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The Changing Role of Global Financial Brands in the Underwriting of Foreign Government Debt (1815-2010)

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Abstract

This paper covers the long-term evolution of the primary market for foreign government debt. We discuss the role of financial intermediaries as underwriters and distributors of securities, providers of information, and lending of last resort services since the early 19th century, and the evolution of this role. We underscore the role of the prestige of global financial brands in sustaining early foreign debt markets and its weakening in the modern era.

Introduction

The recent European Government debt crisis has brought renewed focus on the process through which foreign government debt is packaged and sold. A lot of attention has been given to rating agencies and they have received heavy criticism for their lack of foresight and overreaction. But rating agencies do not exist in a vacuum. Nor do they buy or sell government bonds, or own privileged information on the exact financial position of borrowing governments. Holding them responsible for all the problems that arise when they arise may be somewhat complacent. While their record in predicting foreign government debt defaults is far from perfect, there is evidence that this has always been the case, even before the agencies moved to the issuer pays model. For instance, rating agencies failed to anticipate the interwar debt crisis. But such events are hard to predict, and there are limits to how much responsibility we can reasonably assign to the rating agencies.[1]

Another intermediary is the investment banks. They are arguably more important players. As underwriters and distributors of government securities they must bear their share of responsibility in the successes and failures of the global finance system. They buy and sell, and make recommendations to clients.

In the recent "sub-prime" crisis, they have been blamed for having succumbed to conflicts of interest, underwritten poor products and then exploited inefficiencies in the way rating agencies operate to distribute them. In essence, they delegated to rating agencies a monitoring role, while their exposure to the market and easy access to borrowers and government's officials suggest that they must possess information of superior quality (compared to rating agencies). When trouble came investment banks were in a unique position to hedge whatever exposure they had to sub-prime instruments. Having originated deals which some insider emails described as "crappy" they could short them before anybody knew.

Some observers claim that a similar pattern can be identified in foreign government debt. Investment banks systematically talk up their issues and thus appear to take side not with the

[1] For a classic charge against rating agencies' shortcomings with sovereign debt, see Ferri, Liu, and Stiglitz (1999); For evidence that, already in the 1930s, they failed to predict foreign debt crisis, Flandreau, Gaillard and Packer (2010).

investor but with the borrower, from whom they receive fees.[2] When Greece's debt crisis erupted, allegations were made that Goldman Sachs had structured a number of swaps that had the effect of concealing the rise of Greece's debts by deft exploitation of the way through which official reporting occurred.[3] There is casual evidence of excessively high fees associated with underwriting "bad" governments. We estimate that the average fee on Greek government debt deals during the period 2006 to 2009 was more than 40% higher than the European Average (0.22% of the amount issued against 0.15%), and some Greek issues had fees at or close to 0.3%. During the same period, the average Greek spread (over German bonds) was less than 40 bp (basis points) against 56bp for European issues.[4] A possible interpretation of this is that the underwriters (Goldman Sachs was almost always one of them) knew things that investors did not. The "excess fee" given the lower spread at issue may have rewarded efforts to gloss it over in promotional "road shows". Consistent with this view are reports that Goldman Sachs may have shorted Greek debt immediately after it arranged what some observers have called "shady swaps".[5]

At the end of the day, this failure of gate-keeping (which obviously was not only limited to foreign government debt) has contributed to a massive credit crunch and retrenchment of several capital markets. This has forced government agencies (states, central banks, and the IMF) to step in through various interventions to provide support to the collapsing global system. But apart from Bear Stearns and Lehman Brothers, which failed, prime brokers and investment banks have fared quite well in the ensuing period and managed to return to profitability. This has renewed the widespread and justified concern about conflicts of interests.[6]

This entry provides a historical perspective on primary markets for foreign government debt and the intermediaries that manage them. Primary foreign debt markets are important because this is where countries seeking to attract capital must come and get priced. Even when governments do not need external finance, they are said to access these markets in order to provide a benchmark to other domestic borrowers. It is in foreign debt markets, therefore, that reputations are fabricated and as a result it is where "gate-keeping" takes place.

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[2] Nieto-Parra and Santiso (2007) and Nieto-Parra (2010).
[3] According to *The New York Times*, in 2001, just after Greece was admitted to Europe's monetary union, Goldman helped the government quietly borrow billions, people familiar with the transaction said. That deal, hidden from public view because it was treated as a currency trade rather than a loan, helped Athens to meet Europe's deficit rules while continuing to spend beyond its means.
[4] Authors computations from DCM Analytics (Dealogic) database.
[5] www.businessinsider.com, "Goldman Sachs Shorted Greek Debt After It Arranged Those Shady Swaps" John Carney, Feb. 15, 2010.
[6] See US Senate 2011 for the most recent indictment of the role of investment banks in the Subprime Crisis.

Our summary of the evolution of foreign governments' bond underwriting during two centuries underscores that the role of financial intermediaries has experienced important transformations between "now" (which we take to correspond to the period of the re-emergence of foreign government debt markets in the 1990s) and "then" (which we take to correspond to the period that goes from the end of the French Wars in 1815 and the New Deal Financial Acts of 1933 and 1934).

Today, underwriters merely act as distributors of foreign government securities. The certification (assessment) of the quality of foreign government debts is principally made by rating agencies. Crises are dealt with the International Monetary Fund, which also enforces, through its Article of Agreements for standard of disclosure (Article IV) transparency. This is in sharp contrast with the earlier regime. Until and including the interwar crisis underwriting was a complex financial service that included certification, distribution properly speaking, and the provision of post issue support services and lending of last resort facilities. Modifications to this way of doing business took place during the 1930s, when New Deal's financial Acts transformed the existing setting by introducing legal underwriter's liability and ensuring disclosure. The short-term effect was the closing down of foreign debt markets for a fairly extended period. The long-term effect was that when these markets were reopened in the 1980s and 1990s, they operated in an entirely different way than they had in the past.[7]

We use these findings to provide a new interpretation of the international financial system as a "structured product". We compare the "then" period (1815-1934) with the now period (1993-"today", which given data availability at the time of writing we set to 2007). Two main ways of "structuring" foreign debt contracts are found. In the "now" contract, the underwriting investment bank sells a promise to do its best to distribute the security. It makes no pledge to the investor as to the intrinsic value of the bond and no pledge to the borrower as to its commitment to help make a durable market for the securities it underwrites. The modern underwriting contract is today a "dry" brokerage arrangement to help supply and demand meet, not to make a market. In the past, the underwriting contract included a certification service and the provision of an implicit "put" (which enabled investors to sell back the security at a minimum loss). While we are agnostic as to the absolute merits (or demerits) of these different ways of packaging, we do provide a discussion in the conclusion of their implications and significance.[8]

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[7] See Flandreau (2011) for details.

[8] This finance perspective differs from macroeconomic perspectives such as Bordo, Eichengreen and Irwin (1999), Bordo et al., (2001), Mauro, Sussman and Yafeh (2006); Rogoff and Reinhart (2009).

Section I. Focus, Figures and Facts

a) Focus

Our study casts its sights on two main "epochs" and a limited number of markets. The epochs are "Now" (1993-2007) and "Then" (1815-1934) which we subdivide into a series of sub-episodes that coincide with lending booms (1819-1825; 1845-1876; 1877-1895; 1896-1913; 1920-1930). We have focused on the main markets, which were London during most the 19^{th} century, Paris during the late 19^{th} century, New York during the interwar period, and both New York and London in the current era.[9] As shall appear clear later, these markets have broad similarities in that investment banks are in charge of matching borrowing governments with a clientele of ordinary and institutional investors (pension funds, investment trusts etc).

We have deliberately left aside the long interregnum that corresponds to the period between the collapse of global bond markets (in the early 1930s) and their reemergence in the 1990s. The neglect of the "interregnum" of 1933 to 1992 is supported by the relatively more limited role of international bond finance provided during the period that stretches between the adoption of the New Deal's financial Acts and the early 1990s. There was some limited underwriting of the type described in this paper, but it represented only a modest fraction of capital flows. The bulk of government borrowing was secured on entirely different organizational principles, such as syndicated lending or intergovernmental loans, making comparison irrelevant and misleading. Reflecting this, Gaillard (2005) notes that this interregnum period was a low ebb in country coverage by rating agencies such as Moody's. Last, this focus is also consistent with the fact that measures of financial globalization reached a low until the current "modern" period started.[10]

It was not until the restructuring of Latin American defaulted commercial loans under the auspices of the U.S. Treasury Secretary Nicholas Brady that lending to foreign governments resumed in the 1990s, a story that is familiar to the student of long run trends in these markets. The first Brady deal was reached with Mexico in 1989 and produced exchange traded securities with long maturities and high yields.[11] The Mexican restructuring provided a pattern

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[9] This leaves out Berlin during the pre-1914 period and London during the interwar, but we are skeptical that this would change fundamentally the main conclusions.

[10] Bayoumi (1990), Flandreau and Rivière (1999), Bordo and Flandreau (2003).

