



**DEPARTMENT OF ECONOMICS  
DISCUSSION PAPER SERIES**

**THE *BELLE EPOQUE* OF INTERNATIONAL FINANCE.  
FRENCH CAPITAL EXPORTS, 1880-1914**

**Rui Pedro Esteves**

Number 534  
February 2011

Manor Road Building, Oxford OX1 3UQ

# **The *Belle Epoque* of International Finance. French Capital Exports, 1880-1914**

Rui Pedro Esteves<sup>†</sup>

University of Oxford

rui.esteves@economics.ox.ac.uk

This paper introduces a new dataset of French investments in foreign securities. This is the most detailed data available to date. The data is used to study the composition, valuation, and total return of the French portfolio of non-sovereign foreign securities on the 34 years before World War I. Additional insights are obtained about the structure of the financial market in France.

## **Introduction.**

On the eve of World War I, Paris held a very competitive second place in the rank of major World financial centres. Among its advantages were a specialized financial structure, which was in several respects complementary to that of its most direct Anglo-Saxon competitors, and a structurally positive current account that generated vast funds for investment abroad. As in Britain or Germany, the pace of these capital exports excited the attention of contemporaries worried with the depletion of the national capital stock. The 1917 shock of the Russian repudiation and the later defaults in Central Europe after the War further added a *post-hoc* rationalization to the critics of foreign investment, who castigated it on grounds of national interest and individual rationality. The literature on French capital markets has been able to dispel or at least refine some of these implications, but there is still considerable work to do, compared, e.g., to the state of knowledge of the British portfolio.

This paper aims at contributing to our understanding of the work of the French capital market by introducing the most detailed source on French financial

---

<sup>†</sup> The research for this paper was funded through the Zvi Meitar/ Vice-Chancellor Oxford University Research Prize. We thank Fabiano Ferramosca and Luís Corujo for excellent research assistance.

applications abroad available until now. This source not only identifies the French positions in the flotation or initial trading of individual foreign securities, but it also tracks them on a regular basis through time. This latter characteristic makes it ideal to reconstruct the size and composition of the French portfolio, which is the object of this paper. Nevertheless, the data also allows drawing inferences on the drivers of capital flows that will be studied elsewhere.

The rest of the paper is organized as follows. Section 1 briefly reviews the major strands in related literature. Section 2 explains the origin of the novel data, and describes their nature and caveats. Section 3 uses the data to quantify the evolution through time and the composition of the French portfolio of foreign private securities, as investments in sovereign bonds are not covered by the data source used here. The same section also calculates total returns on the French portfolio, decomposes its evolution between investment decisions and valuation changes, and provides new price indices for foreign securities. Section 4 then uses the information contained in the data to characterize the structure of the market in terms of concentration measures and underpricing of securities at the IPO stage. Some concluding remarks are followed by a documental Appendix.

## **1. Literature on French Financial Markets and Capital Exports**

The literature on French capital markets pre-World War I exhibits similar trends to those observed in the historiography of British and US financial markets. An early tradition of micro or business history, gave way to macro studies, only to be followed, more recently, by a renowned interest on the market micro-structure. Early contributors to the debate range from contemporary commentators and practitioners (Neymarck 1903, Leroy-Beaulieu 1906, Théry 1911) to interwar authors such as Feis (1930), Marchal (1932), or White (1933).

A remarkable fraction of the current literature echoes some of the debates that structured the earlier writings. Such is the case with studies of the industrial

organization and, in particular, the market power of the largest players in the market. In the French case, the presumption of interference and abuse of dominant position fell not only on the largest and most established members of the financial hierarchy –the *haute banque* and the big four deposit banks–, but also on the government. The considerable powers of intervention of the French finance minister, at least on formal grounds, led many to theorise on the adverse consequences of the mix between market power and political suasion (Lysis 1908, Catin 1927, Feis 1930, Raffalovitch 1931, Cameron 1961, Fishlow 1985). In probably one of the most concise statements of this view, Herbert Feis argued that:

In short, the financial transactions between western Europe and the other areas were an important element in political affairs. They became all the more important because the official circles of lending countries gradually came to envisage the foreign investment of their citizens, not as private financial transactions, but as one of the instruments through which national destiny was achieved (Feis 1930: xxvi).

A third element, the financial press, guaranteed that the political destinies of cabinets and the supra-normal profits of banks and other financial intermediaries were accomplished through the mobilization of the savings of the remarkably thrifty French public. The ‘abominable venality of the press’ duly attracted the attention of some contemporary critics (Lysis 1908, Raffalovitch 1931), although their case appears to have been over-stated compared to reality (Bignon and Miscio 2010).

An intimately related debate focuses on the organisation of the several segments of the financial markets. A recent compilation, edited by Hautcœur and Gallais-Hamonno (2007) offers a systemic review of the structure of French financial markets from the nineteenth century to 1914. Among the more interesting topics is the long-drawn competition between the official *Parquet* and the un-official and not always tolerated, the *coulisse* (Pollin 2007). Equally worthy of attention is the micro-structure of the securities markets in comparison with its competitors, particularly in London and New York, that follows up on the pioneering work of Davis and Neal (2005). However, contrary to these authors’ perspective, Hautcœur and Riva (2009) were able to show that the Parisian market, albeit organized differently from its

competitors, was not hampered by a sub-optimal structure and remained competitive throughout.

Among the macro-level contributions, one finds echoes of the celebrated debate on the Victorian decline and the excessive favouritism revealed by British savers for foreign securities. The debate has moved to reject such assertions, particularly in what refers to the “inverse home bias” ascribed to British investors (Edelstein 1982, Davis and Huttenback 1986, Goetzmann and Ukhov 2006, Chabot and Kurz 2010). For France, the earlier works of Lévy-Leboyer (1977), Lévy-Leboyer and Bourguignon (1985) and Marseille (1984) found the pattern of French foreign investment inconsistent with its economic structure, particularly with the direction of foreign trade, which opened up the argument once more to the presumption of a politically-dominated financial model. More recently, Parent and Rault (2004) have revisited this question and concluded that the geographical distribution of French foreign investment was driven by economic and financial factors, rather than political or diplomatic. This is an important step forward, but the authors seem to conclude a bit too much from their analysis, which is grounded on very aggregated estimates of capital stocks. Not having data on capital stocks by region or sector of activity, the authors try to replace for the missing cross-section dimension with an equally aggregate “industrial production index of the area Europe and its periphery” as a measure of economic pull factors of French capital.

Our paper aims at informing this debate by making use of a much more detailed database of French investments in foreign securities than has been available to date. In order to understand how the data compiled for this paper departs from the already existing, we will start the next section by commenting on the previous estimates of the size and composition of the French foreign portfolio.

## 2. Data

### 2.1 Previous estimates

There is no dearth of estimates of the size and composition of the French portfolio of foreign investments in the period before 1914. Between contemporary evaluations and retrospective estimates by economic historians, we find a fairly sizable number of attempts at this complicated problem. Authors varied in their degree of sophistication and in the methods used. A fundamental divide exists between those who preferred to follow a “direct method” by founding their figures on the statistics of foreign issues in France, and those who adopted an “indirect method.” The latter is based on Balance of Payments information corrected by some assumptions about net returns on capital invested abroad. Among the first group we can count Neymarck (1903), a leading authority at the time on foreign capital flows, as well as White (1933). An intermediate step in this “direct method” is the determination of the share of foreign issues effectively bought and kept by Frenchmen in their portfolios. Some authors eschew this difficulty with some *ad hoc* assumptions. For instance, Neymarck himself simply assumed that only 10% of foreign issues in Paris were held by non-residents. Others use the information contained in the several statistics of foreign issues compiled by contemporaries to try and determine approximately the French fraction of foreign issues (Marnata 1973). By assuming a rate of return on their estimates of the stock of French investment abroad in benchmark years, these authors were then able to provide estimates of annual capital flows.

The adepts of the “indirect method” followed precisely the reverse path by basing themselves on Balance of Payments statistics of capital flows to reach an estimate of their stock using variants of the permanent inventory method. This again requires information (or assumptions) on annual returns of the portfolio and an estimate of the initial value of the stock at some point in the past. Lévy-Leboyer (1977), Lévy-Leboyer and Bourguignon (1985), and more recently Parent and Rault (2004) are examples of this approach.

Despite the obvious pitfalls involved in both methods, the literature on French capital exports has had no better base to its hypotheses up until now. This has certainly been helped by the fact that, at a sufficiently high level of aggregation, most estimates are sufficiently close, in size and composition. Table 1 collects the most disaggregated estimates of the French portfolio of foreign securities available in the literature for four benchmark years.

**Table 1 here**

These data underscore the conventional wisdom about the concentration of Continental investment in Europe, which in the French case was especially prominent and only started regressing in the first decade of the twentieth century. Remarkable also in the French case is the low stake in North America (and the higher share of Canada within that region), while the lower relevance of Africa and the Asia/Pacific regions are shared with the pattern of German foreign investments. The geographical spread of the French (as well as the German) portfolio has been a mainstay of authors who, like Feis (1930), White (1933), Cameron (1961), Lévy-Leboyer (1977), or Fishlow (1985), emphasize the abnormal distribution of French foreign investments, particularly its excessive –albeit decreasing– concentration in “old Europe.”

However, it requires some leap of faith to translate information on the geographical spread of investments to conclusions about the rationality of investments decisions and their return. The aim of this paper is to start addressing these questions head-on from the vantage point of direct information on the composition and value of the French portfolio.

## **2.2 The *Commission des Valeurs Mobilières***

The origin of the dataset used in this paper can be traced to the fiscal and political history of the French Third Republic. With the government still at Versailles, in 1872, a law was published to uniformize the tax treatment of foreign and domestic securities. From then on all securities issued by foreign entities were deemed to be subject to three French taxes: a stamp duty (*timbre*) charged the moment the

securities were first traded in France, a tax on ulterior transactions of the same securities (*transmission*) and the income tax on the annual returns of the same securities (*revenu*).<sup>1</sup> Foreign securities could not be traded or even advertised for sale without the issuer having previously settled its tax liability with the French administration. Heavy fines for the announcer or promoter of unauthorized foreign securities were established.

The law discriminated in favour of sovereign bonds, which were exempt from income tax and paid lower rates of stamp, initially set at 0.15% of par, later raised to 0.5% (1895) and 1% (1898). Foreign private securities had to pay higher stamp (1.2% initially, then raised to 1.8% in 1914) and their income was subject to 3% income tax, also raised to 4% in 1890.<sup>2</sup> All foreign securities paid 0.2% of *droit de transmission*.

Unlike other countries at the time, such as Germany or the UK, the French tax law also discriminated between government and private securities from the point of view of the actual implementation of the tax. For the taxation of the issues of foreign sovereigns, the French law followed the usual practice of imposing the French investor (*au comptant*).<sup>3</sup> For instance, foreign government bonds could not circulate in France without a stamp glued to the bond.<sup>4</sup> The taxation method was different for the securities issued by foreign cities, provinces, and companies. These had to nominate a representative (a French company or citizen), who would be responsible for paying the taxes in the manner and time they were due.<sup>5</sup> Because the sale of such securities was deemed a private commercial transaction, the French tax

---

<sup>1</sup> While the income tax was only imposed on the effective return of the securities, i.e. coupons or dividends (but not undistributed profits), the two other imposts were capital taxes. They differed, however, on the method of establishing the tax base. The stamp duty was calculated over the par value of the securities, while the *droit de transmission* was charged over the average market price of the securities in the previous year, or an estimate of their value over the same period, in case they were not traded in a French stock exchange (for details see Guillet 1900, Jobit 1898, and Moreau-Néret 1939).

<sup>2</sup> Hautcœur and Romey (2007) mention that contemporaries were worried with the potential adverse selection effect of this rise in taxes, claiming that it would drive good foreign securities away from Paris, while attracting more speculative values.

<sup>3</sup> The law assimilated foreign sub-states enjoying a sufficient degree of sovereignty in this category, for instance, some Argentinean provinces, and the British Dominia (Jobit 1898).

