signed in Paris in May 1833. The issue price was fixed at 94 percent with a 5 percent coupon. The effective interest rate was therefore 5.3%, which was more than 100 basis points above the average cost of funding of the guarantors, as measured by the secondary market prices of their benchmark bonds at the time. Be it because of a ‘convex scenario’ or the liquidity costs of not listing at the LSE, this lesson was not lost on the contemporaries. In 1855, when the Turkish Loan Bill was being discussed in the House of Commons, the Chancellor of the Exchequer remembered the 1833 arrangement as follows:

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<sup>20</sup> Kofas (1981: 1-20), Wynne (1951: 281-283).

<sup>21</sup> HCPP 1831-32 (007) Protocols of conferences held in London relative to the affairs of Greece.

“Those who managed this loan for the Greek Government, guaranteed by the credit of the three Powers, contrived it so that, in the contract which threw all the credits together, that joint credit was lower than the credit of any of the three guaranteeing Governments, and the Greek Government lost the advantage of the comparatively high price of the English and French funds. For myself, I can hardly conceive a financial arrangement more ruinous to the State it proposes to assist, or less calculated to obtain the benefit of the guarantee afforded by those Governments.”<sup>22</sup>

Although the original agreement authorized only the first installment, as the needs of Greece were urgent, the powers consented to the flotation of the second series at the same time. More than one third of these funds were immediately spent on the war indemnity to Turkey. In 1835 and then in 1836 the Greek government pressed for the issue of the third installment, however due to disagreement between the three powers, the advance of the remaining funds was delayed. Eventually in 1836 the third issue was approved, but the proceedings were devoted to the service of the two first installments.<sup>23</sup>

Due to continuous fiscal difficulties, in 1836 the Greek government deferred the payment of the guaranteed loan until 1840, when the payments were resumed, but only to be suspended again in May 1843. As a response, the three guaranteeing states demanded that the Greek government scaled down all public expenditure and assigned the custom proceeds of the port of Syra as a guaranty for the future service of the loan. Greece eventually agreed to these conditions in September 1843 but due to political turmoil the ratification of this agreement was delayed until 1845.

This situation did not change until the Crimean War, after which Britain, France and Russia appointed their diplomatic representatives in Athens to act as a financial commission to investigate Greek finances. The commission reported in 1860 proposing extensive fiscal reforms targeting both government spending and revenue. Moreover, the commission agreed that Greece could allocate annually a minimum sum of 900,000 francs for servicing the guaranteed debt without hindering its public services. Although the Greek government accepted this arrangement in June 1860, the payments did not follow. Overall, the problem of

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<sup>22</sup> HCH 1855 “Turkish Loan Bill”, Vol. 139, Commons Sitting of Friday, 27 July 1855, columns 1469-1470 url: [http://gateway.proquest.com/openurl?url\\_ver=Z39.88-2004&res\\_dat=xri:hcpp&rft\\_dat=xri:hcpp:hansard:CDS3V0139P0-0026](http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&res_dat=xri:hcpp&rft_dat=xri:hcpp:hansard:CDS3V0139P0-0026)

<sup>23</sup> Wynne (1951: 284).

the 1833 loan remained unsolved since the Commission did not have any supervisory or administrative role over the finances of the Greek government.<sup>24</sup>

In 1862, at last, the conditions changed due to dethronement of the Greek king Otto, whose rule had been characterized by fiscal difficulties, lack of financial and monetary reforms, and his “inability to dissolve the nation’s foreign debt”.<sup>25</sup> The second son of the King of Denmark, who was put forward by Britain, eventually filled the vacancy. As a gesture to the new king, in 1864 the three powers agreed to abandon a total of £12,000 a year from the debt charge. This sum was equal to one third of the prescribed minimum annuity of 900,000 francs. These funds were dedicated to the service of the 1833 guaranteed loan, and its amortization was finally completed in 1871. By that time the indebtedness of Greece to the powers for their payments on account of interest and sinking fund amounted to about 92 million francs.<sup>26</sup> Moreover, according to the terms of 1864 agreement:

1. A new 5 % bond to the value of £1,200,000 was to be issued for the conversion of each £100 of 1824 and 1825 bonds at rates of 31.6 percent and 30.5 percent.
2. New bonds were also issued to exchange for 11.6 percent of the interest arrears.
3. Service of the new bonds amounting to £75,000 a year was to be secured by the customs of Corfu and by a second charge on the stamp duty.