[11] As a result of the arrangement, existing non tradable bank loans could be swapped for long term debts that were tradable. A choice was offered between i) 30-year bonds that would provide a substantial discount but would yield an interest rate higher than the LIBOR and ii) 30-year par bonds that would yield a low interest rate. (Vasquez, 1996).

for other countries who then managed to issue Brady bonds (Costa Rica in 1989, Venezuela in 1990, Uruguay in 1991, Argentina and Brazil in 1992). Credit rating agencies (CRAs) were closely involved in that process and they boosted their sovereign coverage capacities as sovereign offerings expanded. As the number of sovereigns that were assigned a rating doubled between 1989 and 1996 (increasing from 28 to 55 countries in the case of Moody's), CRAs also managed to start charging sovereign issuers because more and more governments, aware of the fierce competition on sovereign bond markets, solicited a rating. Interestingly, they had not been able to do so in the previous era (the interwar period) when resources came from investors who purchased the rating books.[12]

b) Figures

To be able to form an idea of the business of underwriting one must collect both qualitative information pertaining to how the business was organized and statistical information on market size, league tables (the ranking of underwriters), and fees. This is easier said than done. The microeconomic aspects of foreign government debt underwriting emphasized here have generally been neglected by earlier research.[13] Some attention has been given to some features of the structuring of foreign government debt, such as currency of denomination (the so-called "original sin" problem, Eichengreen and Hausmann 2005) or the addition of Collective Action Clauses (CACs).[14]

To document modern aspects of the business of underwriting we collected soft and hard information. First we met with a large number of people from investment banks and institutional investors in London and New York during a period between October 2006 and March 2007. Sovereign bond underwriters today are investment banks and large universal banks but not commercial banks.[15] A handful of firms are involved in this business: ten control more than 90% of the market in New York. Interviews included two parts. One was the filling in of a questionnaire. We also gleaned many insights by letting interviewees describe freely experiences they found "typical". Our source for quantitative information was

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[12] See Flandreau, Gaillard and Packer (2010) for details.

[13] One of us, on a consulting visit to the IMF during the mid 2000s was struck to discover that people working in the capital markets division did know relatively little of the actual operation of foreign debt markets. The empirical literature on primary sovereign bond markets is limited. Some studies discuss emerging countries international bond market access (Eichengreen and Mody, 2000; Grigorian, 2003; Gelos, Sahay and Sandleris, 2004; Fostel and Kaminsky, 2007). Others provide brief descriptions of the role of banks as underwriters in emerging economies (see Hawkins, 2002).

[14] Eichengreen and Mody, (2004), Gugiatti and Richards (2003); Becker, Richards and Thaicharoen, 2003; The relevance of micro aspects of foreign debt pricing is emphasized by Nieto-Parra (2009) who provides evidence of the predictive power of underwriters' fee for future crises in recent times.

[15] This is in contrast with the market for corporate bonds where commercial banks get involved, in particular for small firms issues.

modern databases from DCM Analytics, the fixed income product of Dealogic, an investors and financial intermediaries service firm that provides global coverage of the debt capital markets.

By contrast to the current literature, the historical literature (notably the business history literature) is rather rich in describing the process of underwriting and distributing government securities. In the 19th century, underwriters included originally merchant banks (corresponding to modern "investment banks" nowadays) such as Baring, Rothschild, Hope, Goschen, the Hong Kong and Shanghai Bank, etc. Commercial or "deposit" banks played an increasing role over time (Suzuki 1994, Flandreau 2003). During the interwar period, the New York market for international debt was operated by both investment banks (JP Morgan, Kuhn and Loeb, Dillon and C°) and commercial banks (Guaranty Trust, National City Bank). While formally banned from selling securities, commercial banks used vehicles known as security affiliates, which managed the issue under a related name (such as the "National City Company") and used the facilities of the sister company (Peach, 1941 and Mintz,1951).

Observers and historians such as Drummond (1908), Jenks (1927), Finnie (1934), Cairncross (1953), Landes (1958), Chapman (1984), Suzuki (1994), Flores (2004, 2010), and Flandreau and Flores (2009, 2011) provide detailed information on the process of underwriting in London during the 19th century. The perspective of leading underwriters is found in the works of business historians (Gille (1965 and 1967) for Rothschild; Ziegler (1988) for Baring; King (1988) for the Hong Kong and Shangai Banking Corporation). A number of published and unpublished sources (the press, bondholders' reports and parliamentary reports) can also be used to complete the picture and provide statistical detail.[16] Other important contemporary markets include Paris and Berlin, although their role was less important. Tchernoff (1930) is a useful source for Paris; Lotz (1890) provides some details on the issues of government debt in Berlin the late 19th century. A general perspective on European underwriting during the 19th century is Feis (1931).

London's (and Europe's) undisputed preeminence in foreign debt underwriting came to an end when New York emerged as the center of government finance during the interwar.[17] Underwriting in New York is known thanks to the work of Edwards (1926), Lewis (1938), Mintz (1951), and Kuczinski (1932). More recently, White (1984) describes the evolution of different type of financial institutions and their activities related to the underwriting business, although he does not focus on foreign debt underwriting. Flandreau, Gaillard and Panizza

[16] For details on source see Flandreau, Flores, Gaillard and Nieto-Parra (2010).
[17] See Lewis (1938), Flandreau (2011).

(2010) provide a study of the performance of foreign debt underwriters operating in the New York Market during the 1920s. As is the case for London, these second-hand sources can be supplemented by parliamentary reports, the press and bondholders' documentation. Another useful source that did not exist in the pre-WWI period is the publications of rating agencies pertaining to foreign government debt.[18]

c) Facts

Table 1 provides summary evidence on the long-run evolution of the foreign government debt market set-up. While there are no clearly discernible trends in the number of underwriters, the market exhibited substantially higher concentration "then" as opposed to "now". We measure concentration using either the familiar Herfindhal-Hirschman index or the market share of the top three underwriters. Benchmark values for the H-H index (which computes the sum of squared markets shares) are above 1,800 (high concentration), between 1,000 and 1,800 (intermediate concentration) and below 1,000 (low concentration, reflecting a competitive market). "Then" concentration was always very high. Records are found when the market was started in London in the early 19th century (H-H index of 2,432) and in New York in the interwar (H-H index of 2,869). Historical ratios are at least in the intermediate category of concentration. Likewise, the top three underwriters always control at least 50% of the market. By contrast the modern period has H-H indices in the intermediate or low category and the top three are below 40%. This underscores the value of comparison. While casual inspection of the number of players in the market suggests that this is a very concentrated one, historical benchmarks (and statistical ratios) suggest that this market is today relatively competitive.

Another interesting feature of the table is the persistence of leadership. During the entire 19th century, the House of Rothschild led the London market for foreign government debt issues, and the Paris market too. Poring over the cells, one can see that the other relevant house was that of Barings, which appears in three of four London sub-periods. The move of the market to New York saw the emergence of new key players, JP Morgan and the National City Company (National City Bank "security affiliate"). Their modern avatars (today JP Morgan-Chase and Citigroup) still rule the roost, albeit with substantially reduced shares in a now much more competitive market.

[18] Bank archives that are relevant for the New York market are less accessible than for the London market. Nonetheless the Morgan Library provides valuable material on Morgan loans. The US Senate Committee on Finance 1931-1932) hearings on foreign loans is a classic source. On the material published by rating agencies during the interwar see Flandreau, Gaillard and Packer (2010).

This decline in concentration has a counterpart in the fees that we estimate. Fees represented a substantial fraction of the issue price in the past (between 4 and 8% depending on the period we look at) while figures are today about a tenth of that size (between 0.5 and 0.8%). This dramatic decrease cannot be rationalized as representing only or even mostly greater efficiency. It cannot be solely explained as reflecting a decline in monopoly power. In fact, we have evidence of loans for which underwriting banks had a minimal role and accordingly charged fees that are more comparable with modern benchmarks. For instance, when banks took care of the conversion of an existing issue and thus merely acted as promoters of the conversion and then "brokerage window" that traded old for new securities, fees were not out of line with modern ones.[19]

Table 1. Characteristics of foreign government's debt markets: concentration, league tables, and fees.

Period	Number of Underwriters	H-H Index	Market share Top Three (%)	Names of Top Three Underwriters	Average fee (% of issue price)
1818-1825	12	2,432	73.4	Rothschild Thomas Wilson B.A. Goldschmidt	8.3
1845-1876	45	1,382	55.3	Rothschild Barings Imperial Ottoman Bank	6.1
1877-1895	34	2,176	65.5	Rothschild Barings Hambros	4.4
1896-1913: London	33	1,196	51.7	Rothschild Hong Kong Bank Barings	4.9
1896-1914: Paris	14	1,746	65.0	Rothschild Paribas (*) Banque Impériale Ottomane	4.1
1920-1930: New York	20	2,869	68.9	JP Morgan National City Blair	5
1993-2007: New York	29	1,145	48.0	JP Morgan Citi Morgan Stanley	0.54
1993-2007: London	26	876	38.6	JP Morgan UBS Deutsche Bank	0.76
1993-2007: All	43	842	39.4	JP Morgan Citi Deutsche Bank	0.84

Sources: Authors from Flandreau, Flores, Gaillard, Nieto-Parra (2010).
(*) Paribas stands for Banque de Paris et des Pays-Bas, a French joint-stock investment bank created 1871.