<sup>4</sup> Alternatively, the owner of the bond could pay the tax by *visa*, which didn't require the physical stamping of the bond.

<sup>5</sup> Representatives had to be pre-approved by the tax authority and were usually the banks responsible for paying the coupons or dividends of foreign companies or, in the case of smaller companies, French citizens "of manifest solvency" (Jobit 1898).



authorities decided to deal directly with the issuers instead of indirectly through the French investors in these securities. Furthermore, the French representative was personally liable for the amounts due in case the foreign issuers did not acquit themselves of the due taxes on time.<sup>6</sup> In French terminology, foreign companies or sub-sovereigns paid an *abonnement*, which could then be subtracted from the gross coupon or dividend.

Unlike the securities of foreign sovereigns, the owners of *abonnées* bonds and shares were not required to interact with the French authorities. Although the *abonnement* guaranteed a greater safety for the charging of the tax, it raised the question of how to determine the fraction of foreign securities effectively owned by French taxpayers. To this effect, a decree dated of 24 May 1872 created the *Commission des Valeurs Mobilières* (CVM), which would advise the Finance Ministry on the fraction of each foreign issue to impose the French taxes.<sup>7</sup> In so doing, the CVM had the power to request from the foreign issuer, through its representative, an extensive set of information likely to be correlated with the French share to be imposed. For instance, the representative was frequently asked to provide information on the nationality of the participants at general assemblies, or the distribution of coupons paid each year by country of the recipients. Being composed of high representatives of the civil service and the financial markets, the CVM could also avail itself of its own network of sources, namely, regional tax offices, and the branches of the *Banque de France*.<sup>8</sup> The CVM met whenever there were a sufficient number of foreign securities requesting a first *abonnement* or a reassessment, and the books of minutes of these meetings have been kept at the archive of the French Finance Ministry.<sup>9</sup> Each foreign issue constituted an entry in these minutes, which could vary from half a page to more than a dozen pages, in the most complex cases

---

<sup>6</sup> In 1898 the law allowed foreign companies to replace an up-front deposit at the *Caisse des depots et consignations* for the nomination of a representative. This deposit was fixed at the value of all taxes due for three years on half of the securities involved (Jobit 1898: 53).

<sup>7</sup> The CVM was also tasked with advising on the taxation of foreign companies that operated in France and were by that fact subject to French taxes on the fraction of their business done in the country.

<sup>8</sup> The membership of the CVM was as follows: the president of the finance section at the State Council (president), the director-general of the *enregistrement, des domaines et des timbres*, the director of the *mouvement general des fonds*, a regent from the *Banque de France*, and the syndic of the Paris stock-brokers (*agents de change*).

<sup>9</sup> Series 14-D, composed of 54 volumes covering the period from 1880 to 1955.

(particularly when disputed by the foreign issuer). The Appendix contains two examples of entries into the CVM minutes book. The first, a 62.5 million francs SEO for *Rio Tinto* in 1880 is a straightforward case where the CVM based its assessment on the nationality of the first buyers of the bonds. The second is a more interesting case and illustrates the considerable pains that the CVM frequently took to establish the appropriate value of French investment abroad. *A. Goerz & Co.*, a South African gold mining concern, requested the maintenance of a previous tax assessment on its £1 million worth of common shares, which was due to expire in June 1905. The CVM was initially disposed to raise the assessment based on the information about the number of dividend payments made at French banks; but later compromised, once the company allowed it to check the nationality of the individual shareholders from its own ledgers.

Despite the thoroughness of the proceedings of the CVM, there was an obvious concern with tax evasion. Because this was unlikely to be dissuaded by fines alone, the French law also created positive incentives for foreign issuers to submit to the *abonnement*. Corporations wishing to be listed in the official market in Paris had to be *abonnées*, while issues paying taxes *au comptant* were disadvantaged by having to pay higher rates.<sup>10</sup> At a time of unfettered capital mobility even these inducements were unlikely to deter French investors from choosing to receive their coupons in foreign countries with lower tax rates, or some foreign issuers from formally changing the status of their securities to reduce their duties vis-à-vis the French tax administration. Such was the case of semi-public corporations (particularly railways), which issued securities under government guarantee and were re-classified as sovereign bonds. Reliable assessments of these forms of tax evasion or avoidance are obviously not available, but contemporaries were usually convinced that they were pervasive.<sup>11</sup>

Be as it may, there were three other characteristics of the taxation method of foreign corporations which were likely to dissuade tax evasion. First, the Finance

---

<sup>10</sup> Foreign corporations non-*abonnées* paid stamp *au comptant* of 1.2% until 1895, and 2% from then on.

<sup>11</sup> An official report of 1914 estimated that out of a total 40 billion francs issued of foreign securities, between 13 and 15 escaped paying the full amount of taxes they owed (cit. in Girault 1973).

Minister had discretionary powers to tax the securities of foreign corporations that didn't indicate a representative or that didn't provide the authorities with the required information to establish the tax basis. In these cases, the CVM usually advised the Minister to fix *d'office* the taxes on the full size of the issue, as a means to convince the foreign issuer to come forth and request a revision of the fraction imposed. Second, the CVM had the power to revise the fraction of taxable foreign securities every three years, which guaranteed against perpetuating out-of-date assessments of the French ownership of these securities. And finally, the law established a minimum fraction to be taxed of any foreign issue circulating in France. This was set at 10% of the total issue in the case of shares and 20% for bonds.

The evidence suggests that the periodical revisions of quotas were not just an expedient to raise out-of-date tax assessments. The track record of the CVM shows a remarkable equanimity, with 54% of the revisions triggered resulting in an increase in the tax base, 32% in a reduction, and with no change in the remaining cases. Furthermore, as evidenced in Figure 1, the distribution of revisions is only slightly skewed to the left – inclusively in the case of revisions initiated at the petition of foreign corporations unsatisfied with the CVM's decision.<sup>12</sup>

#### Figure 1 here

The faculty to revise the tax quota in every three-year period is one of the most interesting characteristics of this data source, as it provides the only contemporary estimate of the evolution of the foreign portfolio of a major capital exporting nation before World War I. The available sources for British and German capital exports only allow establishing the value of the flows, usually at the time of the IPO/ SEO or the first instance of trade in organized exchanges.<sup>13</sup> In contrast, the labour of the CVM provides us with the assessment of the updated composition of the French portfolio of foreign securities, as compiled by arguably informed contemporaries. The nature of the data also allows us to distinguish between changes in the

---

<sup>12</sup> The average revision is positive at 30.4% but the dispersion is very wide (CV=2.87).

<sup>13</sup> This is precisely the nature of the data compiled in Stone (1999) and based on the tables of British capital called by foreign issues and published since 1865 by the *Investor's Monthly Manual*. For the equivalent German sources see Esteves (2007).

composition of the portfolio from valuation changes. By using a large number of contemporary financial sources, we were able to match up to 70% of the issues (or 94% of the capital calls) covered by the CVM with their market prices in the French exchanges.<sup>14</sup> In the case of securities which were bought by French investors but were only traded in foreign markets we also used, where possible, the prices in these markets.<sup>15</sup>

Having said that, the CVM has two glaring gaps in coverage. The bonds of foreign sovereigns have already been mentioned. Most secondary estimates place the share of foreign governments' securities at above 50% of the total French portfolio.<sup>16</sup> For these securities we were only able to gather information on the component of French investment valued at the time of the IPO/ SEO, which is the topic of a companion paper. A second omission regards the investment in French colonies. On the one hand, Algeria was not formally considered a colony, but a part of "France proper," so that French investments in this country escaped the purview of the CVM.<sup>17</sup> On the other, securities issued by French companies operating in French colonies were under tax laws particular to each colony, not necessarily under the purview of the CVM.<sup>18</sup> In fact, the minutes of the CVM only include 16 securities issued by companies operating in French colonies, but as in the case of foreign governments, we can gather information on IPOs and SEOs. For symmetry we also leave out from the analysis the French holdings of securities of corporations located in other countries' colonies, which total 56 in the CVM records.

In sum, this paper focuses on the French investment in non-sovereign and non-colonial foreign securities between 1880 and 1913.

---

<sup>14</sup> See the list of sources at the end.

<sup>15</sup> The majority of these cases were listed in London, with some few more being priced in Brussels, New York, and Lisbon.

<sup>16</sup> In the figures of Marnata (1973), taken from contemporary estimates of the *Crédit Lyonnais*, foreign governments absorbed almost 62% of the total placements of French capital abroad, between 1892 and 1913.

<sup>17</sup> Although, strangely, not foreign investments in Algeria, as the CVM was tasked to keep a track of foreign capital invested in "France."

<sup>18</sup> Not so for French protectorates, such as Tunisia or Morocco, which were deemed to have enough sovereignty to fall under the responsibility of the CVM.

## 2.3 Description of the Data

In order to reconstruct the portfolio of French foreign investments between 1880 and 1913 we used the minutes books of the CVM covering the period 1880 through 1915. The extension of the end date is justified, on the one hand, by the fact that the CVM usually assessed the initial tax liability of new issues after they had been introduced, since the information on the share effectively bought by French investors was only then made available.<sup>19</sup> On the other hand, the CVM did not always observe its own deadlines for revisions of the tax liability of foreign securities. The law required that the revision of a previous assessment had to be initiated at least one semester before the expiry of the current triennial period. Despite that, in the 97% of cases this was not respected.<sup>20</sup>

During this period, the CVM entered 3210 assessments with a par value of 22.3 billion francs or £ 886 million, corresponding to 2204 foreign securities (2066 shares, 1144 bonds) worth 13.5 billion francs (£ 534 million) in nominal terms, at issue. In 908 cases (641 shares, 267 bonds) the information on French holdings is censored because the CVM decided to apply the minimum quota imposed by the law.<sup>21</sup> This data represents capital calls raised by 1336 foreign cities, provinces, and companies located in 72 countries, territories and colonies. Figure 2 represents the geographical composition of the data contained in the CVM records. Even though the CVM also includes data on French investments in the UK, we left these out of the analysis for the time being, as we seek to capture the foreign investments outside of the capital-exporting European core (France, Germany, and the UK). Furthermore, British applications were not a significant component of French foreign private applications in the period under study. For the purpose of representation we coded as sovereigns the British *Dominia*, including South Africa. For light blue countries we did not find price information for the respect securities held by French tax-payers. Table 2 lists the number of securities and their par value, by political unit.

---

<sup>19</sup> This happened in 92% of cases with a median delay of almost 17 months.

<sup>20</sup> The median delay was of 40 days.

<sup>21</sup> In 59 cases the CVM also provided its best estimate of the real number of securities circulating in France.

## Figure 2 and Table 2 here

1419 of these securities were introduced by means of an IPO/ SEO in a French stock exchange, with the remaining coming under the attention of the French taxman because of being traded in secondary markets or some other fact suggestive of French investment in them.

As mentioned previously, we were able to find contemporary price information in 70% of cases (2209), which represent 94% of the nominal value of the assessments done the CVM (21.0 billion francs). The aggregate capitalization of these issues through time is 21.7 billion francs (£ 862 million). By using contemporary market prices, we were able to distinguish between valuation changes and changes in positions as drivers of the value of the French portfolio through time. Other than the IPOs and SEOs, for which we used issue prices (not the first-day trading price), the majority of cases were evaluated at the average yearly price, as we seek to establish the value of the French portfolio between CVM revisions. In the case of securities for which we could not find a year average we used the average price in the month of the assessment, or the closest price to the date of the assessment available.<sup>22</sup> 60% of foreign securities covered by the CVM were issued or co-issued in francs. The remaining 40% were mostly denominated in sterling (20%), dollars (4.6%), marks (4.3%), and Spanish *pesetas* (3.4%), although we found 14 other currencies. In converting these values to francs we used the currencies par value, except when the market quote deviated significantly from it, usually when the respective countries were off gold.

Figures 3 and 4 exemplify the outcome of this exercise with the securities of the *Compagnie internationale des Wagons-Lits et grands express européens*, a Belgian railway stock company.

## Figures 3 and 4 here

---

<sup>22</sup> 62.5% of yearly average prices, 5% of monthly averages, and the remainder of closest prices.