As for the independence loans an agreement was finally concluded in September 1878; by then the nominal amount of debt, including accumulated arrears had grown to about £10,000,000.<sup>27</sup>

The history of early Greek debt illustrates several of the topics in this paper. An unsustainable debt burden relieved with external financial assistance under mild conditionality led to a mission creep. Guarantors thought that they could control moral hazard by releasing funds in instalments subject to fiscal reforms by the Greek government. Instead they had no option but to release all funds in return for little cooperation from the government just to prevent it from defaulting. Later in the history the bond, the conflicts between the guarantors added a layer of moral hazard, which deteriorated even more the governance of the Greek loans.

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<sup>24</sup> Levandis (1944: 44-51).

<sup>25</sup> Kofas (1981: 132)

<sup>26</sup> HCPP 1864 (144) Greek loan. A bill for authorizing the relinquishment in favour of the King of the Hellenes of certain money payable in respect of the Greek loan; HCPP 1864 [3346] Papers relating to the arrangement concluded at Athens in June 1860 respecting the Greek loan.

<sup>27</sup> Levandis (1944:28).

## 4.2 The Turkish 4% loan of 1855

Although the origins of the Ottoman Empire's attempts to contract a loan in international markets can be extended back to the 1780s, it issued its first bond in 1854 in order to finance the Crimean War (Akar and Al 2003). The underwriter (Palmer and Goldschmidt) initially demanded that the British government acted as guarantor, however the British prime minister, Palmerston, was reluctant to provide financial help in the form a guaranty.<sup>28</sup> The payments of this bond were secured by part of the Egyptian tribute. The authorized amount for this issue was £5 million, but the Ottoman government only raised £3 million. However, by 1853 the war expenditure had reached almost 67 per cent total government spending and on the 5 April 1855 the Ottoman government officially requested the remaining £2 million and asked the British and French governments to jointly guarantee the issue.

The situation worsened by May due to the collapse of the peace negotiations in Vienna and with the prospects of more extensive military operations, it was decided that a bigger sum was needed. A new loan of £5 million was organized under the joint guaranty of Britain and France. After lengthy discussions in the House of Commons on 20 July the financial resolution authorizing the guaranty was passed by a majority of only three.<sup>29</sup> According to the convention signed between the French, British and the Ottoman governments, the service of this loan was to be met by the remaining part of the Egyptian tribute together with the customs income of Izmir and Syria. Moreover, in case of default, the interest and repayments were guaranteed jointly and severally by Britain and France.<sup>30</sup>

This joint guaranty enabled the issue of the bond above par and at an interest rate of 4 per cent. The net interest was 3.9%, almost exactly the average cost of funding of the guarantors, which in the month prior to the issue averaged just 3 basis points below the effective rate on the Turkish bond. But these favorable terms came with several conditions. One condition of the guaranty was to use the proceedings entirely for war purposes. In order to supervise the expenditure, Lord Hobart and the Marquis de Ploeuic were assigned as British and French representatives. The role of these commissioners, who were sent to Istanbul

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<sup>28</sup> Anderson (1964: 47-51)

<sup>29</sup> Anderson (1964: 55)

<sup>30</sup> HCPP 1968 Declaration exchanged between the British and French governments relative to the Turkish loan. Signed at London, July 27, 1855" and HCPP 1961 Convention between Her Majesty, the Emperor of the French, and the Sultan, for the guarantee of a loan to be raised by the Sultan. Signed at London, June 27, 1855.