[19] A 1.25% fee is observed in the 1889 conversion of Argentina's 6% bonds into new 3,5%.sterling bonds.

This dramatic transformation in market structure and fees has a counterpart in transformations in the way business was being conducted. The next sections provide a description of each “stage” of the underwriting process. We identify four “stages”, corresponding to weights that were attached to economically distinct aspects of the underwriting business. These are (a) Prospecting, (b) Planning (c) Placing and (d) Post-Issue Operations. We end with a discussion of the significance and implications of the long-run evolution we have identified.

Section II. Prospecting

Governments issuing an external loan today need to select a financial intermediary (FI). The Ministry of finance is usually in charge of the offering, although the central bank may also become involved.[20] The FI dealing with the Government is known as the Lead Manager (LM). There can be several (in practice up to two) Lead Managers. In interviews, factors influencing the choice of the LM include the reputation of the FI, its market share, and the quality of the service provided. People mention the structure of the bond when there is a demand for creative products, the marketing process, the presence of the underwriter in the secondary market, its experience and capacity to attract investors in relevant markets, and finally the price of the underwriting services or “underwriting spread” (also known by “underwriting discount”) which is the fee received by intermediaries.

Interviews suggest that while the “normal” procedure is for governments to look for FIs, it is not uncommon for FIs to approach governments. They make representations, suggesting for instance that the market is now favorable to receive new issues, and advise on the terms of a possible deal.[21] FIs regularly propose new deals to governments and, in order to promote competition among underwriters, governments tend to switch among FIs.[22] From qualitative interviews, it is hard to form a clear idea of the degree of competition prevailing in this market. Some interviewees suggest that we are observing an oligopoly because there are only

[20] In some cases the central bank can also be the main agent involved.

[21] An example is provided by Citigroup, Lead Manager of the bond US$1,500 Millions issued by Federative Republic of Brazil (8.25% Global Bonds Due 2034. Jan 20, 2004): “We had a tremendous success with the Brazil transaction. We have been talking to them for the last couple of weeks and we thought a 30 year was viable; certainly it seemed so as the market continued to improve at the beginning of the year”.

[22] Deutsche Bank summarizes the matching between FIs and issuers by using the example of Brazil: “Ten banks are in constant contact with Brazil, and they are constantly sending in proposals individually to Brazil at least once a week, on what they should be doing. They maintain complete discretion. People never know whether Brazil is issuing a deal or not, until they see the deal announced. They analyze proposals that they receive from banks on a continuous basis, and when they decide they want to pull the trigger, they call the bank literally a day before they want to do the deal to say “the deal is yours, we want you to help us on a billion-dollar ten-year tomorrow, we want you to work with Citigroup. Give us ten minutes to call Citigroup to tell them, and then you guys call Citi to coordinate””.

a few participants.[23] Others emphasize a lack of price-setting capacity, and suggest that this market is "very competitive."[24] JP Morgan told us that "many banks didn't have a presence in emerging markets, but underwriting bonds is such a prestigious franchise that they decided to do it for the franchise value and not for the economic value."

In very broad terms, the matching process that prevails today is similar to the historical experience. In previous times, governments that had been allowed by the parliament to issue an external loan designated an agent to take care of the negotiation. Contact could also be initiated before formal authorization was given. The agent sought to set-up an underwriting syndicate with one bank or a pool of banks. To select the winning FI, governments initially resorted to formalized auctions (bids in sealed envelopes, etc) although it seems that this process disappeared over time and we have no mention of it for the interwar period. The more general framework was to use informal contacts with competing groups of bankers and auction the issue via bargaining. Generally speaking, since regular borrowers had permanent financial representatives in leading financial markets while regular lenders had permanent representatives in borrowing countries there wasn't a dearth of opportunities for bankers and governments to chase one another. From archives and secondary sources we infer that a key concern was prestige and past performance (an item closely related to prestige). Another important factor was cost. The geographical reach of the bankers involved was also often mentioned. Some bankers had better knowledge or influence in certain parts of the world and this could be important.

Just like today, there are stories of banks chasing governments. This includes Drummond's (1908) humoristic account of mid-19th century practices. The 1875 British Select Committee on loans to Foreign States has examples where bankers colluded with representatives to issue bogus loans without the full knowledge or consent of borrowing governments. Flores' economic study of the market for Argentine securities during the 1880s shows the importance of underwriter competition in eroding market discipline (Flores 20010). For the 1920s, Winkler's (1933, p. 87) study gives the example of a $20,000,000 loan to the City of Budapest which "was in demand by thirty-six different houses, most of which were American." A frequently quoted source on loan pushing during the interwar period is the

[23] : "It's a very small world… it's not easy to get into, and these guys all know each other" (Fidelity); or: "Realistically, you have 6-8 lead managers for sovereigns, which in economic terms qualifies as an oligopoly" (Invesco).

[24] Interview with an asset manager from Western Asset. Market participants found evidence of competition in the fact that "all of these guys want to be on top of the league tables at the end of the year" (Western Asset). Goldman Investment stated that "it [can't be] oligopoly, otherwise they wouldn't be charging such low fees".

following declaration by Corliss (a statistician from the US Department of Commerce) that "at one time in Colombia there were something like 29 representatives, I was told. Perhaps that figure is exaggerated, but there were a great many representatives of American financial houses there trying to get various loans from the national government, from the departments, and so forth."[25]

However, a distinct feature of the past experience is that loan pushing was frowned upon by "reputable" institutions (we never heard anything similar in our contemporary interviews). For instance, Otto Kahn (of the bank Kuhn and Loeb) emphasized in his testimony before the Senate Committee on Finance in 1931 that Kuhn and Loeb made a point of *not* joining into the Latin American loan chasing. Likewise, JP Morgan's partner Thomas W. Lamont wrote a scathing description (in a letter to the US Secretary of Commerce) of Latin American bargaining practices as a motivation for why they were not eager to lend over there: "They [the Latin American governments] would say – Yes Yes – to everything, but the moment that somebody came along and offered them a loan for spending money at a rate that seemed to them 1/8 to 1% more favorable […], they would jump overboard and abandon all our carefully laid plans…"[26]

Arguably, it is possible to distil the difference between then and now in a simple summary statistic. In the later part of the 19th century (1870-1913), the turnover ratio of underwriters of foreign debt in London was about 51%.[27] The figure for today (1993-2007) is a hefty 86%. Moreover, this figure conceals quite varied difference across intermediaries then but not now. While today stealing one another's customer is the name of the game, the situation in the 19th century differed depending on the type of country and underwriter. While borrowers often had recourse to outside offers (perhaps to increase their bargaining power) they tended to adhere to the same underwriter. A typical case is Brazil, which faithfully stuck to Rothschild for all its foreign loans during more than half a century. Likewise, a correlation analysis between spreads and turnover reveals that, in the late 19th century, countries with the highest turnover ratio had also the highest borrowing spreads. Country with low turnover ratios had lower spreads. This pattern has disappeared today and there is no longer a correlation between risk and turnover. In other words there existed in the past a kind of sovereign relationship banking

[25] U.S. Congress (1932), p. 845.
[26] See Flandreau (2011).
[27] Turnover is measured as the sum of underwriter switches divided by the number of issues. Where there are multiple underwriters, if any of the underwriters from the past issue are among the underwriters for the current issue, we do not consider this event as a switch. See Flandreau, Flores, Gaillard and Nieto-Parra (2010) for a discussion.

which has disappeared today. Thus, beyond superficial resemblances, substantial changes have occurred.

Section III. Planning

Once they have agreed on each other, governments and FIs must work out the details of their arrangement. Today, key aspects of each bond issue are formalized in a document signed by both the Lead Managers and the Government. This document is known as the "agreement." It specifies the particulars of the issue, such as the bond structure, whether the security includes exchange clauses, the maturity, amortization, interest rate, coupon payment periodicity, etc., but not the issue price.[28] One central aspect of the agreement is the "distribution system." In a foreign debt issue, distribution typically takes the form of so-called "best efforts." In this arrangement, the FI pledges to help with finding investors to purchase as many bonds as possible, but is not obligated to acquire a single bond if there are no buyers. As interviews with market participants suggested "best efforts" is the ruling pattern today.[29] That is, a failed issue creates no liability for the FI. The other arrangement that is known to exist in underwriting – namely so-called "firm commitment" -- is not usual in foreign debt. Under firm commitment, the FI agrees to purchase all securities directly from the issuer for sale to the public and thus is liable for any unsold inventory. The lack of this form of underwriting in modern markets may show that underwriters are reluctant to take responsibility.