Figure 3 illustrates the case of 5500 bonds of 4% (1<sup>st</sup> issue) of 1892.<sup>23</sup> The blue line represents the CVM's assessment of the French share of the par value of these bonds, while the maroon line traces their market value. The differences between the two are shaded. Although the bonds usually traded very close to par they underperformed in the early 1900s. Vertical solid lines represent the dates in which the CVM re-assessed the tax liability of these bonds and vertical shaded lines the dates in which no revision was conducted, but a market price was still entered. As the books of the CVM only contain records of initial assessments and revisions, once a security stops being mentioned it is unclear whether the CVM was happy with maintaining its previous decision or the security (or indeed the corporation) had stopped being traded. To investigate these cases we used the contemporary financial press, which invariably reported when a corporation went out of business or stopped being traded, or when its securities were replaced by newer ones. Figure 4 aggregates all the securities issued and traded by the *Compagnie internationale* between 1885 and 1913.<sup>24</sup> It is interesting to note how on a couple of occasions (1893 and 1902) French investors reacted to a fall in market prices, after new seasoned issues, with a reduction in their exposure to this company.

Going up one level of aggregation, we can also illustrate the evolution of the French portfolio of the securities of specific countries. The four panels of Figure 5 illustrate this with the cases of Argentina, Portugal, Russia, and the US.

### Figure 5 here

Argentina and Portugal stand here for speculative investment propositions that went through well-known financial crises in the early 1890s. The two cases differ, however, as to the magnitude of the shocks. The consequences of the Argentinean default of 1890 are staggering, as its private securities disappear completely of the French portfolio, in the estimation of the CVM, between 1891 and 1896. Even when French investors regain interest in the country, they acquire Argentinean securities at fairly depressed market prices. After a new sudden stop around the 1905 financial

---

<sup>23</sup> The CVM treated separately successive issues of the same securities. The 130,000 4% (1<sup>st</sup> issue) bonds were covered as 10 separate securities.

<sup>24</sup> 14 different share issues, and 18 bonds.

crisis, when French investors sell almost 2/3 of their Argentinean holdings, the share of Argentina in the French portfolio increases very rapidly, initially pulled by a recovery in their market values later confirmed by a fast increase in the size of positions taken by French investors in this country. The swings in the Portuguese portfolio are less extreme. Even though the value of Portuguese securities was halved by the 1892 default, French investors did not divest significantly from the country (-10% from 1892 to 1893) and even increased their stake in 1896 thanks to some speculative issues in the *Beira-Alta* railway company. The most severe retrenchment comes in the years 1897 and 1898, when there is a peak-to-trough fall of 87% in French positions, very much confirmed by the market valuations. 1898 marks also, unsurprisingly, the nadir of the Portuguese currency, which had left its gold peg in 1891. In line with the overall recovery of the economy and of the exchange, French investors returned very quickly to the market for securities of this country and increased their positions until another stop, in 1910, this time motivated by the political risk associated with the overthrow of the Portuguese Monarchy.

The two investment-grade countries rose considerably in the appreciation of French investors as their securities usually performed above par. Nevertheless, US securities seem not to have avoided some contagion from the “Argentinean flu” of 1890 as their value dropped by more than 70% despite an initial increase in the size of French positions. This was later reversed, with US securities virtually disappearing from the French portfolio until 1895. There is also a hiatus in French holdings of Russian securities, in the second half of the 1880s, which is likely to be associated with the very intense placement of Russian sovereign bonds in France.<sup>25</sup> Girault (1973) dates from 1888 the first big Russian sovereign flotation in France and calculates that the Russian funds absorbed close to 2.3 billion francs just between 1888 and 1890.

We now turn to the analysis of the data from the point of view of the characterization of the investment strategy of French savers, who invested in foreign securities.

---

<sup>25</sup> Part of this regress is also probably due to the re-classification of some corporations as sovereign, for instance, Russian railway companies that acquired a government guarantee in this period.



### 3. The French Portfolio over Time

#### 3.1 Geographical Distribution

Even though our data does not cover the very significant component of foreign government bonds, it is still instructive to contrast the geographical distribution of the securities tracked by the CVM with the usual aggregate estimates available in the literature (Table 1 above). Table 3 provides the geographical breakdown of the CVM data on the same benchmark dates listed in Table 1.

#### Table 3 here

A first distinction between the two tables regards the pace of expansion of the total portfolio. Whereas the best guesses in the literature as to the value of the total French portfolio increase by 56% between 1900 and the eve of World War I, the private portion of the portfolio more than trebled over the same period. If we take the figures in Table 1 at face value, the lower shares of Europe and Asia/ Pacific in Table 3 are a reflection of the higher-than-average concentration of sovereign bonds of those regions in the French portfolio.<sup>26</sup> This evidence seems to agree with the literature's contention that for these countries "borrowing was more often to balance government accounts than to undertake infrastructure investment" (Fishlow 1985: 54). Of course, at this level of aggregation it is impossible to ascertain whether government calls on the capital market were not being used to build infrastructure, particularly as we know that a fair share of railroad construction along the European periphery was being directly financed or indirectly guaranteed by local governments. The Table also shows that France was a latecomer to investment in the US.<sup>27</sup> A final remark is due to the jump in the African share of French investments, between 1892 and 1900. African investment is dominated throughout the period by Egypt, but this particular jump is two-thirds explained by the mining boom in South Africa.<sup>28</sup>

---

<sup>26</sup> As in the German case, the "Asian" share of French investment is fundamentally Turkish until the later part of the period.

<sup>27</sup> It is unsurprising that the US share in French investment in foreign private securities is twice that of Table 1, which is the outcome of the small pace of sovereign issues in this region.

<sup>28</sup> However, the drop between 1900 and 1913 in the African share is 90% explained by Egypt.

Rather than presenting snapshots of the composition of the portfolio for the benchmark dates available in the literature, the structure of our data allows us to follow up the time-series dimension of the change in composition of the French portfolio, which is represented in Figure 6.

**Figure 6 here**

The Figure makes plain the chronology of changes in the geographic orientation of French investments, namely, the earlier drop in the importance of Europe dating from around 1890. This was counterbalanced by the already mentioned growth of the African part, which was also reversed around 1905, this time by the very fast expansion of US and Argentinean securities in the French portfolio. Also notice the scale of Egyptian interests from the very eve of the imposition of the British protectorate.

### **3.2 Distribution by Broad Sectors**

A different way of looking at the composition of the French portfolio over time is by the type of activity financed by French investors. Table 4 details the distribution of French capital by six aggregate sectors for the same four benchmark years of Table 3. Figure 7 then illustrates the evolution in time of the same sectors.

**Table 4 and Figure 7 here**

The forbearance of the French tax authorities with respect to foreign sovereigns under-represents the share of government securities in the CVM data. Ignoring the first row of Table 4, there are two characteristics, which are specifically French in this distribution. The first is the important, but decreasing share of railroad investment, particularly when compared with the patterns of British and German investment (see Esteves 2007). A second and related characteristic is the above average shares of finance and raw materials. The former was animated, depending on the period, by the purchase of banking securities or by investments in real estate (including mortgage companies). Mining companies led the boom in investment in raw

materials until the turn of the century, and were later replaced by oil as the major driver of this category in the last years of the period. Also remarkable is the low importance of the investment in industrial enterprises, a trait shared with contemporary German investment. Figure 7 provides once more the time series angle, which underscores a remarkably stable profile of investments, apart from the increase in the share of raw materials at the expense of railroads. This change is also approximately contemporary of the increase in the share of African investments since it is mainly driven by the South African mining boom of late nineteenth century.

### **3.3 Time Series Behaviour**

A final step in aggregation leads us to compute the total value of the French portfolio in each year of our period. The resulting time series is summarized in Figures 8 and 9.

#### **Figures 8 - 10 here**

Figure 8 replicates the previous representations for individual corporations and countries, and compares the evolution of the par value of the French portfolio with its market valuations. As mentioned previously, the total market capitalization of this portfolio is very close to par (21.7 billion francs against 20 billion). Consequently, the deviations between the two lines in the Figure almost exactly compensate over time. From the viewpoint of evaluating the investment decisions of French savers, a better measure compares the market value of the portfolio to the acquisition price of the securities included. The result, represented in Figure 9, gives a measure of capital gains or losses on a year-by-year basis. Apart from the period 1893-99, French investors were always able to enjoy capital gains by holding on to their portfolios. The losses in the decade of 1890 are not hard to reason, as they are likely to be related to the shockwaves of the 1890 crisis and also to the decrease in the prices of commodities on which the profitability of many of the exotic investments in the French portfolio were dependent. This is the period when Africa and in lesser extent

Asia and the Pacific increase their presence in the portfolio. In the case of South African gold mines, their profits and market prices suffered from their very success, which led to a fall in the relative price of gold, reinforced later by the Klondyke rush. Although ideally one would want to calculate total returns of the portfolio by introducing information on the coupons and dividends paid, our database does not include this information disaggregated at the level of individual securities. We do, however, have information on the aggregate returns of foreign securities from the statistics of the income tax. Figure 10 represents this information over time. As can be seen, there is a direct correspondence between market prices and returns, particularly in the late 1880s and early 1890s. Given that the bonds of foreign governments were exempt from income tax, the returns from bonds taxed by this impost correspond precisely to the fixed income securities surveyed by the CVM. Consequently, we can calculate the total return of the French portfolio on an aggregate basis. This is done in Tables 5-7.

**Tables 5-7 here**

Apart from the years 1894-1898, French investment abroad clearly paid off over and above a conceivable measure of home bias and equity premium. Over the whole period average total returns were 13.4% for shares and 7.4% for bonds. Arbulu (2007) computed a total return of 5.85% for the shares of French companies in the period 1870-1913, while investors in French fixed income securities were lucky to get more than 3% at any time.<sup>29</sup> Around the same period, comparable foreign securities in the British portfolio were performing below their French counterparts, as summarized in Table 8.

**Table 8 here**

In characterizing the performance of the British portfolio of foreign private securities we used the data from Edelstein (1982). The returns reported in this Table are deflated by the British and French CPI and suggest that the higher average and

---

<sup>29</sup> The average return between 1880 and 1913 implied by the INSEE Fixed Income series is actually of no more than 0.3%, and the annual return only rose above 3% in 4 years. This series is available to download from <https://www.globalfinancialdata.com>

cumulative returns of French investments abroad were not driven by higher volatility in the case of shares, although the standard deviation of bond returns is considerably higher. Naturally, for a return-risk comparison of the French and British portfolios we would need to include the substantial share of French investment in sovereign bonds. This will be object of an extension of the present study.

The only caveat of this exercise is the fact that we were only able to price 94% of the portfolio (by par value), so that we are likely to overstate the income payments in the total return. Nevertheless, even if we shade 6% off the values from the income tax statistics, the order of magnitudes is very similar: 7% average return for bonds and 13% for shares. It should also be noticed that the aggregate valuations of the portfolio differ considerably from Parent and Rault's (2004). While we cannot compare their estimates of the stock of foreign bonds with our own, as we do not capture sovereign bonds, there is an almost 5-to-1 difference between our stock circa 1913 and theirs. This seems too high to be attributable to tax evasion alone, especially since the authors revise upward Lévy-Leboyer's (1977) estimates constructed from a similar "indirect method" by 16%. Our presumption is therefore that their figures are overestimated, but we cannot pursue the matter at this moment.

A different angle to approach the investment decisions behind the portfolio is to decompose its changes in a component due to the decisions themselves –i.e. changes in the positions in each security– and another driven by pure valuation changes through market prices. This we do in Table 9, which decomposes the variance of the market value of the French position in each individual security into these two components, while controlling for issuer and security fixed effects.