despite the opposition of the Ottoman government, was to verify the treasury accounts and ensure the funds were spent in support of the army (Kiray 1988, Al 2007). However, due to the diplomatic resistance of the Ottoman Empire, the work of the commission started only in January 1856, after several army contracts had already been signed in order to evade its control. By September 1856 all funds were spent and the commission finished its work.<sup>31</sup>

In October 1875, when the Ottoman Empire defaulted on the interest payments on its outstanding debt of c. £200 million, the Porte also suspended the prescribed sinking fund of one per cent of the guaranteed loan. Despite this, the sums due continued to be regularly advanced by the Bank of England to the bondholders until the settlement of the Greek default in 1881.<sup>32</sup> Although, it should be noted that the tribute payable by Cyprus to the Turkish Government had been retained from 1878 by Great Britain and applied to the service of the loan. This bond was eventually retired in 1943.<sup>33</sup>

As in the previous bond, the weak conditionality imposed by Turkey's creditors led to an eventual default, during which the creditors honored their guaranty. The link between post-contractual opportunism and default is, of course, less clear than in the Greek case, since 21 years separate the 1855 loan from the 1876 default, a period when the Ottoman external debt increased 23 fold (Tuncer 2015).

### **4.3 The Egyptian 3% loan of 1885**

The Egyptian government contracted its first "state loan" in 1862, and from this year to 1873 the total amount of loans raised in international financial markets reached the sum of £E68 millions.<sup>34</sup> In 1873, the government issued a large external loan, amounting to £E32 millions, with the Imperial Ottoman Bank, Bischoffsheim, Société Générale and other banking houses. This loan was secured by all the revenues of the railways of Lower Egypt, the proceeds of the personal and indirect taxes, the salt tax, as well as a share of the receipts from the Moukabala.<sup>35</sup> Taken together with the previous guaranties, this covered almost all the general revenues of the Egyptian government. Although the loan of 1873 was seen as a success for the government, the 1876 financial crisis, which led to the

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<sup>31</sup> Anderson (1964:61) and Badem (2010: 326-327)

<sup>32</sup> HMT (1916) "Turkey: Ottoman public debt 1854-1914: External Guaranteed Loan 1855: memoranda by S A Armitage-Smith"

<sup>33</sup> Wynne (1951: 393-395).

<sup>34</sup> Crouchley (1938: 120), CFB (1914).

<sup>35</sup> This name was originated from the "compensation" introduced by the Egyptian government in 1871, which provided landowners the option of paying six years' land tax in advance with a discount. See McCoan (1877: 122)

bankruptcy of the Ottoman Empire and several other states, had an immediate effect on Egyptian credit, and the government suspended the payments on outstanding debt.

A settlement was reached on the same year, whereby an institution named the “Caisse de la Dette Publique” was established, under the direction of foreign commissioners nominated by their respective governments; these commissioners were authorized to receive the revenues intended to service the debt directly from the local authorities. Taxes from several Egyptian provinces, monopolies and customs revenues were assigned to the Caisse. Moreover, the debt settlement established an Anglo-French control over the finances of Egypt. Finally, the agreement called for the unification of the entire debt stock, which at the time stood at £91 million. Apart from its financial consequences, this settlement marked the beginning of a set of historical events, which in the end led to the military takeover of Egypt by Britain in 1882. Within a few months of the British taking over, the Anglo-French control was abolished. The British Consul-General was given overall authority and English advisers were posted to the Egyptian ministries.<sup>36</sup>