The issue of a bond also involves today a number of formalized institutions, such as the legal advisors who help finalize the agreement's details, as well as the trustees, custodians, and listing agents and more critically, regulatory authorities of the issuing market(s). The importance of legal aspects to securities issues is associated with liability and litigation. Liability and litigation are matters that are closely related to the judicial system under which bonds are being issued, which establish the rules and operation of the market of issue at the center of the stage. For instance, New York issues require registration of the securities.[30] The most common form of registration for sovereign bonds is the "Public Offering," which is regulated by the Securities Act of 1933 and also allows countries since 1989 to engage in

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[28]. An issue price is not provided by the bank, but an indication of the future price. It shows the view of the bank about the demand and conditions of the market. A peer analysis can be performed and, of course, it is considered by both the issuer and Lead Managers where the yield curve is trading.
[29]. For instance JP Morgan told us "everything is best efforts, rarely a firm commitment. Best efforts is the standard" Moreover according to Lehman Bros, "banks would never put up capital to buy a whole deal, enough to make a firm underwriting. You are not really paid to take that risk today".
[30]See Clifford Chance Rogers and Wells (2002) for a detail of the registration procedure for securities.

multiple markets issues known as Global Bonds.[31] The Securities Act of 1933 sought to provide investors with the background information on the issuer as well as details on the securities offered, and thereby "prohibits misrepresentation, deceit and other fraudulent acts and practices in the sale of securities." Information is made available to investors by a "registration statement" with the SEC that includes the prospectus, information about the offering, and specified exhibits relating to the offering, the underwriters and the issuer.[32]

Another important set of players involved today is the rating agencies. While their participation is not strictly required, since it is legally permitted to issue a sovereign bond without a rating, domestic or international prudential regulation do rely on ratings and place limits on institutions' purchases of unrated securities, making ratings necessary for purchasers.[33] Therefore, a rating is a relevant part of the process through which information asymmetries are managed.[34]

Previous periods share similarities but again exhibit differences. The contract signed between governments and FIs was always a central part of the issuance process. Like today, historically it served as a management tool, stating the characteristics of the issue system (maturity, price of issue, participants, commitments, etc). One important aspect of the contract, however, that differs from today is that it normally stated the price (or in some more sophisticated cases, the contingent price) at which the security would be sold to the public.

Like today, the issuance system chose between having the FIs providing best efforts (then known as "sale on commission") or a firm commitment. The difference is that historically, firm commitment for at least part of the issue seems to have generally prevailed. Just like today, in the case of a sale on commission, FIs received subscriptions for the purchase of bonds but took no responsibility in the result of the issue. In the "firm commitment" system, the issue was understood to go through the books of the bank: everything happened as if the banker bought the issue from the government and then resold it to the market, the margin

[31] See Miller and Puthenpurackal (2005) for a description.

[32] Additionally, there are two other types of registration that are used by emerging governments and are not considered as Public Offering Registration in US and are exempted to be registered at the SEC. The first is the private placements that from rule 144A which may not be sold in the market for 2 years after issuance. The market regulation of these bonds is strict and for most of the cases the disclosure information is similar to that exposed in the SEC regulation. Second, there is a special registration (Regulation S) which is used to securities that are publicly offer outside the United States (the bonds issued by this regulation are known as "Eurobonds"). Any offer or sale of the security must be made in an "offshore transaction" (i.e., no offer to persons in the US, no "directed selling efforts" in the US and no offers targeting US persons outside the US).

[33] The Basel II regulatory framework put forward by the Basel Committee identifies a specific category for "unrated" securities with a risk weight equivalent to securities with a rating between BB+ and B- (100%), which is an encouragement to purchase a grade (Basel Committee on Banking Supervision , 2006).

[34] . This argument can be related to the conventional suggestion (e.g. Larraín, Reisen and von Maltzan 1997) that governments seek ratings because these have an effect on the terms faced by other domestic borrowers.

being the commission, which was the net profit of the bank in the case of a successful issue that would sell out in a few days.[35] Mixed arrangements involved partial underwriting with a portion sold on commission and the bank underwriting any unsold portion up to the stated amount.[36] The limited role of the bank in the case of a sale on commission is described in the following way by a Baring manager examined in 1875 by the *Select Committee*:

"Q 64 : What is it that you do for that ; what is it you are bound to do for that commission ? – We are bound to make all the arrangements for issuing the loan. Q 65: What sort of arrangements; suppose the agreement made, what do you do? – We examine all the documents, and prepare the prospectus, and invite subscriptions for the loan; then we issue scrip for the loan, then receive the proceeds generally by various installments; and when all this is completed we receive the bonds and countersign them, and issue them to the public"[37]

From the contracts we could examine, we found that full underwriting became the dominant pattern over time, and it is fair to say that it was already a dominant form in the mid-19th century. The few contracts that have survived for the early period (such as those in the Rothschild archives) also reveal a similar pattern. On the other hand, some reports indicate that initially, the Barings favored partial underwritings or simple placement in the market with the investment bank acting as a mere broker.[38] However, this does not mean that the loans where Barings acted as distributors had not been underwritten by another bank. Flores (2004, 2010) shows that this was the case for loans issued by Argentina during the 1880s.

The same pattern (i.e. predominance of the full underwriting contract) also applies to the interwar period. The limited number of actual contracts that are accessible encourages caution, yet this is a reasonable inference given available evidence. First, it is clear that Morgan loans (described in the Syndicates Books, held in the Morgan Library, New York) were of that nature. Secondary sources such as Galston (1925), Edwards (1926) or Kuczynski (1932) make statements that are consistent with this view, although only Edwards (1926: 110) confronts the matter directly. He states that by underwriting an issue, banks "guarantee or really insure the sale of an issue by agreeing to an arrangement whereby the unsold balance of an issue is taken

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[35] . A technically different but economically identical arrangement was one whereby the issue would take place say, at the government financial window in the foreign market (e.g. London): in this case, the government would pay an underwriting fee, computed as a percentage of the entire amount issued. In case some portion would be unsold, then the government would pay the fee for the sold part and then sell the balance to the underwriters at the agreed price.

[36] . For a model studying the trade-off between underwriting share and commissions, see Flores (2007).

[37] . Select Committee, p. 3.

[38] . One Baring employee drew a sharp contrast between issues where bankers acted as genuine "contractors" (underwriting the issue) and those where they would be mere "agents" (only placing the loan in the market) adding that "most generally loans are issued by the firm [i.e. the Barings] in London as agents for the Government" (Select Committee, p. 1: our italics).

over." Flandreau (2011) describes New York underwriting during the 1920s as a "London transplant," which conjures up comparisons with European ways. In any case, the development of mighty, nationwide retail sales networks by both investment and commercial banks made it easier for underwriters to find bond buyers and probably encouraged full underwriting to prevail.[39]

Like present issues, earlier ones involved the intervention of other agents, such as lawyers who assisted in the drafting of the contract. But their presence was far more discrete then than now.[40] This is most likely because legal aspects of sovereign debt underwriting were less important, with the London Stock Exchange thinking of itself as a place to buy and sell securities rather than providing a judgment on their merits. The Stock Exchange authorities (the Secretary of the Share and Loans department and the Stock Exchange Committee) only paid some attention to ensuring a modicum of "*bona fide*" on behalf of underwriters whom it considered were those in charge of judging the qualities of the loans. The Stock Exchange successfully resisted greater regulatory control (Duguid 1901).[41]

As a result, rules relative to the disclosure of information to investors, which were generally soft, were particularly soft for foreign debt (unlike today). The London Stock Exchange required little evidence before granting a settlement day and quotation. For instance, the 1873 edition of the LSE's official *Rules and Regulations* stated the need to apply with the Secretary of the Share and Loans department. The "agent" (in our language, the FI) in charge of the issue had to provide him with the prospectus, as well as "satisfactory evidence of the powers under which the loan is contracted," a certificate stating the amount allotted to the public and a statement that the physical instrument in which transactions were performed (scrip or bond) were ready for delivery to the public (Slaughter 1873). Interviews during the Select Committee suggest that Stock Exchange authorities required less rather than more. The foreign debt manager with Barings argues that some documents could be given after the issue.[42] Of course, Barings, which enjoyed much prestige, might have been privileged on this account.

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[39] Mahoney 2001, p. 7: "Mr. Pecora: Well, conceivably no banker would underwrite a foreign issue unless he felt quite certain that he could sell it in his market? Mr. Dillon: I should not think that he would underwrite any issue unless he felt that, sir" (U.S. Senate Committee on Banking and Currency, 1933-1934); See also Pecora 1939, chapter 3—"Merchants of Securities".

[40] For instance, lawyers make a brief appearance before the Select Committee of 1875.

[41] See Neal and Davis (2006) for a discussion of listing requirements, and Michie (1999) for a general perspective.

[42] "Q 66. Have you anything to do with the committee of the Stock Exchange? –No; except in reporting to them that the loan is subscribed and submitting the scrip and bonds to the inspection of the committee before they grant a quotation. Q 67. Do you submit this prospectus also? – The prospectus is submitted to them but not before the loan is issued; but when the loan is issued we furnish the Stock Exchange with a certified copy of the scrip, and with a bond, if the bond is ready at the time; if not, that is done subsequently, and with a certificate as

The rise of the New York market was not associated with a strengthening of standards. Previous researchers generally have emphasized that with respect to transparency, London was superior to its US counterpart for both foreign and domestic securities disclosure and transparency rules (Kuczynski 1932, Hannah 2007).[43] O'Sullivan (2007) argues that pressure from competing exchanges (such as the Curb Market) limited the stringency of disclosure rules in the NYSE. The Crash of 1929 led to mounting criticism and the debate eventually gave birth to New Deal Financial Acts the Securities Act of 1933 and its amendment of 1934, which considerably increased disclosure standards. At the same time formal liability was created for underwriters, which encouraged firms to seek the assistance of lawyers. Flandreau (2011) argues that New Deal financial acts effectively crowded investment banks out of some aspects of the business of underwriting. They became leery of sending signals that could be held against them, and this encouraged them to retreat to the much more modest role of a broker matching supply and demand.