#### **Table 9 here**

All variables are in logs, so coefficients should be interpreted as elasticities. It is clear that there is more variance between than within securities, but within the time dimension price changes clearly dominate two-to-one changes in investment

positions in driving the value of individual securities included in the French portfolio.<sup>30</sup>

Such result justifies taking a closer look at the price indices of these securities. Parent and Rault (2004) used in their research two price indices based on information published by the *Economiste Français*, a newspaper, between 1873 and 1913, on the “leading foreign bonds” and the “main foreign shares issued on the Paris Stock Exchange.” Although the information was available weekly, the authors chose to take the unweighted average of the prices on the last day available for each year. Furthermore, the indices only include 18 sovereign bonds and the shares of 6 European railway companies. This composition completely misses on the non-sovereign bond market and on some of the most dynamic sectors of French investment in this period – finance and raw materials. The indices also have an obvious survivorship bias built in, as they only track the prices of securities traded continuously in the 40 years covered by the *Economiste Français*. To make headway here, we computed the price indices for the bonds and shares covered by the CVM in two variants: weighted by capitalization and unweighted. We also took care of excluding securities from the indices on the year when they first showed up in the French portfolio. This is to match up more closely with the evidence in Table 9, which distinguishes changes in value due to price movements *and* changes in investment positions. Table 10 and Figures 11-14 summarize the results.<sup>31</sup>

#### **Table 10 and Figures 11-14 here**

A first advantage of this exercise lies in the coverage. Compared to Parent and Rault’s (2004) 18 bonds and 6 shares, we include an average of 144 bonds and 186 shares in our aggregate indices. The Figures also immediately illustrate the biases in Parent and Rault’s (2004) indices. Starting with the share indices, Figure 11 shows that their index is excessively pessimistic for the period before 1890 and completely misses a short-lived price boom at the beginning of the new century, which is especially obvious in our weighted index. For comparison, we also represented one

---

<sup>30</sup> Also, as required, the estimates of the elasticities for the Positions and Prices variables are not statistically different from 1 in specification (6).

<sup>31</sup> We chose 1895 as base year because all price series reach a local minimum around that date.

of the several capitalization-weighted indices published since 1887 by the *Banker's Magazine* for the UK, which bears some resemblance to the index computed by Parent and Rault (2004).<sup>32</sup> However, as Figure 12 makes clear, the index built by these two authors is not representative and follows closely a sectoral British index of foreign railways, also compiled by the *Banker's Magazine*. Also evident in the Figure is the fact that the price boom of the early 1900s was driven by mining stocks, especially in South Africa. This can be ascertained from the British sectoral index for these mines. The only difference is that French investors seem to have arrived late to this industry and missed a previous price spike back in the late 1880s. We can further confirm this hypothesis by looking at the price profile of two of the largest South African mining companies that attracted French capital: the Simmer and Jack Gold Mining Ltd, and the Consolidated Goldfields of South Africa Ltd. Figure 13 depicts the prices in London of these two mining concerns, which mimic closely the aggregate indices of the previous Figure.

Moving to the fixed income segment, Figure 14 shows that the behaviour of corporate bonds was very different from sovereign bonds since the beginning of the twentieth century. Corporates performed much better than sovereigns, while Parent and Rault's (2004) index closely tracks the equivalent British index for foreign sovereigns.

## **4. The Structure of the Market for Foreign Securities**

### **4.1 Concentration**

It is a well-established fact that the French market for foreign securities was very concentrated and under the dominance of the traditional *haute banque* group of merchant bankers and, increasingly, of the big deposit banks – Crédit Lyonnais, Société Générale, Comptoir National d'Escompte, and the Banque de Paris et des Pays-Bas (Paribas). Flandreau *et al.* (2009) have recently interpreted this concentration in the context of a model of certification and suasion of foreign

---

<sup>32</sup> All of the indices prepared by the Banker's Magazine are available for download from the site <https://www.globalfinancialdata.com>

sovereigns by their parent banks in the great European financial centres.<sup>33</sup> Despite the overwhelming importance of the sovereign segment of the French market, Hautcœur and Romey (2007) documented a change in the hierarchy of issuers in the context of the boom of French capital exports between 1895 and 1913. In particular, there was the emergence of a market for securities of foreign companies, initially mostly bonds, but later also shares. Such transformation was accompanied by some adjustments in the hierarchy of French intermediaries for the flotation of these securities. The particulars of the French tax law provide yet again an interesting insight into the structure of the French capital market. It will be recalled that foreign corporations were required until 1898 to nominate a French representative, which was usually a French financial house that undertook the service of paying French investors the coupons or dividends of its clients.<sup>34</sup> Consequently, although the connection is not perfect, it is safe to assume that in most cases the representative was also the parent institution who had lead the placement of foreign securities in the French market. For the purpose of synthesis, we classified the representatives into four classes: big deposit banks and *haute banque*, other banks, non-financial, and a residual class for corporations that preferred to pay the legal deposit instead of nominating a representative.<sup>35</sup> Table 11 summarizes the market share of each of these classes out of the total number of securities covered by the CVM.

#### **Table 11 here**

However measured, the market share of the French big banks is still dominating, as it absorbed about one third of all foreign securities traded and 60% of their value at the time of issue or initial trading in France (both at par and market prices). Another third of securities and capitalization was represented by smaller banks, and the remaining third was split almost equally between firms that chose a non-financial representative or that didn't nominate a representative altogether. The vast

---

<sup>33</sup> For other recent reflections on the same topic see Flandreau (2003), and Quennouëlle-Corre (2007).

<sup>34</sup> Even after 1898 most foreign corporations continued to nominate representatives probably because of the large bond they would have to deposit otherwise.

<sup>35</sup> We included in the first class the following 12 French banking houses: Crédit Mobilier, Société Générale, Crédit Lyonnais, Paribas, Banque de l'Union Parisienne, Comptoir Nationale d'Escompte, Rothschilds, Hottinguer, Mallet, Neuflyze et Cie, Pereire, and the Union Générale (until its bankruptcy in 1882).



majority of the last two situations (91%) correspond to foreign corporations that didn't introduce their securities in France through an IPO and, hence, were only hiring purely representative services with no base on an underwriting relation. Average value of issues is also much larger among securities represented by reputed French banks.

Figure 15 provides some finer detail on the density of representation, measured by the number of securities and their nominal value. The top bars correspond to the density of the 20 most important representatives and the lower bar cumulates the density of all other representatives. We also provide in Table 12 the ranking of the market shares for the largest players in each category.

#### **Figure 15 and Table 12 here**

Concentration is obvious by any measure, but especially so when calculated from the size of issues. The two largest players, Société Générale and Paribas, represented 40% of the market, and also led with 18% of the number of securities. Other notable features are the unimpressive presence of the Crédit Lyonnais, the uncontested leader in the sovereign segment of the market, and the creeping up to the top places of less known financial houses.<sup>36</sup> Two telling cases are the Banque Privée de Lyon et Marseille and the Compagnie Française de Banque et Mines. The latter was essentially associated with mining concerns, whereas the former did the majority of its business with railway and real estate corporations.

Consistent with Flandreau et al.'s (2009) model of relationship banking, representative turnover was relatively low. In 34 years only 10.3% of issuers or 2.9% of securities changed representative arrangement.<sup>37</sup> The changes are split roughly equally between "promotions" to higher representative quality and "demotions."

#### **Figure 16 here**

To finalize this section, Figure 16 uses a familiar concept, the Hirschman-Herfindhal index, to characterize the trends in concentration in the market.

---

<sup>36</sup> The Crédit Lyonnais was seventh by par and sixth by market value.

<sup>37</sup> The figures don't include the relatively rare case of corporations that chose to drop a previous representative and pay the legal deposit from then on.

Measured by nominal or market values, the index indicates high concentration throughout.<sup>38</sup> Concentration is also counter-cyclical tending to decrease in periods with greater capital issues, such as the capital boom since the late 1890s. It increases during periods of capital rationing such as after the Argentinean crisis of 1890. This is consistent with Flandreau et al.'s (2009) findings for the sovereign debt market, as only the securities represented by leading financial houses kept the favour of the market in difficult periods.

## 4.2 Underpricing

The information in Table 11 allows calculating the initial premium or discount of foreign securities introduced in French markets. As our database does not include first-day prices, we can only compare issue prices, negotiated with underwriters, to par values. Nevertheless, the evidence compares nicely with other studies on IPO underpricing.

In identifying IPOs we used a conservative rule of retaining only those issues offered by public subscription in the French markets (fundamentally Paris and Lyon); this excludes a significant number of securities placed privately by French banks and intermediaries with their customers. The number of IPOs by this measure is 227 (116 shares, 111 bonds).

Table 11 interestingly shows that the average discount at issue was the highest for securities represented by the big French banks. While securities represented by other banks were floated or traded initially at a 24% average premium, big banks were apparently associated with an initial discount of 4%. Likewise, securities of corporations without a representative initially traded at a one-third premium, while those with non-financial representatives were traded very close to par. Because of extreme outliers, a more accurate representation can be obtained from the median values of the premiums, which were zero for securities represented by big banks, 3% for other banks, 1.7% for non-financials, and 0.8% for securities without a

---

<sup>38</sup> The indices average 0.197 for nominal and 0.221 for market values.

representative. A slightly different ordering can be found if we concentrate only on IPOs. The median IPO discount was 2.5% for securities represented by big banks, 3.3% for other banks and zero for the other two categories of representatives. The evidence therefore implies that, initially at least, only well-established foreign companies that traded very close to par were able to penetrate in the French portfolio without the seal of approval of a French financial institution. By contrast, more speculative or less well-known issues had to acquire that certification, which came at a moderate cost of around 3% of the value of the securities. The order of magnitude lines up generally with evidence for other European financial centres at the time. Chambers and Dimson (2009) found a 1.9% median first-day return for IPOs in London between 1917 and 1929. Schlag and Wodrich (2000) computed a 2.95% median initial return on IPOs in six German stock exchanges between 1870 and 1914, while Burhop (2010) found a figure of 1.9% by concentrating only in the Berlin stock exchange before 1896.<sup>39</sup>

Another way of characterizing the performance of IPOs by quality of representative is to look at long-term performances. As we don't have information on period returns (coupons and dividends), the following discussion is based exclusively on capital gains or losses. Figure 17 depicts the evolution of the median market premium over par over a 8 year-horizon since the IPO. Because shares and bonds behaved very differently we present panels for each type of security.

### Figure 17 here

Unlike fixed income securities, shares had some room for capital gains, although these are only significant at very long horizons, which should be interpreted with care given that the median lifetime of shares in the dataset was of only 8 years.<sup>40</sup> From among the classes of representatives, the shares of corporations represented by the French financial elite did considerably better, initially trailing the securities represented by smaller banks, but later overtaking them. Much worse was the

---

<sup>39</sup> The choice of the breakpoint has to do with a major regulatory change introduced by the 1896 Imperial Securities Exchange Act (*Reichsbörsengesetz*).

<sup>40</sup> Moreover, the median values for corporations without representatives or represented by non-financial agents are censored above 5 years because these securities were more short-lived.

performance of shares represented by non-financial agents, while the shares of corporations without a representative hardly deviated from par. Bonds seemed to have been created alike, with a median discount from par of around 5.6% at issue. They later diverged substantially, with the bonds represented by big banks outperforming an otherwise underwhelming fixed income portfolio.<sup>41</sup> Even though we have not considered information on coupons, the overall profile of capital losses seems in line with Chambers and Burhop's (2010) conclusion about the 'disastrous' performance of IPOs in London and Berlin between 1900 and 1913.

In any case, Figure 17 suggests that the fee paid to financial intermediaries for their signalling services was actually compensated over the long-run. As DeLong (1991) famously concluded, not only J.P. Morgan men added value, the elite of the French banking industry added value too.

---

<sup>41</sup> The median lifetime of bonds was 5 years.

## Conclusions

The rich information contained in the books of minutes of the *Commission des Valeurs Mobilières* provides an extremely detailed characterization of the operation of the French market for foreign securities between 1880 and the eve of World War I. This paper concentrates on the portfolio composition, but the data is equally ideal to study the timing and direction of capital flows, which is the natural complement of the analysis here.