The first thing that the new British administration faced with was a budget deficit due to the costs of the military campaign. The net revenues from the Daira<sup>37</sup> and the domains were insufficient for the amounts required to service the loans secured by these properties. In 1884 the government was in need of a new foreign loan and recognized that it had to expand state revenues to maintain a minimum level of public works and handle the heavy expenditure on account of the war in Sudan. According to Edgar Vincent, then financial adviser to the Egyptian government, “the financial history of the year [1884] may be summed up in the statement that it consisted in a long struggle to stave off bankruptcy”.<sup>38</sup> In fact, from early 1884 the Rothschilds had already started advancing funds to the Egyptian government in order to prevent a default and the British government was quite keen that they carried on this arrangement. Rothschilds requested that the British government guaranteed a new loan to consolidate the debt, but the government refused on 6 August 1884 by stating that “her majesty government have no authority to guarantee the repayment of any debt of the government of Egypt, nor can they determine of present the precise amount of the influence to be exercised by them with regard to the financial engagement of that country”. Nevertheless, the foreign secretary Lord Granville reassured that the government

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<sup>36</sup> Cromer (1908), Sayyid-Marsot (2007).

<sup>37</sup> Dairas or “administrations” refer to the large estates of the Egyptian Khedive and his family. See McCoan (1877: 146)

<sup>38</sup> FO 1885 “Reports on the State of Egypt and the Progress of Administrative Reforms”, Egypt, No.15 [C. 4421.] p. 51-52

did “not entertain any doubt that the advance of your house ought to be and will be repaid”.<sup>39</sup> As a consequence, the Rothschilds continued renewing their advances to the Egyptian government until an agreement for a new loan was reached in July 1885.<sup>40</sup>

To this effect, the British government invited in April 1884 the representatives of five other powers (Germany, Austria, Russia, France and the Ottoman Empire) to a conference in London. After prolonged negotiations regarding the nature of the guaranty, an agreement was signed by the six powers in March 1885, according to which the Egyptian government was authorized to take out a new loan not exceeding £9 million and at a rate not to exceed 3.5 per cent. This loan was jointly and severally guaranteed by Germany, Great Britain, Austria-Hungary, Russia, France and Italy.<sup>41</sup> The effective interest rate at launch was a very moderate 3.1%, which compares favorably with the average cost of funding of the guaranteeing powers, which in the month prior to the issue of the Egyptian bond stood at 4.2%.<sup>42</sup> Even the average of just the yields of Britain and France was 3.4% in the same month. Despite the already mentioned concerns about ‘convex scenarios,’ the loan was floated but 13 basis points above the yield of British consols.<sup>43</sup> The heavy involvement of the British government in preventing an Egyptian default prior to the agreement to issue the guaranteed loan is a striking example of the political nature of these operations and probably explains in part the low yield at issue.

The 1885 convention also introduced a few other adjustments to the financial position of Egypt. During the negotiations, Britain had advocated a permanent reduction of interest on the old debt while France had opposed any reduction. As a compromise, the convention provided a temporary tax of 5 per cent on the coupons of previous loans (Preference and Unified) due in 1885 and in 1886 to supplement the funds available to the Egyptian government.<sup>44</sup>

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<sup>39</sup> RA 1884 “Egyptian loan 1884- 1885 private correspondence Nathaniel de Rothschild and Lord Granville and Egyptian Finance Minister” XI/111/16

<sup>40</sup> FO 1885 “Reports on the State of Egypt and the Progress of Administrative Reforms”, Egypt, No.15 [C. 4421.] p. 51-52, and 85.

<sup>41</sup> HCPP [C.4341] Egypt. No. 7 (1885). “Convention between the governments of Great Britain, Germany, Austria-Hungary, France, Italy, Russia, and Turkey, relative to the finances of Egypt. Signed at London, March 18, 1885.”

<sup>42</sup> The bonds used were the 3% British consols (yield of 3%), the 3% French *Rentes* (3.7%), the 4% Russian Nicholas Railway (5%), the 4% Prussian consolidated (3.9%), the 4% Austrian Gold *Rentes* (4.9%) and the 5% Italian *Rendita* (4.6%).

<sup>43</sup> See the *Economist*, 21.3.1885, p. 344.