The last difference in the planning phase of an offering between now and then involves rating agencies. In the 19th century, rating agencies did not matter because there *were no rating agencies*. The *activity* of rating sovereigns was internalized by underwriting banks – i.e. it took the form of investment recommendations to clients, sometimes backed by some illustrative calculations (Flandreau 2003). The press, as well as specialized publications, also provided recommendations. Some volumes gave guides and formulas to produce home-made ratings such as Nash's "trade test" (Flandreau and Zumer 2004). Even with the rise of foreign debt ratings, which paralleled the growth of the New York market in the 1920s (Gaillard 2005; Flandreau, Gaillard and Packer 2010), ratings kept a junior role. Rating agencies produced essentially "unsolicited" ratings (i.e. they assessed what they found on the market for the benefit of investors). As publishers of news, they charged investors who subscribed to their publications. But this typically occurred after issues had taken place and ratings thus followed

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to the loan being properly subscribed; that is all we have to do with the Stock Exchange. Q 68. That is with the materials upon which they will decide whether they will give a settling day, or not? – Yes."

[43] . Kuczynski (1932) makes this point in the context of fees, which he says are relatively more transparent in London than New York: "American banks as a rule, do not disclose the purchase price of the loans they offer. The student who wants to ascertain the price paid by an American bank, therefore, has to resort to scanty data published in the commercial and financial press, the annual reports and balance sheets of the borrowing corporations, and so on. But the information is neither comprehensive nor sufficiently trustworthy, and it does not bear at all on the distribution of the various commissions among the banks participating in the sale of bonds nor on the profits which they derive there from." Note that London did not have rules on the disclosure of such things as fees.

rather than preceded the issue of a security. In other words, rating was not yet part of the issuance process.[44]

In summary, as in the prospecting phase, the planning phase of underwriting sovereign debts reveals some striking contrasts between "then" and "now." First, while "full underwriting" as well as "best effort" systems were known to both periods, the former dominated in the past while today it is the latter that is more widespread. Second, disclosure has become much stricter today. Last, a critical difference is the inclusion of legal work and ratings in today's IPO's process. All differences point to the same direction – the greater reliance on financial intermediaries' ability to certify securities in previous periods than in modern times. And this is, of course, consistent with the lower fees underwriters collect today as opposed to what prevailed in the past.

Section IV. Placing

Today, lead managers and governments jointly decide who will form the "Placement Syndicate" in charge of selling the loan in cooperation with the Lead-Manager. Junior members of the Placement Syndicate, known as Co-Managers, typically place a smaller share of the overall amount, and receive lower commissions (in percentage) than the one paid to the Lead-Manager. Interviews suggested that the number of co-managers depends, among other things, on the size of the loan.

Before introduction into the market, lead-managers play an essential role in the publicity of the bond. A preliminary prospectus (called "red herring") is made available with all the information about the issue but the offer price and the effective date, which are not known at that time. Not incidentally, the red herring is a product of New Deal regulation which forced the circulation of standardized information ahead of the issue. With the red herring in hand, the underwriter and the issuer seek to build interest in the issue. They undertake promoting activities (presentations, conference calls, publications, and occasionally road shows).[45] Presentations are prepared for investors in major financial locations, and these typically concentrate on the macroeconomic situation of the country and the main characteristics of the bond. Investment banks' research departments also circulate regular publications covering

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[44] Although they were already used as an instrument for solving agency problems: some new investment trusts pledged not to invest in securities rated below a certain grade.

[45] . These presentations, known in the jargon as "road shows", are not formally required but are used when (i) it is difficult to place the bonds (e.g. weakness of the issuer's economy, liquidity restrictions in the financial markets), (ii) investors have limited knowledge about the issuer's characteristics , or (iii) the product that will be sold differs critically from other existing products (e.g. new currency denomination, or particular legal bond feature).

various issuers on an ongoing basis. These contain advice for investors regarding the kind of government bonds they should purchase. Due to the “Chinese Wall” (separation between sell-side and buy-side business), these recommendations are not based on a specific issue but concern the total external debt and never mention futures issues although recent research suggest the Wall is porous.[46]

Another aspect of the modern placement is that most emerging and transition countries' sovereign bond issues are managed through so-called “book-building.” In this process, which lasts for a couple of hours, the Lead-Managers (also called book-runners) build up a list of “orders” at a specified price. Investors are contacted by telephone (sales staff typically call clients) or Bloomberg messages. Orders are collected. These are “expressions of interest” helping the Lead-Manager and the Government set the price of the issue in line with the demand levels that have been established. Once the final terms of the deal are agreed upon between the issuer and underwriters, the latter go back to every client to confirm the expression of interest and proceed with allocation. Normal trading then begins through standard clearing systems (such as Euroclear or DTC). Since the bonds start trading right after pricing (therefore, before settlement date or issue date) investors can sell them right away.

One important aspect of this process is the determination of the offer price. Price depends, among other things, on the perception of investors regarding the country. Interviews strongly suggest that the grade given by rating agencies to the external debt is relevant at this stage.[47] That is consistent with recent studies showing substantial correlation between ratings and IPO prices.[48] Obviously, issue prices are also adjusted for the precise structure of the bond, such as maturity and currency of denomination. Additional factors such as market conditions (the level of risk aversionof investors, or the level of economic activity in developed markets) are also significant to set prices (Nieto-Parra, 2010). In other words, the modern era is characterized by a process of fine tuning of the price which is concomitant to the issue itself in an auction-like manner, with players other than underwriters (such as the rating agencies) playing a critical role in the pricing of securities.

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[46] . Calomiris (2003), referring to emerging market crises, notes the possible “cooperation” between research and origination departments. Nieto-Parra and Santiso (2007) find that 90% of the underwriters in Latin American bond markets recommend to buy or to maintain the bonds issued by the countries where they are acting as lead managers.

[47] . In that respect JP Morgan says: “Ratings are key, as they are a factor in people's allocation of money. In general, the markets follow what the ratings agencies have to say”.

[48] See Eichengreen and Mody (2000), Ratha, De and Mohapatra (2007) and Nieto-Parra (2010) for an analysis of the impact of ratings on launch spreads.

This is a radical contrast with earlier times. Historically, the price to the investing public was known when subscription opened. Sometimes the price had been set in the contract. Sometimes the contract allowed for some adjustment in the last days before the issue.[49] For instance, upward or downward variations in the secondary market price of similar securities (from the same government) could be used in a formula included in the contract.[50] There were also escape clauses in case of wars or significant changes in the value of risk-free securities (such as British or French government bonds).[51] But by the time the prospectus was launched, the price – along with instructions on where to subscribe -- was included in it.

Knowledge of the price at which securities would be distributed was the catalyst of the placement efforts. The placement of the issue was undertaken under the stewardship of the underwriting syndicate who put together something that came to be known in the later part of the 19th century as the "placement syndicate." Broadly speaking, the placement group included the underwriting syndicate plus a number of other financial institutions. The members of the placement syndicate who were not part of the underwriting syndicate actually came from places where the FIs wanted to sell the bonds but had junior representation only. Jenks (1927, p. 273) suggests that the successful winner of a government bond contract had an incentive to co-opt competitors since "competition simply augmented the risks of marketing the loan in the face of efforts of the unsuccessful banker to cry it down."[52] Similarly, the growth and consolidation in France of huge deposit banks forced the underwriting merchant banks to co-operate with these retail giants by giving them a prominent role in Placement Syndicates (known in the New York market in the interwar as the Selling Group).[53] As a result of this

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[49] Since contracts were typically signed a few days or weeks before the issue, there existed a residual amount of uncertainty: conditions at issue could differ from those at the date when the contract was signed.

[50] . An example among many others is the 6% £ Chinese loan of 1895, placed by HSBC. The contract stated that the issue price could not be less than 95.5 and specified that gross fees (placement, underwriting, stamp etc) would be 6.5% of the nominal amount, adding that "should the loan be floated on better terms than those named therein the Imperial Chinese government shall have the benefit of the difference and the corporation shall share in no economy or profits on the floating of the loan other than its commission" (HSBC archive, 6% Chinese loan 1895).

[51] . As WWI approached we found more and more conditions on the bond prices of the leading European governments, suggesting that contemporaries understood the liquidity effects of a major international conflict. In the international tension that surrounded the Fashoda incident, one Chinese contract reads: "In the event of an extraordinary political and financial crisis taking place in Europe or elsewhere by which the Markets (sic) are so violently affected as to render the successful floating of this loan impossible on the terms herein named, the Banks have the right to withdraw from this contract with the Chinese government, and it shall in that case become null and void". HSBC Archive, Chinese 4.5% loan of 1898, contract, p. 6.