Among the many results unveiled by this new dataset, we would like to emphasize four. The first is the very database, which constitutes an extremely disaggregated panel set of information on the composition by industry and country of destination of French investments abroad. Second in line comes the new price series for foreign shares and bonds, which are a considerable improvement over the previously available synthetic indices. Third but not less important are the estimates of the total return of the portfolio, which are very much on the high end and tend to agree with the refutation by Parent and Rault (2004) of the thesis of the economic inconsistency of French foreign investment. Further evidence for this reinterpretation is given by comparing these estimates with the returns of contemporary British foreign investments, as calculated by Feinstein (1982), although this comparison is hampered by the absence of a sample of French investments in foreign sovereign bonds, as these were not covered by the CVM.

A final word is due for the indicators of market concentration and, especially, the evidence on IPO performance over time, which place France in the context of recent literature on Britain and Germany.

## List of Sources

### I. Unpublished

Archive du Ministère des Finances, series Direction Générale des Impôts – Commission des valeurs mobilières, 14 D 2 to 14 D 26.

### II. Published

*Annuaire Desfossés. Valeurs cotées en banque à la bourse de Paris*, several issues.

Association Nationale des Porteurs Français de Valeurs Étrangères, *Rapport Annuel*, several issues.

Banque Dupont et Furlaud (1914), *Chemins de fer, mines et valeurs industriels des États-Unis et du Canada*

Bromberger, H.-A. (1913), *Les chemins de fer exotiques*, Paris: Éditions du Moniteur Économique et Financier.

Compagnie des Agents de Change, *Annuaire des valeurs admises à la cote officielle*, several issues.

Decourdemanche, J.-A. *Manuel des valeurs cotées en coulisse à la bourse de Paris*, several issues.

Jordanoff, D. (1911), *Les Capitaux des Sociétés Bulgares par Actions avant la guerre Balkanique*, Sofia: Imprimerie de S. M. Stalkoff.

Ministère du Travail et de la Prévoyance Sociale, *Annuaire Statistique*, several issues.  
*Tableau des titres cotés à la bourse de Paris*, several issues.

And several issues of the following newspapers:

*Commercial and Financial Chronicle*, *Commercio do Porto*, *Der Deutsche Oekonomist*, *Investor's Monthly Magazine*, *Journal des Chemins de fer et des progrès industriels*, *Journal des Finances*, *Journal des Mines*, *L'agent d'assurances*, *L'argus*, *Le Capitaliste*, *Le carnet financier, industriel et commercial*, *Le Compte Rendu*, *Le Figaro*, *Le Gaulois*, *Le Journal des Transports*, *Le matin*, *Le Petit Economiste*, *Le petit Parisien*, *Le Pour et le Contre*, *Le Temps*, *L'Écho de la Bourse*, *L'Écho des mines et de la Métallurgie*, *L'économiste européen*, *Nord-Finance*, *Notes financières (Caisse commerciale de Roubaix)*, *Paris-Capital*, *Revue textile et des arts industriels*, *The New York Times*, *The Times*.

### III. References

- Arbulu, P. (2007) "Le marché parisien des actions au XIX<sup>e</sup> siècle" in G. Gallais-Hamonno, eds. *Le marché financier français au XIXe siècle. Volume 2. Aspects quantitatifs des acteurs et des instruments à la Bourse de Paris*, Paris: Publications de la Sorbonne, pp. 365-458.
- Bignon, V. and A. Miscio (2010) "Medias Bias in Financial Newspapers: Evidence from Early 20th Century France", *European Review of Economic History*, 14(3): 383-432.
- Burhop, C. (2010), "The underpricing of initial public offerings in Imperial Germany, 1870-1896", *German Economic Review*, in print.
- Cameron, R. (1961) *France and the Economic Development of Europe 1800-1914*, Princeton: Princeton University Press.
- Catin, R. (1927) *Le portefeuille étranger de la France entre 1870 et 1914*, Paris: Jouve.
- Chabot, B. and C. Kurz (2010) "That's Where The Money Was: Foreign Bias And English Investment Abroad, 1866–1907," *Economic Journal*, 120: 1056-79.
- Chambers, D. and C. Burhop (2010) "The Value of Regulation and Reputation: Going Public in London and Berlin, 1900-1913," *Mimeo*.
- Chambers, D. and E. Dimson (2009) "IPO underpricing over the very long-run," *Journal of Finance*, 64(3): 1407-1443.
- Davis, L. and D. Huttenback (1986) *Mammon and the Pursuit of Empire. The Political Economy of British Imperialism, 1860-1912*, Cambridge: Cambridge University Press.
- Davis, L. and L. Neal (2005) "The Evolution of Rules and Regulations of the First Emerging Markets: The London, New York and Paris Stock Exchanges, 1792-1914," *Quarterly Review of Economics and Finance*, 45 (2-3): 296-311.
- Delong, J. B. (1991) "Did J. P. Morgan's Men Add Value? An Economist's Perspective on Financial Capitalism" in P. Temin, ed. *Inside the Business Enterprise: Historical Perspectives on the Use of Information*, Cambridge, Mass: NBER.
- Edelstein, M. (1982) *Overseas Investment in the Age of High Imperialism. The United Kingdom, 1850-1914*, London: Methuen.

- Feis, H. (1930) *Europe The World's Banker 1870-1914*, New York: Council of Foreign Relations.
- Flandreau, M. (2003), "Crises and Punishment: Moral Hazard and the Pre-1914 International Financial Architecture", in M. Flandreau, ed., *Money Doctors: The History, theory and policy of international financial advice*, London: Routledge, pp. 13-48.
- Flandreau, M., J. Flores, N. Gaillard, and S. Nieto-Parra (2009) "The End Of Gatekeeping: Underwriters And The Quality Of Sovereign Bond Markets, 1815-2007," NBER # 15128.
- Girault, R. (1973) *Les emprunts russes et les investissements français en Russie 1887-1914*, Paris: Armand Colin.
- Goetzmann W. and A. Ukhov (2006) "British Investment Overseas 1870-1913: A Modern Portfolio Theory Approach," *Review of Finance*, 10(2): 261-300.
- Guillet, E. (1900) "Contribution à la statistique des valeurs mobilières étrangères," *Congrès international des valeurs mobilières*, no. 1-9.
- Hautcœur, P.-C. and G. Gallais-Hamonno (2007) *Le marché financier français au XIXe siècle*. 2 vols, Paris: Publications de la Sorbonne.
- Hautcœur, P.-C. and Riva (2009) "The Paris Financial Market in the 19<sup>th</sup> Century: An Efficient Multi-Polar Organization?" *Mimeo*.
- Hautcœur, P.-C. and C. Romey (2007) "Les émetteurs sur le marché financier français: une hiérarchie nouvelle après 1895" in G. Gallais-Hamonno, eds. *Le marché financier français au XIXe siècle. Volume 1. Récit*, Paris: Publications de la Sorbonne, pp. 437-494.
- Jobit, M. (1898) *Traité Pratique contenant les règles de perception en matière de titres ou de biens des sociétés étrangères en France et de fonds d'état étrangers*, Paris: Guillaumin et Cie.
- Leroy-Beaulieu, P. (1906) *Traité de la science des finances*, Paris: Guillaumin et Cie.
- Lévy-Leboyer, M. (1977) La balance des paiements et l'exportation des capitaux français" in *La position internationale de la France*, Paris: Editions de l'EHESS.
- Lévy-Leboyer, M. and F. Bourguignon (1985) *The French Economy in the Nineteenth Century. An Essay in Econometric Analysis*, Cambridge: Cambridge University Press.
- Lysis (1908) *Contre l'Oligarchie financière en France*, Paris: Bureaux de "La Revue."



- Marnata, F. (1973) *La bourse et le financement des investissements*, Paris: A. Colin.
- Marchal, J. (1932) *Les grands marchés financiers. Londres, New-York, Paris, Berlin. Leur solidarité internationale*, Paris: Sirey.
- Marseille, J. (1984) *Empire colonial et capitalisme français. Histoire d'un divorce*, Paris: Albin Michel.
- Mitchell, B. R. (1993) *International Historical Statistics. Europe 1750-1993*, London : MacMillan.
- Moreau-Néret, O. (1939) *Les valeurs mobilières*, Paris: Sirey.
- Neymarck, A. (1903) "La statistique des valeurs mobilières," *Bulletin de l'Institut International de Statistique*, IV<sup>e</sup> rapport.
- Parent, A. and C. Rault (2004) "The Influences Affecting French Assets Abroad Prior to 1914," *Journal of Economic History*, 64 (2): 328-62.
- Pollin, P.-R. (2007) "La coulisse au XIXe siècle: de l'illégalité à la reconnaissance" in G. Gallais-Hamonno, eds. *Le marché financier français au XIXe siècle. Volume 2. Aspects quantitatifs des acteurs et des instruments à la Bourse de Paris*, Paris: Publications de la Sorbonne, pp. 87-116.
- Quennouëlle-Corre, L. (2007) "The Paris Bourse and the International Capital Flows Before 1914," *Mimeo*.
- Raffalovitch, A. (1931) *L'abominable venalité de la presse*, Paris: Librairie du travail.
- Schlag, C. and A. Wodrich (2000) "Has There Always Been Underpricing and Long-Run Underperformance? IPOs in Germany Before World War I," *Mimeo*.
- Théry, E. (1911) *La fortune publique de la France*, Paris: C. Delagrave.
- White: H. D. (1933) *The French International Accounts*, Cambridge, Mass: Harvard University Press.
- Woodruff, W. (1966) *Impact of Western Man. A Study of Europe's Role in the World Economy 1750-1960*, London: Macmillan.

**Table 1: Geographical Distribution of Foreign Portfolios (Secondary Literature)**

Region	Britain		Germany		France		
	1900	1914	1914	1882	1892	1900	1914
Europe	10.4	5.3	44	70.4	71.0	70.7	51.9
(with Turkey)	N.a.	(5.8)	(51.7)	N.a.	N.a.	(71.6)	(59.1)
North America	18.8	35.3	19.8	4.2	2.0	2.6	5.5
(US)	(12.9)	(21.3)	(16.4)		N.a.	(1.7)	(4.4)
Latin America	10.4	18.5	15.5		2.0	11.2	17.7
Africa	15.8	12.3	8.6	0.7	N.a.	12.1	9.9
Asia/ Pacific	27.5	28.8	12.1	24.8	25.0	3.4	14.9
(without Turkey)	N.a.	(17.3)	(4.3)	N.a.	N.a.	(2.5)	(7.7)
<b>Total (bn fr)</b>	<b>62.2</b>	<b>103.6</b>	<b>30.1</b>	<b>14.4</b>	<b>N.a.</b>	<b>30.1</b>	<b>46.9</b>

Note: values in percentage of total market value of portfolios, except for last row (in billion francs).  
Sources: Woodruff (1966), Braudel and Labrousse (1979), and Parent and Rault (2004).

**Table 2: Number of Securities and French Share in Par Values, by Country**

Country	Number	Par value (fr m)	Country	Number	Par value (fr m)
Argentina	43	529.83	Liberia	1	0.05
Australia	30	31.96	Luxembourg	2	11.25
Austria-Hungary	124	1231.75	Mexico	73	473.68
Belgium	224	433.43	Morocco	1	1.52
Bolivia	4	32.80	Netherlands	6	17.96
Brazil	116	1464.53	New Zealand	1	0.25
Bulgaria	1	5.90	Nicaragua	2	2.90
Canada	80	315.38	Norway	12	36.41
Chile	12	78.37	Panama	1	1.00
China	3	18.78	Peru	7	33.22
Colombia	19	35.15	Portugal	43	489.77
Cuba	14	76.95	Romania	24	57.60
Denmark	4	32.70	Russia	246	1727.61
Ecuador	4	13.48	Serbia	9	7.75
Egypt	113	1305.59	South Africa	208	355.83
Ethiopia	1	0.45	Spain	282	1928.67
Finland	2	2.50	Sweden	15	70.62
Germany	22	40.05	Switzerland	31	99.57
Greece	36	120.70	Tunisia	49	62.96
Guatemala	1	0.78	Turkey	81	417.41
Haiti	1	12.95	USA	176	1428.41
Italy	56	225.99	Uruguay	3	7.98
Japan	6	168.58	Venezuela	11	13.05
Korea	4	52.85	<b>Total</b>	<b>2204</b>	<b>13476.93</b>

**Table 3: Geographical Distribution of French Private Portfolio (CVM Data)**

Region	France			
	1882	1892	1900	1913
Europe	69.2	70.7	53.4	39.0
(with Turkey)	(73.7)	(74.7)	(6.8)	(43.9)
North America	1.1	0.8	1.7	12.8
(US)	N.a.	N.a.	(0.5)	(10.1)
Latin America	4.5	6.0	10.6	21.2
Africa	20.7	18.5	27.4	19.8
Asia/ Pacific	4.5	4.0	6.9	7.2
(without Turkey)	N.a.	N.a.	(0.1)	(4.9)
<b>Total (bn fr)</b>	<b>1.5</b>	<b>2.4</b>	<b>2.9</b>	<b>10.1</b>

Note: values in percentage of total market values, except for last row (in billion francs).