<sup>44</sup> Wynne (1951: 621) and RA 1885 “Egyptian Guaranteed Loan Contract – 3% £9,424,000 24/8/85-23/4/87”, 000/401D/7

From 1885 onwards Egyptian finances started to improve, and by 1890 the budget yielded a surplus. During the period 1885-1903 the Egyptian government contracted another four foreign loans with an average effective interest rate of 4 per cent. The final major event of the period was the agreement between Britain and France in April 1904. On the eve of this agreement, four separate bonds remained: the Guaranteed Debt created in 1885; the Privileged Debt, bearing interest (since the conversion of 1890) at 3 per cent; the Unified Debt, bearing interest at 4 per cent and finally the Daira and Domains Loans. The agreement maintained the existing structure and only changed the revenues assigned for the service of these debts.<sup>45</sup>

#### **4.4 The Chinese 4% (Franco-Russian) loan of 1895**

Prior to 1895 the majority of Chinese external bonds were small sums issued by the provinces and secured by the corresponding receipts of the Chinese Maritime Customs. A significant part of these external loans were contracted in order to pay indemnities and to finance war, especially with Japan.

In 1895, following the defeat in another war with Japan, China needed funds to meet the first installment of the war indemnity of 200 million kuping taels. According to the Shimonoseki Treaty signed on 17 April, China was required to pay half of the war indemnity in one year, and the rest in 7 years with 5 per cent interest.<sup>46</sup> After the imposition of the peace treaty, the Chinese government considered the issuance of a loan, and contemplated the appointment of the British diplomatic representative in China, Sir Robert Hart, to take charge of the financial arrangements. However, this proposal was met with strong resistance from Russia, which was keen on providing a loan to China through a joint Franco-Russian banking consortium. Consequently a loan amounting to 400 million francs was issued at 96.5 per cent and carrying an interest of 4 per cent. The effective interest of 4.15% stood about 27 basis points above the contemporary yields of Russian bonds. Maturity was 36 years and it was secured by the revenues of the Maritime Customs of China, with priority over all subsequent loans.<sup>47</sup> In the event that the service of the loan was delayed or suspended, the Imperial Russian Government guaranteed to pay any amount due. In order to ensure the timely payment of the loan, the Chinese government also committed not to use the receipts of the Chinese Maritime Customs for the issue of new loans until amortization of the 1895 bonds was completed.<sup>48</sup> The fact that all issues

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<sup>45</sup> Crouchley (1938: 169-171); Feis (1972: 393); Brunyate (1906).

<sup>46</sup> FO 1895 Miscellaneous Papers, Vol. 48, p.160.

<sup>47</sup> Viner (1928), Feng-Hua (1919: 27), Kimber (1920: 362).

<sup>48</sup> FO 1895 Miscellaneous Papers, Vol. 48, p.336 and MacMurray (1921: 40-41)

were secured by the proceeds of the Maritime Customs raised concerns among the contemporary investors:

“[By] pledging the maritime customs the Chinese government is alienating a source of revenue upon which it will probably find it very difficult to get on without... The broad fact is, that the one really good security which China has to offer has already been charged pretty heavily, and the idea which seems to prevail at present that she may safely be trusted to almost any extent is utterly fallacious.”<sup>49</sup>

Contrary to what one might expect, the problem with the 1895 guaranteed loan was not China or the Maritime Customs administration but Russia itself, which was not in a favorable fiscal condition. Uncharacteristically, the yields of the Chinese guaranteed bonds performed better than the loans of its guarantor state Russia after the Russo-Japanese War 1904-1905.

#### **4.5 The Greek guaranteed loan of 1898**

The settlement of the independence loans in 1879 marked the reappearance of Greece in the financial markets of Europe, followed by an era of rapid debt expansion, which eventually culminated in another default in 1893.<sup>50</sup> Immediately after the default, in December 1893, the Corporation of Foreign Bondholders and bondholder representatives of other countries appointed a committee to start negotiations with the Greek government.<sup>51</sup> The formal negotiations had a slow start because of the Greek demand of an extensive reduction in the capital and interest of the outstanding debt.