[52] This may be one reason why French FIs underwriting Argentinean securities in the 1880s nonetheless involved the Barings when it came to selling the bonds in London, although having Baring on board, even only as a distributor, made the issues look good (Flores 2004, 2010).

[53] As we found in the collection of contracts in Crédit lyonnais archive, for French loans issued in the late 19th century, investment banks were more important in underwriting, but commercial banks were often more important in placement. According to Lysis (1908) this reflects the rise of the power of commercial banks and it

evolution which deepened over time, total "underwriting fees" (the difference between the price to the banks and the price to the public) came to be shared between "underwriters" (in the narrow sense) and distributors.[54] The total fee is then divided between an "underwriting" fee" and a "distribution" fee (in European languages). Discussion in the Senate Committee (1932), Kuczynski (1932), and Haven (1940) shows that these matters were still very much valid in the interwar period – New York financial language identifying the fee given to distributors is sometimes referred to as the "selling group" commission.[55] These sources outline that beyond the straightforward spread between the buying and selling price, computation of the exact profit of each single participating bank was by no mean an easy task.

The actual selling of the bonds could take a variety of forms. These alternatives needed not be mutually exclusive and in effect various mechanisms co-existed. The more frequent one was through underwriting bank(s) offices or branches. Another possibility was public subscription at government offices in London or in other cities for international issues. Typically, international bonds were jointly issued in a number leading international markets. A factor that mattered was the exchange rate regime: In the first part of the century, it was common that securities denominated in gold be issued in London while those in silver were issued in Amsterdam. In general, the security was also issued and listed in the local market and a domestic bank was involved. This served the clientele of locals who preferred to buy the foreign securities of their government (perhaps to enjoy the bondholders protection that issues in a foreign market entailed).

One important implication of this diffuse nature of foreign debt issues is that measurement of the contribution of, say, "British savings" to foreign government debt is impossible. Governments went to London not because the British had surplus savings but because the London market was liquid and endowed with attractive facilities. This is also what encouraged other people with surplus saving (not only Britons) to go to London to lend, with the assistance of London-centred but globalized financial intermediaries. Heroic attempts by previous economic historians to earmark certain issues to certain markets in order to compare the "size" of the leading European financial centres may thus have been in vain and the use they have made of such series to construct balance of payment statistics is questionable to say the least. A significant (but not isolated) example is the Portuguese 5% bond issue of

is also reflected in their growing influence in underwriting syndicates (although as can be seen in Table 1, the three leaders in underwriting are still investment banks).

[54] . The relevant document to be able to go from underwriting to placement is the so-called "syndicate act" a short-lived sub-contract between intermediaries, which stated the breakdown and responsibilities of each participants.

[55] The selling group in turn could make a "selling concession" or the "dealers concession" to retail distributors.

September 22 1886, authorized by the Portuguese Royal decree of July 29 1886. The Paris prospectus reads "subscriptions in Paris (Banque de Paris et des Pays-Bas, Crédit Lyonnais, and Société générale), Francfort (Jacob S-H. Stern) and Lisbon/Porto (Treasury's cashiers)."[56] On the other hand, Burdett's Stock exchange official intelligence (1889, p. 159) a London Stock Market handbook lists this bond indicates that the "Interest is paid […] at Messrs. Baring brothers & Co. in London, and in Portugal, Paris, Frankfort, and Amsterdam". In other words, this Paris issue had found British investors and it is unlikely that the converse did not hold: if you wanted to buy government bonds there were a limited number of places to do so.

Once bankers had completed their order book, they proceeded to the allotment. A successful issue would typically be oversubscribed several times in a few hours or days, and distribution was made in proportion of the individual subscription.[57] Investors were called to pay down the first instalment and a calendar stated the dates of the subsequent instalments. They then received a "scrip" (a certificate that a portion of the security had been paid down) and the scrip could be traded on the stock market. It was also possible to "liberate" the scrip, by paying down all the instalments at once in return for a discount in the price. In this case the Stock Exchange recorded a separate quote for the "liberated" or "paid down" security. Underwriters were fond of claiming success but nobody could control effectively whether the issue had been "successful," i.e., whether the issue was entirely subscribed by the "public." Also when an issue had not been subscribed in full, the underwriters could make arrangements to distribute scrip to the public for the part that had been bought and try then to use the stock market to liquidate their own scrip which they had received as part of their underwriting. Telling apart "genuine" subscription from the rest was impossible since, as Stock Exchange authorities emphasized, subscribers could include "buy and sell" financial intermediaries, probably sponsored by the underwriters themselves. This practice was not per se indicative of bad faith: it was suggested that the best houses did precisely that on occasion. In the end, the only thing for which underwriters were committed was the calendar which they had agreed upon with the government for the transfer of the funds. This matter and related features discussed in the next section, received much attention during the 1870s and again in the interwar, when it was perceived that the large independence of banks over the management of the placing of bonds helped them deceive investors.

[56] *Semaine financière*, 1886, p. 747.
[57] There was probably at this stage a preferential treatment of friends and special clients. Exposure of Morgan's "preferred lists" played a major role in the interwar debate and Pecora hearings. We do not see how things could be different during the earlier period, but they attracted less visibility.

In the end, we find that FIs act today as shepherds who guide the issue towards completion by attending to a book building process. Their forerunners in history, acted more like wholesale traders and insurers, generally purchasing bulk securities from the government at a discount and then selling the securities to the public with the help of a placement syndicate. A feature that captures this difference neatly is that while the price of a given issue is known today only *ex post*, it used to be known *ex ante*. This suggests a greater commitment then, and the consented liability of the underwriter to price a security correctly. Today by contrast the rating agency is called in helps hide the underwriter from view. Given this, it is quite understandable that the market is much more competitive now, and generated much bigger fees then.

Section V. Post-Issue Support and Performance

Today, one of the services offered by underwriters to issuers is their participation in the post-offering secondary market in order to reduce volatility and contribute to the success of the issue. This feature, although often emphasized in interviews, seems suspect. The prospectuses of the bonds often state that, although the underwriter is not obliged to make a secondary market for the bonds, it is understood that it plans to make one. Consider the following excerpt from the prospectus of a Brazilian loan issued in 2004: "Brazil (the issuer) has been advised by the underwriters that the underwriters intend to make a market in the global bonds but are not obligated to do so and may discontinue market making at any time without notice. No assurance can be given as to the liquidity of the trading market for the global bonds."[58] Interviews suggested that the quality of this service is related to the fee paid to the underwriter. Some also suggested that the desire that the underwriter has to acquire a reputation as a good supporter may encourage it to support the bond, thus increasing the likelihood to secure future contracts.[59] On the other hand, in view of the very high turnover that prevails today, it seems questionable whether any bank makes an effort of that kind. When asked about who would be known for its support of securities, interviewees reported conflicting answers.

Last, underwriters today never guarantee investors against a lag or a default in the payment of the principal or coupons. The responsibility of underwriters is limited to placing the bonds in the market and making an effort to stabilize the price of the bonds in the secondary market

[58] . Prospectus supplement of US$750,000,000. Federative Republic of Brazil. 10.5% Global Bonds Due 2014. July 7, 2004.

[59] An example, as many others, is provided by Citigroup: "As lead manager of a bond, one of the things you are compensated for is to maintain markets for the bond".

during an unspecified time.[60] It is never understood that the underwriter should provide support beyond the issue and even less that it should act as lender of last resort for the bonds issued by the governments.[61] In an earlier study, we analyzed the incidence of default within debt underwriters. Our data could not reject the null hypothesis that default was randomly distributed across intermediaries. This suggests that one should be sceptical that underwriters seriously concern themselves with performance.[62]

That finding is in sharp contrast with previous eras, when some underwriters decisively engaged in market operations to support the government bonds they were issuing. Information on the matter is somewhat difficult to retrieve owing to the fact that price support operations were often alleged to be made to deceive investors. This came up during the Select Committee of 1875, when MPs examined the allegation that "contractors" (underwriters) of foreign loans had used fictitious operations (instructing one broker to sell another to buy) so as to be able to post price run up and encourage uninformed investors to buy. Discussion of, and evidence on, such operations have generally come up in the press or in parliamentary commissions in reference to deceptive schemes meant to "inflate" bond prices – an anonymous commentator for the *Investor's Review*, writing in 1892 called such devices the "old decoy."[63] They were then termed "market rigging." They came again under scrutiny during the 1930s US Hearings in reference to "pool operations." Pool operations were discussed in reference to bank shares but a good deal of attention focused on JP Morgan's price support arrangements in favor of governments securities. That attention ensured such operations a career as patented shady arrangements.[64]

One key problem with such alleged schemes is that their mere presence of support is not sufficient to provide conclusive evidence of deception. In fact, two types of support schemes seem to have coexisted. A rationale for the "good type" of market intervention was provided in the testimony of Otto Kahn (from Kuhn and Loeb) before the Senate Committee. Kahn was quite forthright about the need for the underwriting bank to support "its" securities. The act of underwriting, he claimed, created a contingent liability. As a result, serious underwriting firms (such as his) were bound to find themselves under a kind of "permanent moral liability." As a