**Table 4: Portfolio Distribution by Sectors of Economic Activity**

Sector	France			
	1882	1892	1900	1913
Provincial & Municipal	0.7	0.0	0.0	3.5
Railroads	48.7	56.9	36.2	38.1
Public Utilities	16.8	16.6	20.0	11.8
Finance	28.3	20.2	15.8	26.1
(Banks)	(15.6)	(8.8)	(5.3)	(12.0)
(Real Estate)	(9.5)	(10.0)	(8.8)	(13.7)
(Insurance)	(3.2)	(1.4)	(0.4)	(0.1)
Raw Materials	4.4	3.9	22.1	14.5
(Mining)	(4.4)	(3.9)	(22.0)	(9.7)
Industrial & Other	1.1	2.4	6.0	6.3
(Manufacturing)	(1.1)	(2.4)	(6.0)	(5.8)

Note: values in percentage of total market values

**Table 5: Total Value and Return of French Foreign Portfolio**

Year	Values at market prices		Cap. Gains		Payments		Total Returns	
	Initial	Current	m fr	%	m fr	%	m fr	%
	m fr	m fr						
1880	743.1	743.1	0.0	0	70.9	9.5%	70.9	9.5%
1881	1026.6	1050.3	23.8	2.3%	92.2	9.0%	116.0	11.3%
1882	1418.6	1471.3	52.7	3.7%	130.2	9.2%	182.9	12.9%
1883	1450.1	1498.3	48.2	3.3%	124.6	8.6%	172.8	11.9%
1884	1706.8	1737.7	30.9	1.8%	124.0	7.3%	154.9	9.1%
1885	1718.4	1750.5	32.1	1.9%	121.5	7.1%	153.6	8.9%
1886	1731.7	1778.0	46.3	2.7%	105.3	6.1%	151.6	8.8%
1887	1898.6	1895.4	-3.2	-0.2%	106.0	5.6%	102.8	5.4%
1888	2050.1	2043.2	-6.9	-0.3%	112.1	5.5%	105.2	5.1%
1889	1961.0	1949.1	-11.9	-0.6%	126.3	6.4%	114.4	5.8%
1890	1806.6	1929.7	123.1	6.8%	130.9	7.2%	254.0	14.1%
1891	2069.6	2216.2	146.6	7.1%	149.3	7.2%	295.9	14.3%
1892	2264.4	2387.7	123.3	5.4%	150.8	6.7%	274.1	12.1%
1893	1841.4	1829.9	-11.5	-0.6%	129.6	7.0%	118.1	6.4%
1894	2146.8	2048.8	-98.0	-4.6%	118.2	5.5%	20.2	0.9%
1895	2170.2	2056.6	-113.6	-5.2%	116.4	5.4%	2.8	0.1%
1896	2284.4	2261.6	-22.8	-1.0%	121.0	5.3%	98.2	4.3%
1897	2360.1	2335.3	-24.8	-1.0%	127.2	5.4%	102.4	4.3%
1898	2417.2	2372.2	-44.9	-1.9%	126.8	5.2%	81.9	3.4%
1899	2635.6	2627.6	-8.0	-0.3%	152.7	5.8%	144.8	5.5%
1900	2759.9	2936.8	176.9	6.4%	165.5	6.0%	342.3	12.4%
1901	2885.7	3080.0	194.3	6.7%	163.8	5.7%	358.1	12.4%
1902	3304.4	3570.6	266.2	8.1%	172.8	5.2%	439.0	13.3%
1903	3559.2	3857.6	298.4	8.4%	177.3	5.0%	475.7	13.4%
1904	3911.0	4263.9	352.9	9.0%	213.7	5.5%	566.6	14.5%
1905	4125.1	4558.1	433.0	10.5%	213.0	5.2%	646.0	15.7%
1906	4989.6	5596.6	607.0	12.2%	265.8	5.3%	872.8	17.5%
1907	5337.6	5874.9	537.4	10.1%	314.7	5.9%	852.1	16.0%
1908	5886.5	6412.8	526.3	8.9%	325.7	5.5%	852.0	14.5%
1909	6274.8	6675.8	401.1	6.4%	353.2	5.6%	754.3	12.0%
1910	7642.1	8062.5	420.4	5.5%	383.8	5.0%	804.2	10.5%
1911	9308.3	10117.1	808.8	8.7%	444.6	4.8%	1253.4	13.5%
1912	10426.2	11401.9	975.7	9.4%	431.5	4.1%	1407.2	13.5%
1913	9544.7	10172.2	627.5	6.6%	585.2	6.1%	1212.7	12.7%

Source: *Annuaire Statistique de la France* and author's calculations.

**Table 6: Total Value and Return of French Variable Income Portfolio**

Year	Values at market prices		Cap. Gains		Payments		Total Returns	
	Initial	Current	m fr	%	m fr	%	m fr	%
	m fr	m fr						
1880	341.0	341.0	0.0	0	20.8	6.1%	20.8	6.1%
1881	726.9	750.6	23.8	3.3%	40.2	5.5%	64.0	8.8%
1882	907.7	959.9	52.1	5.7%	65.7	7.2%	117.8	13.0%
1883	906.2	961.8	55.6	6.1%	63.4	7.0%	119.0	13.1%
1884	1009.0	1044.8	35.8	3.5%	65.6	6.5%	101.4	10.0%
1885	938.2	969.4	31.2	3.3%	61.6	6.6%	92.8	9.9%
1886	937.8	969.0	31.2	3.3%	42.5	4.5%	73.7	7.9%
1887	1011.6	979.3	-32.2	-3.2%	43.6	4.3%	11.4	1.1%
1888	995.1	920.1	-75.0	-7.5%	50.0	5.0%	-25.0	-2.5%
1889	1000.7	929.5	-71.2	-7.1%	61.1	6.1%	-10.1	-1.0%
1890	944.7	1005.6	61.0	6.5%	60.8	6.4%	121.8	12.9%
1891	1000.2	1058.7	58.5	5.9%	67.6	6.8%	126.1	12.6%
1892	1036.7	1069.9	33.3	3.2%	80.2	7.7%	113.5	10.9%
1893	900.1	930.5	30.4	3.4%	57.2	6.4%	87.6	9.7%
1894	976.9	974.5	-2.4	-0.3%	47.9	4.9%	45.5	4.7%
1895	933.8	926.2	-7.5	-0.8%	46.2	4.9%	38.7	4.1%
1896	976.9	1042.1	65.1	6.7%	49.7	5.1%	114.8	11.8%
1897	1082.3	1157.0	74.7	6.9%	51.5	4.8%	126.2	11.7%
1898	1183.6	1250.0	66.4	5.6%	56.0	4.7%	122.4	10.3%
1899	1301.9	1395.6	93.7	7.2%	76.0	5.8%	169.7	13.0%
1900	1430.3	1687.7	257.5	18.0%	86.8	6.1%	344.3	24.1%
1901	1526.8	1780.7	253.9	16.6%	85.3	5.6%	339.2	22.2%
1902	1713.7	1988.9	275.2	16.1%	84.7	4.9%	359.9	21.0%
1903	1715.8	1932.3	216.5	12.6%	85.6	5.0%	302.1	17.6%
1904	1937.4	2156.6	219.2	11.3%	110.4	5.7%	329.6	17.0%
1905	2128.9	2412.5	283.6	13.3%	114.4	5.4%	398.0	18.7%
1906	2490.4	2911.7	421.3	16.9%	139.0	5.6%	560.3	22.5%
1907	2606.7	2942.3	335.5	12.9%	187.4	7.2%	522.9	20.1%
1908	2693.1	3025.7	332.6	12.3%	193.5	7.2%	526.1	19.5%
1909	2861.8	3151.5	289.7	10.1%	190.4	6.7%	480.1	16.8%
1910	3442.6	3792.2	349.5	10.2%	208.0	6.0%	557.5	16.2%
1911	4015.9	4687.5	671.6	16.7%	233.8	5.8%	905.4	22.5%
1912	4388.3	5169.4	781.1	17.8%	214.4	4.9%	995.5	22.7%
1913	3933.6	4639.0	705.4	17.9%	317.3	8.1%	1022.7	26.0%

Source: *Annuaire Statistique de la France* and author's calculations.

**Table 7: Total Value and Return of French Fixed Income Portfolio**

Year	Values at market prices		Cap. Gains		Payments		Total Returns	
	Initial	Current	m fr	%	m fr	%	m fr	%
	m fr	m fr						
1880	402.1	402.1	0.0	0	50.1	12.5%	50.1	12.5%
1881	299.7	299.7	0.0	0.0%	52.0	17.4%	52.0	17.4%
1882	510.8	511.4	0.6	0.1%	64.5	12.6%	65.1	12.7%
1883	543.9	536.5	-7.4	-1.4%	61.2	11.3%	53.8	9.9%
1884	697.8	692.9	-4.9	-0.7%	58.4	8.4%	53.5	7.7%
1885	780.2	781.1	0.9	0.1%	59.9	7.7%	60.8	7.8%
1886	793.9	809.0	15.1	1.9%	62.8	7.9%	77.9	9.8%
1887	887.0	916.1	29.1	3.3%	62.4	7.0%	91.5	10.3%
1888	1055.0	1123.1	68.1	6.5%	62.1	5.9%	130.2	12.3%
1889	960.3	1019.6	59.3	6.2%	65.2	6.8%	124.5	13.0%
1890	862.0	924.0	62.1	7.2%	70.1	8.1%	132.2	15.3%
1891	1069.4	1157.6	88.1	8.2%	81.7	7.6%	169.8	15.9%
1892	1227.7	1317.8	90.1	7.3%	70.6	5.8%	160.7	13.1%
1893	941.4	899.5	-41.9	-4.5%	72.4	7.7%	30.5	3.2%
1894	1169.9	1074.3	-95.5	-8.2%	70.3	6.0%	-25.2	-2.2%
1895	1236.5	1130.4	-106.1	-8.6%	70.2	5.7%	-35.9	-2.9%
1896	1307.5	1219.5	-88.0	-6.7%	71.3	5.5%	-16.7	-1.3%
1897	1277.8	1178.3	-99.5	-7.8%	75.7	5.9%	-23.7	-1.9%
1898	1233.6	1122.3	-111.3	-9.0%	70.8	5.7%	-40.5	-3.3%
1899	1333.7	1232.0	-101.6	-7.6%	76.7	5.8%	-24.9	-1.9%
1900	1329.7	1249.1	-80.6	-6.1%	78.7	5.9%	-1.9	-0.1%
1901	1358.9	1299.3	-59.6	-4.4%	78.5	5.8%	18.9	1.4%
1902	1590.7	1581.8	-8.9	-0.6%	88.1	5.5%	79.2	5.0%
1903	1843.4	1925.3	81.9	4.4%	91.7	5.0%	173.6	9.4%
1904	1973.6	2107.3	133.7	6.8%	103.3	5.2%	237.0	12.0%
1905	1996.2	2145.6	149.4	7.5%	98.6	4.9%	248.0	12.4%
1906	2499.2	2684.9	185.7	7.4%	126.8	5.1%	312.5	12.5%
1907	2730.8	2932.7	201.9	7.4%	127.3	4.7%	329.2	12.1%
1908	3193.4	3387.1	193.8	6.1%	132.2	4.1%	326.0	10.2%
1909	3413.0	3524.3	111.4	3.3%	162.8	4.8%	274.2	8.0%
1910	4199.5	4270.3	70.8	1.7%	175.8	4.2%	246.6	5.9%
1911	5292.4	5429.6	137.2	2.6%	210.8	4.0%	348.0	6.6%
1912	6038.0	6232.5	194.6	3.2%	217.1	3.6%	411.7	6.8%
1913	5611.1	5533.1	-78.0	-1.4%	267.9	4.8%	189.9	3.4%

Source: *Annuaire Statistique de la France* and author's calculations.