The defeat in the 1897 war with Turkey over Crete added up to the Greek financial troubles. According to the peace terms, determined through the mediation of six powers (Austria-Hungary, France, Germany, Great Britain, Italy and Russia), Greece was condemned to pay a war indemnity, which made the financial position of the country even worse. In accordance with the preliminaries of peace, in 1898 the powers assembled a commission to report on the financial condition of Greece.

On the basis of this report, Greece agreed to sign the 1898 Law of Control with the representatives of the foreign powers and consented to the creation of an International Financial Commission. Moreover, it agreed to pledge the gross proceeds of the monopolies (salt, petroleum, matches, playing cards and cigarette

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<sup>49</sup> “Chinese Borrowing” *The Economist* (London, England), Saturday, July 13, 1895; pg. 907

<sup>50</sup> Levandis (1944: 58-68).

<sup>51</sup> CFB (1893: 85).

paper), tobacco dues, stamp dues and the Piraeus customs duties to the service of the gold loans. The collection of these revenues was placed in the hands of a company registered in Greece, under the effective control of the Commission. In return, the powers agreed to guarantee a new loan to allow Greece to pay the indemnity. The maximum amount of the loan was fixed at £6.8 million, but the actual amount issued was £6,023,700.<sup>52</sup> In order to ensure a favorable rate, the three governments agreed to make their guaranty “joint and several” -instead of only several as they had done in 1833. As a result, the bonds, bearing 2.5 per cent coupons were marketed at a small premium and oversubscribed. Once more, the combination of guaranteeing powers of different credit standing did not markedly affect the effective yield on the guaranteed bonds. The average yields of the three powers were 2.9% before the floating of the new Greek bond and, in particular, British consols paid but two basis points below the Greek guaranteed bond. In the post-1898 period, Greece was able to contract eight more external loans, totaling £28 million. More than half of this value was used to finance the Balkan Wars in 1912-1913.

## 5. Conclusions

This paper has shown that debt mutualization solutions were previously tried in Europe, though in a smaller scale than those considered today. We revisit the debate on Eurobonds as a solution to the fiscal crisis in the Eurozone by providing an overview of the relevant economic and historical literature on debt mutualization around the issues of debt dilution, moral hazard and conditionality. We then focus the argument on the closest historical parallels to today’s proposals: the guaranteed bonds issued before World War I, and uncover a nineteenth-century debate, which shares uncanny similarities with the current arguments pro and against Eurobonds. As envisaged by today’s proposals, these bonds were seen by the markets as instances of debt mutualization, but there are also significant differences between the two periods we compare.

As regards to the aims of debt mutualization, we recognize that the current debate mostly emphasizes economic factors such as financial stability, transmission of monetary policy and improving the efficiency of the sovereign bond market. Before 1914 international political and strategic considerations, great power rivalry, and military support played a significant role in debt mutualization. One could perhaps construct an argument about how the strengthening the Euro via issuance of Eurobonds can also be interpreted from an international political economy perspective. This, however, is not always

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<sup>52</sup> HCPP, 1898 [C.8778] Greece. No. 1 (1898). Despatch from Her Majesty's minister at Athens, inclosing the Greek law of control.