[60] As pointed by JP Morgan concerning the support on the secondary market, "We don't want an explicit commitment. It is an unwritten service provided. This is called market conventions".
[61] As we were told, this is unlike the underwriting services occasionally provided to emerging government bonds by multilateral organizations, such as the World Bank (WB) or the Andean Development Corporation (CAF) who do include commitments.
[62] Flandreau, Flores, Gaillard and Nieto-Parra (2010).
[63] Anonymous (1892, p. 39).
[64] Select Committee (1875), Jenks (1927: p. 276-8), Lysis (1907), Benston (1990), Senate Committee (1931-1932), Pecora (1939) after evidence from the "Pecora Hearings".

result they "have frequently made it our business, a contingent part of our obligation, that if there is an undue or unjustifiable decline in bonds, if there is not a fair market for the bonds, we have more than once gone into the market in order to afford the opportunity to such people as may want to sell, or are compelled to sell, within the limits of proper prudence, and within the limit of our ability, for them to do so."[65] He recalled the case of a loan to the state-guaranteed Mortgage Bank of Chile which did not go well so that Kuhn and Loeb went "into the market, and bought bonds."[66] If there is an "unjustifiable decline in bonds, if there is not a fair market for the bonds," the underwriter ought to go into the market and permit customers (investors who trusted the underwriter) who wanted to walk out to do so. This, Kuhn and Loeb had done "more than once."[67] In other words, bankers had to treat bonds they had sponsored as open-ended investments, permitting their customers to walk out.

Such practices were not at all similar to the shady schemes whereby bankers of a lower kind sought to boost price to confuse investors. As a result, the public, Kahn felt, had been under the wrong impression regarding price supports/manipulations. The difficulty to tell apart good and bad support (the responsible kind and the deceiving variant) may be one reason why bankers were generally reluctant to acknowledge publicly that such practices were common. An illustration is provided by the declarations of one Baring employee's testimony before the Select Committee in 1875 who alleged that price support schemes were never his House's making,[68] and that contention does not stand against powerful evidence from Barings' own archive, as emphasized by more recent work (Ziegler 1988, Flores 2004, 2010). A more transparent attitude was also observed during the interview of Nathaniel de Rothschild before the same *Select Committee*. While carefully selecting an old example (a Neapolitan deal, issued half a century ago) and avoiding giving too many details, Rothschild acknowledged that there were cases where bankers had to do what was needed to make sure things worked out according to plan. Rothschild's testimony before the Select Committee acknowledges that there were cases where support had to be provided.[69]

A more complete rationale regarding these price support schemes would take into account the need to avoid a set-back that could damage the reputation of the underwriter. Anecdotal evidence suggests that post-issue support was extended until the operation of the placement syndicate came to an end and this could extend for a period that contemporary observers

[65] . Senate Committee, p. 135. Original has "apportunity" instead of "opportunity".
[66] Senate Committee on Finance, Otto Kahn interviewed, p. 387.
[67] Id., p. 135.
[68] Select Committee, p. 1 ff.
[69] Select Committee, p. 267. See also Flandreau and Flores (2009).

described as ranging from 3 to 24 months. In some cases, when the issue was a complete success the time frame of support could be shorter, with the market taking care of price changes. In others, support went on for much longer, a reflection that some underwriting firms bore the liability for subsequent problems. An empirical illustration of this is how, during the financial crisis of 1825-26, Rothschild-sponsored government securities “decoupled” from bonds underwritten by other firms. The “Rothschild put” protected their bonds from the contagion that was spreading to the entire market. The evidence of an insulation of Rothschild securities obviously resulted not only from the actual exercise of the put but also from market expectations that such a put existed.[70]

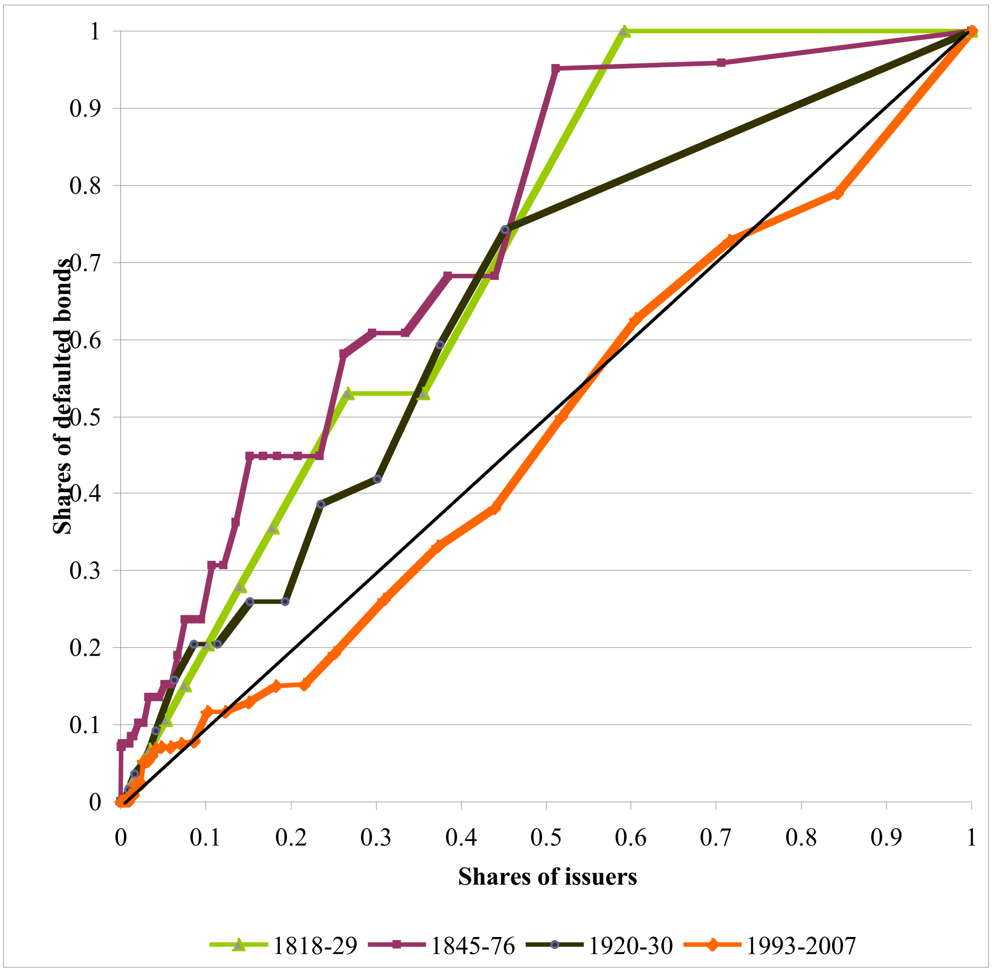
The existence of these implicit put options (motivated by the need to protect prestige) can be recast as a critical feature of what amounted to relationship banking between good banks and financially committed governments. It was a natural outcome of stable relationships between FIs and governments and is related to the lower turnover that characterized the better borrowers in the “then” era. In those cases, the “usual” underwriter provided financial help in the shape of forward intervention on the bond market even outside of bond issues. In more extreme cases, FIs also provided support in cases of liquidity crises, and prevented countries from default, or, if default could not be avoided, acted as agents of a swift debt restructuring aimed at restoring credit. “Funding Loans” (the “then” term for bailouts) were thus common bread in the financial world of the time. Examples include the Rothschild funding loan to Brazil in 1898, or the Paris banks stabilization loan to Russia in 1906.[71] An important feature of these loans, however, is that they were successful at protecting the interests of incumbent bondholders. For instance, the Brazilian Funding loan of 1898 rewarded the forbearance of investors (who accepted the illiquidity of their investment) with considerably expanded returns.

Relevant empirical evidence may be found in the construction of “Lorenz curves” of financial responsibility, then vs. now.[72] These provide a way to summarize relevant information on the incidence of foreign debt default conditional on a broad measure of prestige – namely, market shares. The prediction that we make is that in the “then” era, more serious houses had larger market shares but a lower incidence of default too. We thus rank houses according to their market shares and then add up, along the x-axis, the cumulative market share of smallest, two smallest, … n-smallest, etc., underwriters. We then plot on the y-axis

[70] See Flandreau and Flores (2009) for details.
[71] On Brazil and the funding loan see Flandreau and Flores (2011). On the French bank’s support to Russia, see Flandreau (2004).
[72] The use of such Lorenz curves is pioneered in Flandreau, Flores, Gaillard and Nieto-Parra (2010).

the incidence of default for these groupings of increasing size. If reputable firms care relatively more, then default should concentrate on the smallest one, yielding a concave curve. If nobody cares, then the incidence of default should be just the same regardless of market share and the curve is linear (technically, the 45° line) – a feature we have argued characterizes the current period. Figure 1 plots the evidence for a series of lending episodes. As is apparent, all "then" experiences (during both the 19th century and the interwar period) exhibit the virtuous concavity which is the hallmark of underwriter's care -- and crisis support. This is in contrast with the modern era, an additional proof that of the changing role of global financial brands in underwriting.