**Table 8: Comparative Total Returns, Britain and France, 1880-1913**

	Shares		Bonds	
	France	Britain	France	Britain
Mean	12.84	7.66	6.88	4.42
Std Deviation	6.94	7.75	6.04	1.98
Cumulative	12.63	7.38	6.71	4.40

Notes: total returns deflated by CPI; cumulative returns are calculated from the moment of acquisition of securities.

Sources: Edelstein (1982) for Britain, *Annuaire Statistique* (1913), Mitchell (1883), and author's calculations for France.

**Table 9: Decomposition of Market Values of Securities**

Variable	(1)	(2)	(3)	(4)	(5)	(6)
Constant	15.584 (0.025)	13.436 (0.035)	13.829 (0.046)	17.684 (0.052)	13.962 (0.018)	16.229 (0.019)
Positions	0.543 (0.020)		0.265 (0.019)	0.958 (0.023)		0.992 (0.009)
Prices		0.345 (0.007)	0.316 (0.007)		0.973 (0.011)	0.983 (0.009)
Issuer FE	No	No	No	Yes	Yes	Yes
Security FE	No	No	No	Yes	Yes	Yes
N	12188	12188	12188	12188	12188	12188
R	0.061	0.198	0.211	0.933	0.970	0.988

Note: OLS regressions with robust standard errors in parentheses.

**Table 10: Price Indices, 1880-1913**

Year	Shares			Bonds		
	Unweighted	Weighted	No. Sec.	Unweighted	Weighted	No. Sec.
1880	104.0	81.0	19	110.9	99.7	18
1881	120.6	115.7	36	114.3	113.0	24
1882	122.3	97.1	48	108.8	105.6	30
1883	115.9	95.7	47	101.1	100.4	31
1884	118.3	97.8	51	102.8	103.8	42
1885	115.9	95.6	47	103.9	104.7	49
1886	113.3	93.5	49	107.3	107.6	54
1887	109.7	92.4	51	112.3	110.2	60
1888	105.5	88.8	52	115.0	114.6	65
1889	104.4	92.8	54	114.8	116.3	66
1890	115.8	109.5	53	117.0	120.3	69
1891	116.9	104.9	56	117.3	118.7	76
1892	111.5	97.9	58	114.5	116.2	83
1893	106.8	105.4	54	103.2	104.7	85
1894	107.4	98.4	65	97.5	98.1	97
1895	100.0	100.0	73	100.0	100.0	103
1896	94.5	99.6	100	101.5	91.6	114
1897	101.1	100.9	105	104.8	95.8	115
1898	100.8	98.6	123	105.6	101.0	115
1899	104.6	101.6	159	107.4	97.4	125
1900	111.3	169.1	195	107.4	98.0	133
1901	106.9	163.8	205	110.7	99.4	145
1902	90.7	153.5	226	116.6	138.2	162
1903	73.4	95.1	240	121.3	144.0	181
1904	69.4	89.3	284	121.3	143.5	186
1905	72.8	102.8	308	129.4	156.3	211
1906	78.4	105.7	358	129.8	152.2	233
1907	76.7	104.9	418	129.2	148.8	251
1908	77.1	100.9	437	129.3	126.0	281
1909	73.2	97.7	441	127.9	129.3	303
1910	75.2	97.6	458	129.3	139.1	328
1911	78.5	99.3	499	130.1	139.9	359
1912	89.1	104.1	524	128.8	137.4	372
1913	91.1	105.5	459	125.6	137.8	334



**Table 11: Market Structure by Type of Representative**

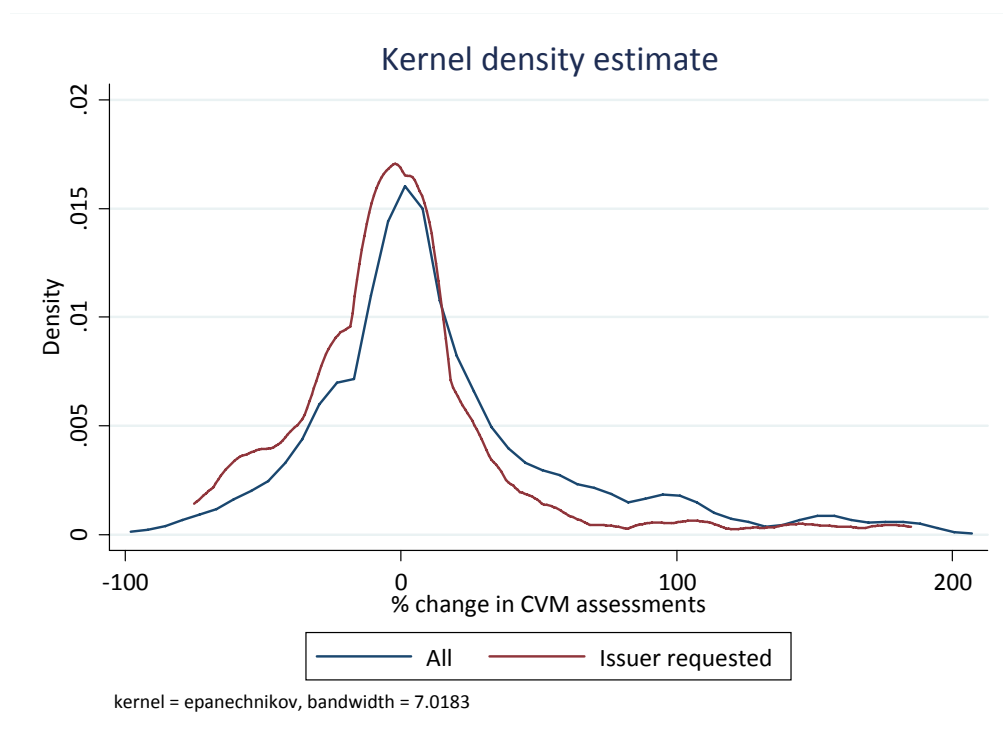
Representative Type	All securities			Securities with info on value			Median premium	
	no.	no.	Par value	no.	Par value	Market value	All	IPOs
Big banks	12	723	8053.0	595	7612.0	7326.8	0	-2.5%
Other banks	110	699	3671.6	521	3090.9	3836.4	3.0%	-3.3%
Non-financial	225	406	1202.4	202	967.0	983.7	1.7%	0
None	252	376	549.9	171	449.0	601.1	0.8%	0
<b>Total</b>	<b>599</b>	<b>2204</b>	<b>13476.9</b>	<b>1489</b>	<b>12118.9</b>	<b>12748.1</b>	<b>0.6%</b>	<b>-0.5%</b>

Note: values in million francs measured at issue or initial trading

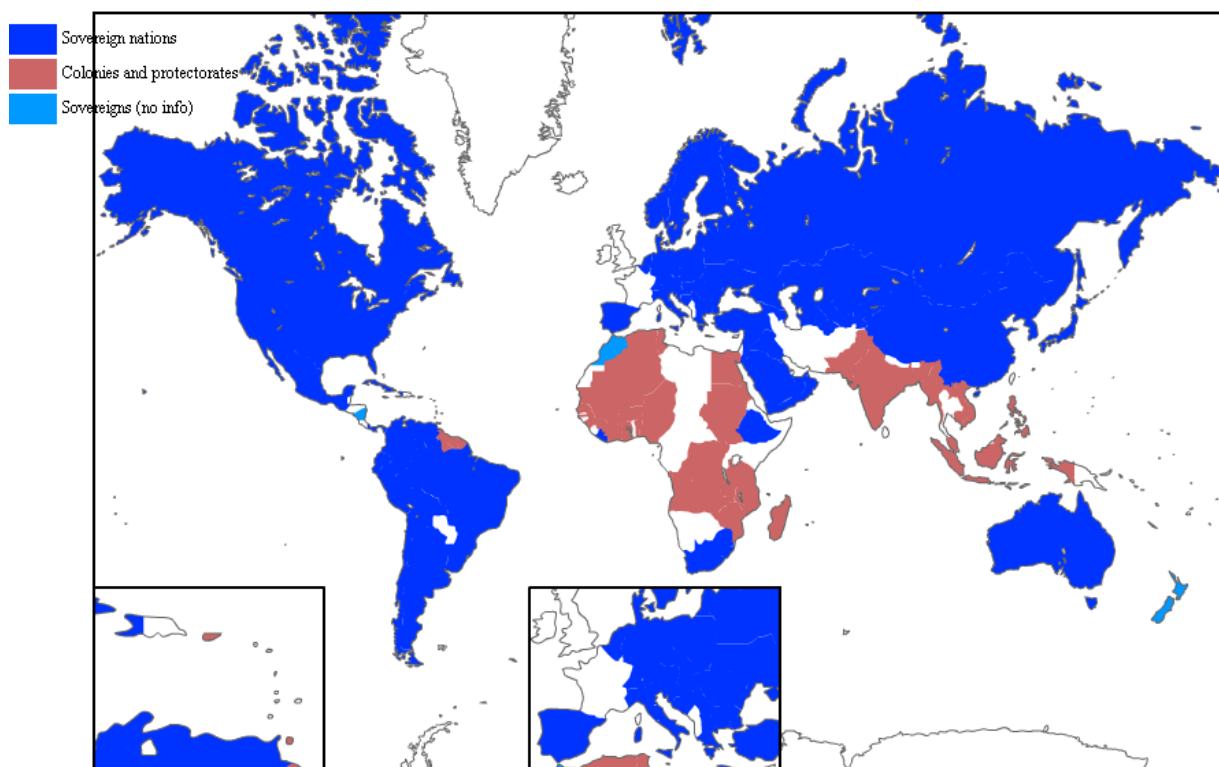
**Table 12: Five Largest Representatives**

No. securities		Par values		Market values		
		#	%		%	
1	Paribas	224	Soc Gen	20.1	Soc Gen	20.6
2	Soc Gen	178	Paribas	18.9	Paribas	18.9
3	Comp d'Esc	94	Comp d'Esc	4.7	Ban Priv Lyon-Mar	4.8
4	Cred Lyon	90	Rothschild	4.3	Cie Fran Banque Mines	4.3
5	Cie Fran Banque Mines	72	Ban Priv Lyon-Mar	3.7	Ban Union Par	3.5