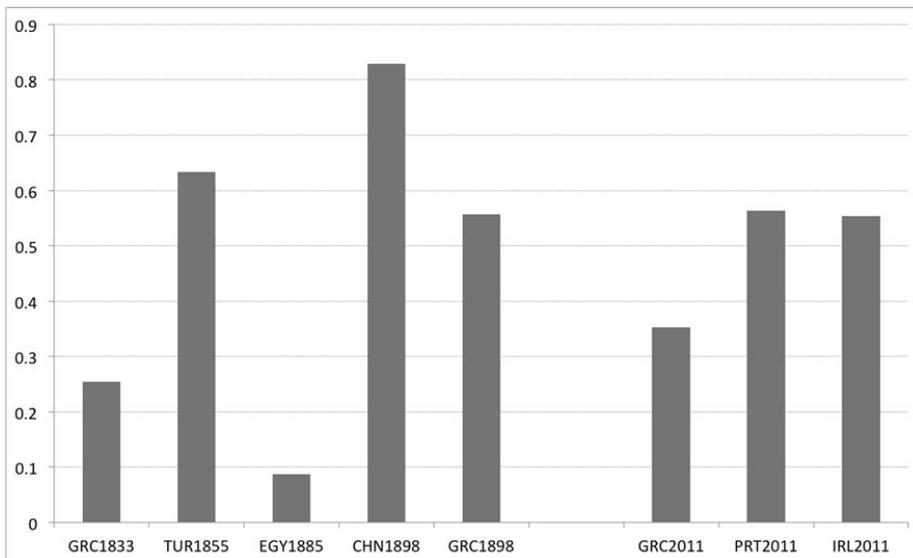
explicitly stated in the current debate and we have not elaborated on this issue in the paper.

In terms of practical implementation of the debt mutualization via Eurobonds, the current debate mainly revolves around issues of moral hazard, debt dilution and conditionality. One conclusion to draw from the historical discussion is that the fears about short-run dilution and moral hazard were not unknown to pre-1914 market participants and guaranteed bonds were issued under severe criticism from market participants. Debt dilution and moral hazard concerns were addressed within the governance of the sovereign debt market before 1914 from several types of credit enhancements included in bond covenants to international financial control to enforce debt repayments. Nineteenth century shades of conditionality ranged from special debt commissions as in the case of guaranteed loan of Turkey in 1855 to partial to the transfer of fiscal sovereignty to foreign creditors as in the Greek guaranteed bond of 1898.

Historical discussion and research on pre-1914 guaranteed bonds also suggests that the dilution of outstanding obligations may be an overplayed argument despite the similarities in the scale of debt mutualization between now and then. Our review of historical literature and evidence demonstrates that markets treated guaranteed bonds and countries' own bonds differently. Elsewhere, we show more formally that the investors priced the guaranteed bonds on the basis of the credit risk of guarantors, which may not necessarily be a good thing if the credit of the guarantor state was in doubt as in the case of Russian guaranty of the Greek and Chinese bonds (Esteves and Tuncer 2016). Here again, the present imitates history, as the reaction of the spreads of the EFSF bonds to the downgrade of eight of the guaranteeing sovereigns in late 2011 is there to show.

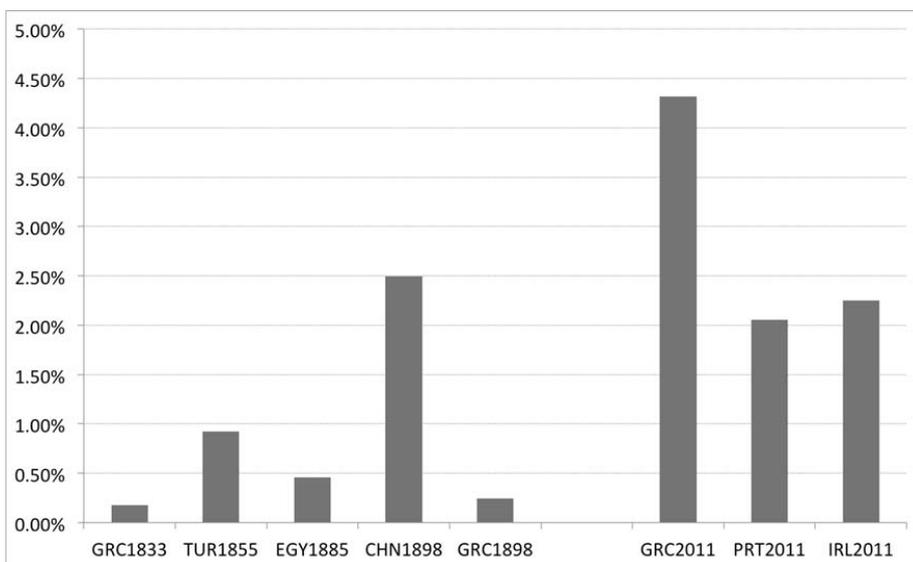
Finally, our review of the nineteenth century guaranteed bonds revealed how the nature of the guaranty affected the governance of mutualized debt. A several-only guaranty contributed to creditor moral hazard in the case of the first Greek loan. Furthermore, non-overlapping constituencies of guarantors and external creditors also created incentives for creditor moral hazard, this time illustrated by the second Greek bailout of 1898.