Figure 1. Market Share and Quality: 3 Debt Crises Compared with Today



Source: Flandreau et al. (2010).

In the end, it seems that, from a qualitative point of view, underwriting firms lent more market support to their customers in the past than their modern counterparts do. The difference between the two approaches may be put in the language used by Sir Robert M. Kindersley (of

Lazard, a private investment bank) during its interview before the Macmillan Committee in 1931. He suggested that the full underwriting of a security meant that the intermediary (who first bought the bond, and then sold it to the public) acknowledged its liability. This led him to draw a line between what he called a "bank" by which he means a mere distributing institution and an "issuing house" or underwriter in the old sense: "Q. 1302. Do you buy up the issue yourselves? – Yes. I think that another difference between a bank and an issuing house is that an issuing house, not always, *but I think in the majority of cases purchases the security and re-sells it to the public. It takes the definite risk and purchases it* … This is what generally happens."[73] In the language of Kindersley, today's intermediaries would be more like "banks" than "issuing houses".

Conclusion: The Global Financial System as a Structured Product

This survey of the long run record of global bond markets has focused on micro-structures. Through micro-structures, it has identified a number of critical features that capture broader characteristics of the global financial system. Looking at government debt from the point of view of the microeconomics of debt markets (arguably the backbone of financial globalization, if we are to judge the matter from the conspicuous interest that the IMF has had on the macroeconomic features of government debt) we have reinterpreted the global financial system as a nexus of contracts.

While fully accounting for all features is not possible, this overview provides a mapping of key issues and structural aspects worthy of interest at both the theory and policy level – perhaps also worthy of future careful research. At one level, the underwriting process has kept a similar logic and structure: governments borrowing in a limited number of markets, with investors lending, and a limited number of intermediaries ("underwriters") standing in between buyers and issuers. But a more thorough exploration reveals differences that outweigh similarities. The "product" that is being sold today by underwriting banks is rather different from the one that was sold in the past by their predecessors, and this probably explains (much more than greater efficiency or competition) the dramatic decline in underwriting fees that the modern period has witnessed.

Both "then" and "now," banks sold to borrowers and investors a "package," but the content of the "package" has changed markedly. The "then" package included the setting of a relevant

[73] . Our italics. *Macmillan Report*, Minutes of evidence, p. 77-8. Kindersley used that to draw a contrast between "British" and "US" business practices, the former, of course, being superior. We do not need to agree with his view of the respective merits of British and US banking to find value in his analytical distinction.

price, the distribution of the security itself, and finally the insurance that the issue would be fully bought along with a partial or complete guarantee that investors would be able to sell at a fair price at any point in the future. The instrument of choice for achieving this was the "full underwriting" contract whereby the bank bought the security from the government and re-sold it to investors, putting its signature on it as a result. This was, in fact, the one thing that the soft regulations of the London Stock Exchange insisted upon: that the prospectus would bear the "autographic signature" of the underwriter. Of course, such a business must have been very risky and helps explain the rather enormous fees that are observed for the "then" period. The historical arrangement also imposed tight conditions upon the underwriters: for how could one be sure that the underwriting bank would honor its "implicit CDS" and lend support to its government-customers in case of liquidity shocks, enabling at the same time those of its investors-customers to sell should they decide to do so. The underwriter had to be credible and prudent. An overly generous distribution of "CDS" in periods of boom would put the underwriter under considerable stress in cases of "sudden stops" in the market for foreign government debt. Obvious pre-conditions for such a system to survive, as we know it did for more than one century, were enormous underwriter capital footings, the avoidance of excessive leverage, and a considerable market share to discourage risky behavior.[74] The guarantees of banks with lesser reputations were priced lower and this generally prevented them from an easy entry in the market for foreign government debt. All these features have been observed in the "then" regime lending support to our suggested interpretation.

The "now" package is different. Essentially, it is much more limited. Today, "pricing" is guided by the opinions of rating agencies. The way they are recurrently blamed when foreign debt crises occur suggests that investors and policy makers ascribe today great significance to their ratings: in contrast, recall that rating agencies entirely failed to see the interwar debt debacle and yet were never blamed for this.[75] The role of rating agencies was not so essential then as it is today, a finding that is consistent with our microeconomic evidence on the historical evolution of the issuing process. We interpret this as implying that rating agencies in the past were selling opinions on securities already traded on the market, while today they act as *certifiers* at the inception of the distribution process thus providing liability relief to underwriters.

Another novel feature of the modern system is that, unlike in the past, underwriters are not in the business of security insurance. This is visible at the issue stage, which is ruled by "best

[74] On the capital of Rothschild and their prudence, see e.g. Flandreau and Flores (2009).
[75] See Flandreau, Gaillard and Packer (2010).

efforts" contracts (as opposed to the predominance of the "firm commitment" in the past). A fortiori, the underwriters make no longer-term commitment today: Risks are transferred to investors while crisis management is with international organizations. This new setting, which considerably reduces the liability of underwriters compared to historical benchmarks, explains – or at least is consistent with – the much increased competitiveness that we found characterizes the modern market for foreign government debt – judged it by historical standards. It also helps explain why recent research has found that modern underwriters have no hesitation to talk up the issues they "underwrite."[76] They are mere distributors of assets and can direct complaints to the relevant agency (the rating industry, the IMF). Those who believe underwriters now have credibility and are surprised to find them structuring Greek securities and then shorting Greek debt were not paying sufficiently close attention. The "then" regime is no more.

There are many important issues that are beyond the reach of our discussion. The first is the reasons for the change in the nature of the structured product. One proximate reason is outlined in a recent paper, which emphasizes the role of New Deal Financial Acts. The Glass-Stegall Act and the Securities Exchange Act were a challenge to global financial brands of the "old style." The Glass-Steagall Act, by crowding JP Morgan out of underwriting and into commercial banking, gave a blow to a prominent global financial brand whose credibility was a precondition for the survival of the current regime. Next, the Securities Exchange Act enforced disclosure by issuers and introduced the *formal* liability of underwriters. That rule weakened the informational advantage of leading underwriters and increased the risks of selling "informal" CDS contracts. The result of these reforms was that prestigious underwriting banks were encouraged to remove certification capital from the foreign debt underwriting business, further crowding in government regulation.[77] New instruments had to be created. The authority of rating agencies was called in to rate (and indirectly to price) securities, and the IMF was summoned to deal with trouble.

It is difficult, and perhaps irrelevant, to try to decide which set of market arrangements is superior, the old financial contract or the new one – fter all, we do not get the opportunity to choose. Different regimes provide for different successes but also different malfunctioning, crises and eventually, a different history. A recurrent theme of the older regime was the concern that underwriters had succumbed to conflicts of interest, and the companion outrage over fees. The scene was replayed in several instances (in the 1840s, 1870s and 1930s), with a

[76] See Nieto-Parra and Santiso (2007) and Nieto-Parra (2010).
[77] For more details, see Flandreau (2011).

similar dramaturgy. The problem was not so much with the reputable firms, who had sold at a high price a valuable service to both investors and borrowers, since they saw to it that their securities would perform. It was with the "wildcat" underwriters who had entered the market in a speculative era and who defaulted on their expensive "CDS" when market trends were reversed. Parliamentary commissions invariably rediscovered this: some underwriters had misbehaved – but they were the shady ones and, until the 1930s, the moral of the tale was invariably that the greedy investor needed to be taught a lesson and re-learn the value of banking with the prestigious global financial brand.

As a result, this system had a "Malthusian" bias; the prestigious bankers could not originate so many loans since they had to show their concern about fathering quality loans. A consequence of the removal in the modern period of the underwriter reputational concern ought to be a greater capacity for risky governments to access markets. Comparing the distribution of ratings for government loans made during the 1920s and those made during the modern era (1993-2007) -- and bearing in mind that rating agencies were just as inaccurate then as they are now -- we find that the modern era has a substantially bigger share of speculative grade loans than its historical counterpart.[78] This evolution is not necessarily bad. Provided that risks are adequately priced and diversified, easier access to capital is good news for development.

But then, of course, new problems and new debates have replaced the old ones. For instance, outrage when things went wrong "then" was with bankers and their exorbitant fees: It focuses now on the rating agencies. In the introduction, we alluded to the public criticism that has focused on Goldman Sachs' "shady" underwriting of Greek bonds. But the modern debate is nothing new in comparison to the vehemence of the debate on underwriters' conflicts of interest during the 1930s. This, we are tempted to argue, stems from the general realization, beyond the sound and fury of policy debate, that the word of the modern underwriter is not supposed to carry much weight anymore. Another interesting aspect of the modern discussion is the way the IMF has inherited some problems of its predecessors – the prestigious underwriters. Like them, the question of its adequate capitalization has become paramount and subsequent crises have led to subsequent increases of its resources. Some issues, on the other hand, manifest themselves as entirely opposite to the earlier debate. While historical concern was with the private gatekeeper, the current one is with the borrower: In

[78] See Flandreau, Flores, Gaillard and Nieto-Parra (2010).

today's world the conflict of interest-ridden intermediary has given way to the moral-hazard plagued borrower.

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