**Figure 1: Share of blue (guaranteed) bonds in borrowers' ex-post debt stock**



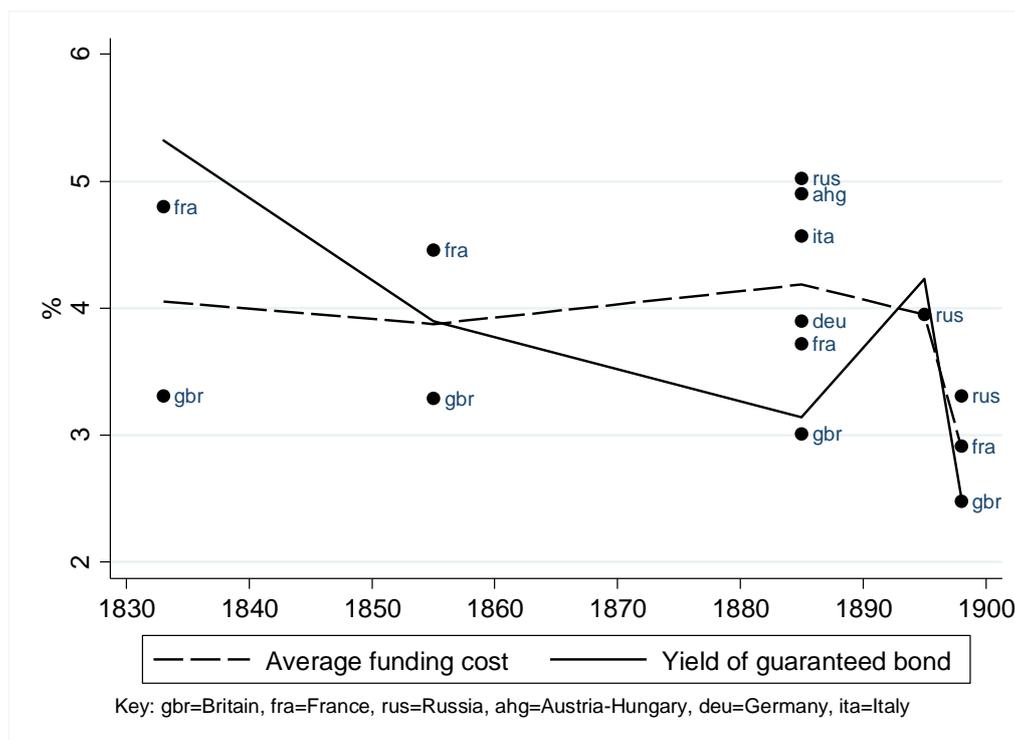
Sources: ECB and see text.

**Figure 2: Share of blue (guaranteed) bonds in guarantors' debt stock**



Sources: ECB, Almanach de Gotha (1834), Bonney (2010), Flandreau and Zumer (2004), Mitchell (1962)

**Figure 3: Guarantors' funding costs and yield of guaranteed bonds, 1832-1898**



Sources: Elaborated from Esteves and Tuncer (2016).

Note: The average cost of funding is established from the secondary yields of the following loans (when applicable): the 3% British consols, the 3% French *Rentes*, the 4% Russian Nicholas Railway, the 4% Prussian consolidated, the 4% Austrian Gold *Rentes* and the 5% Italian *Rendita* (4.6%).

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