**Figure 1: Kernel Density of CVM's Assessments Revisions**

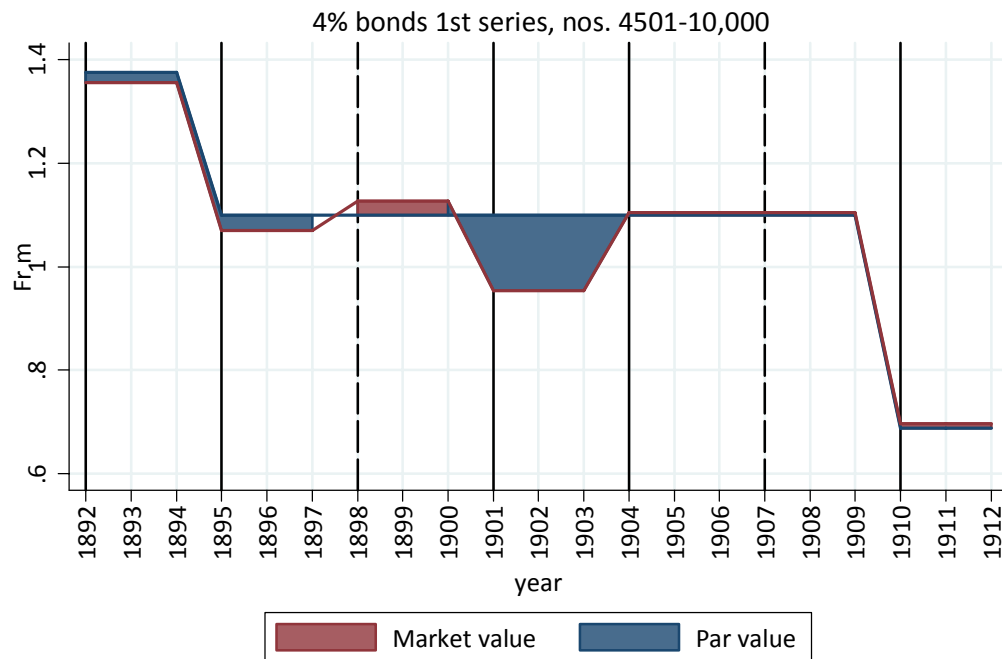


**Figure 2: Geographical Spread of CVM Data**



**Figure 3: An Example Security**

Compagnie internationale des Wagons-Lits et grands express européens



**Figure 4: An Example Corporation**

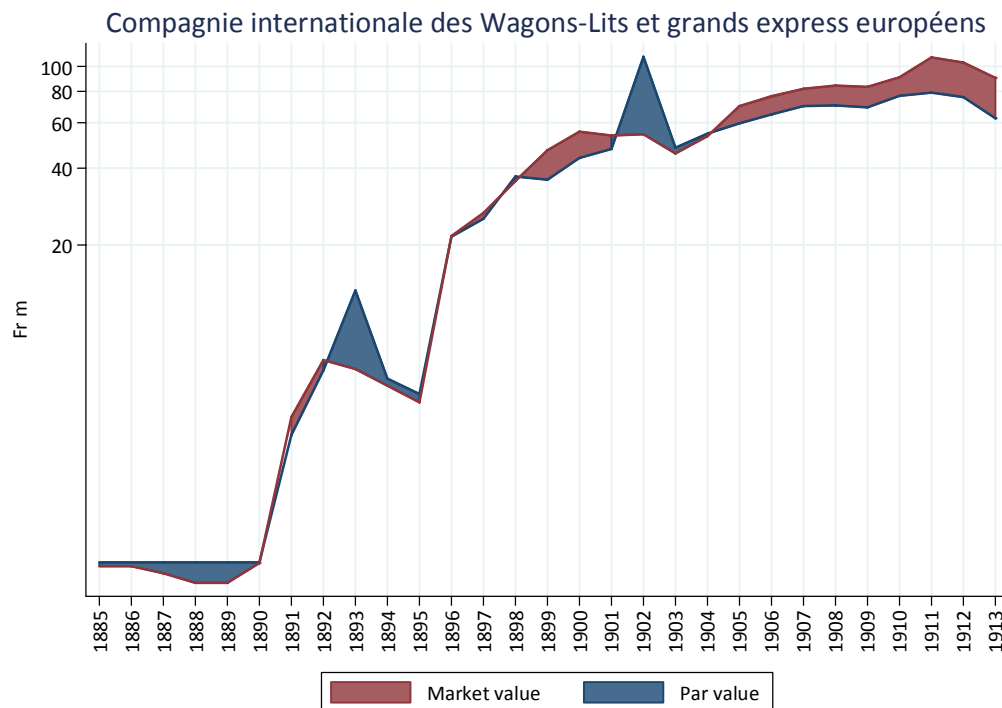
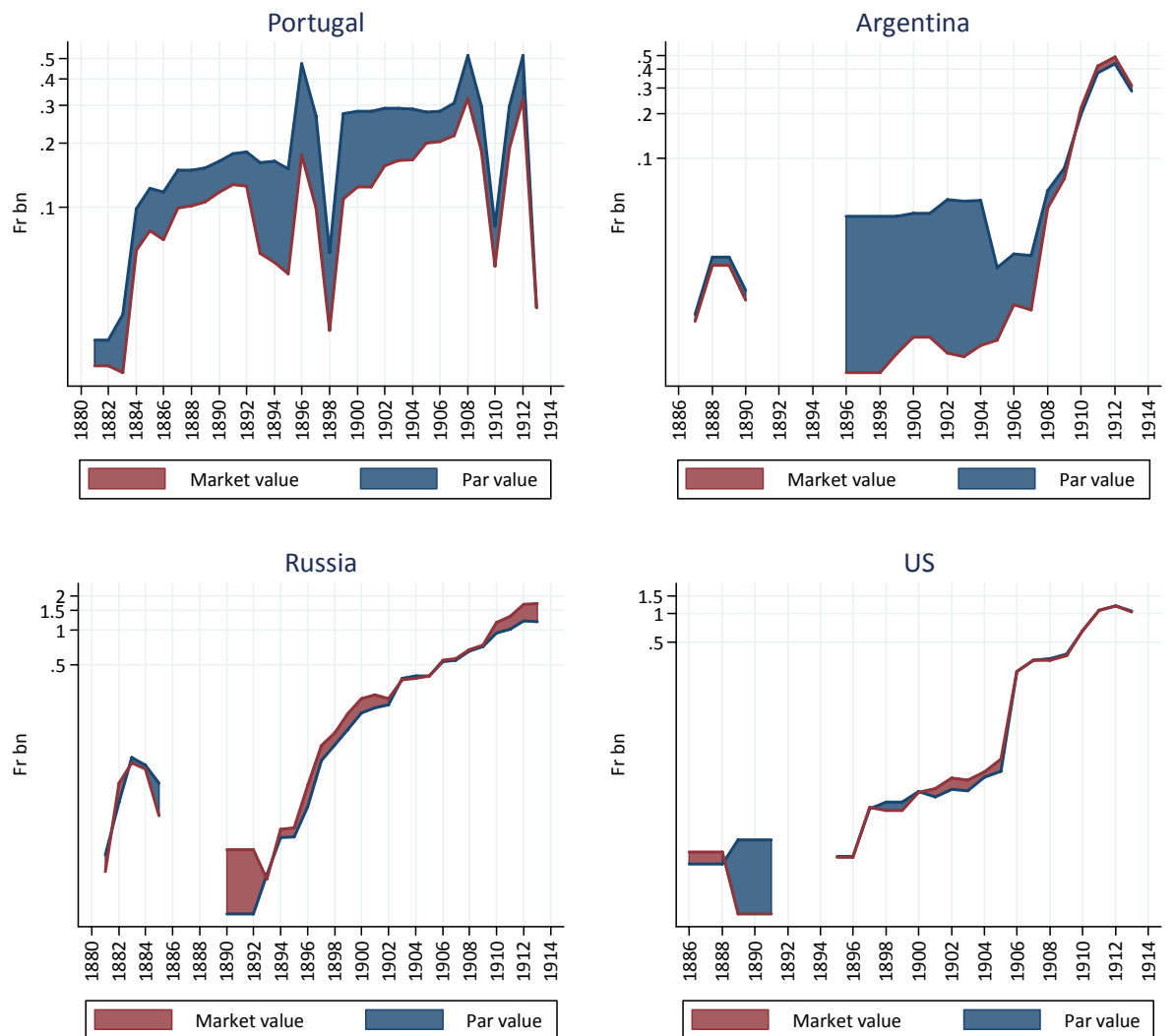
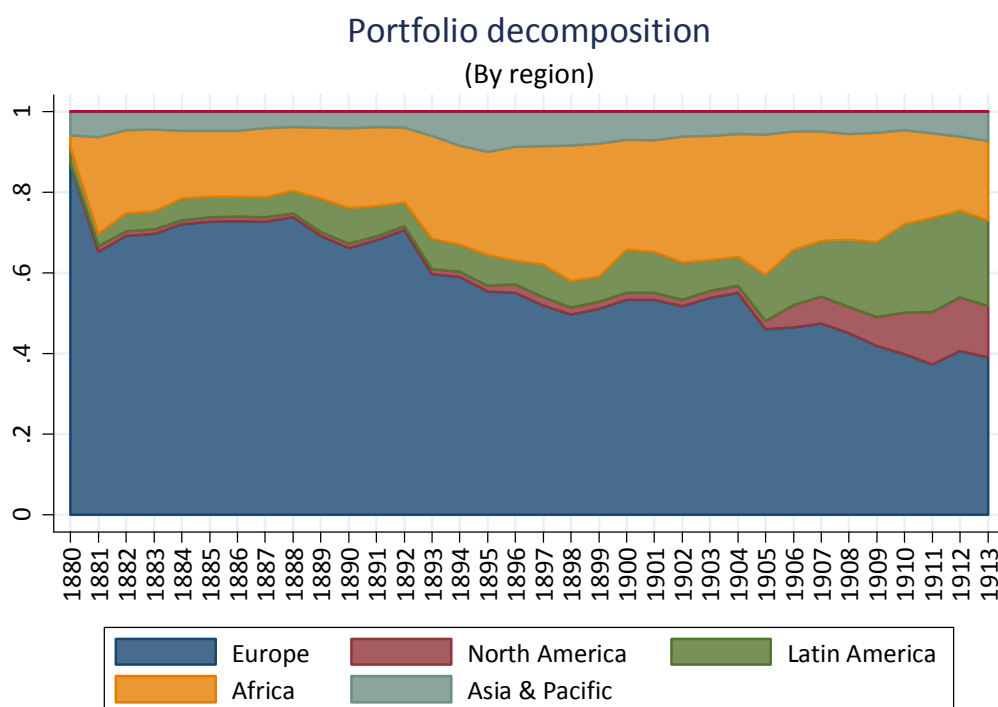


Figure 5: Four Country Examples



**Figure 6: Timeline of Geographical Composition of French Portfolio**



**Figure 7: Timeline of Portfolio By Aggregate Sectors**

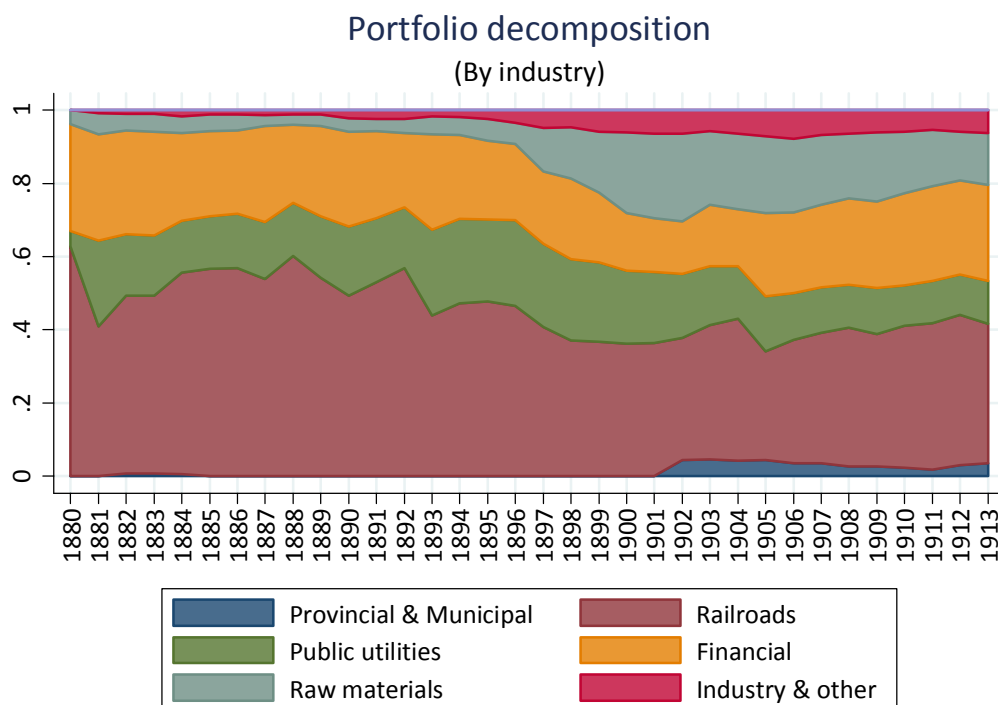


Figure 8: Evolution of the French Portfolio

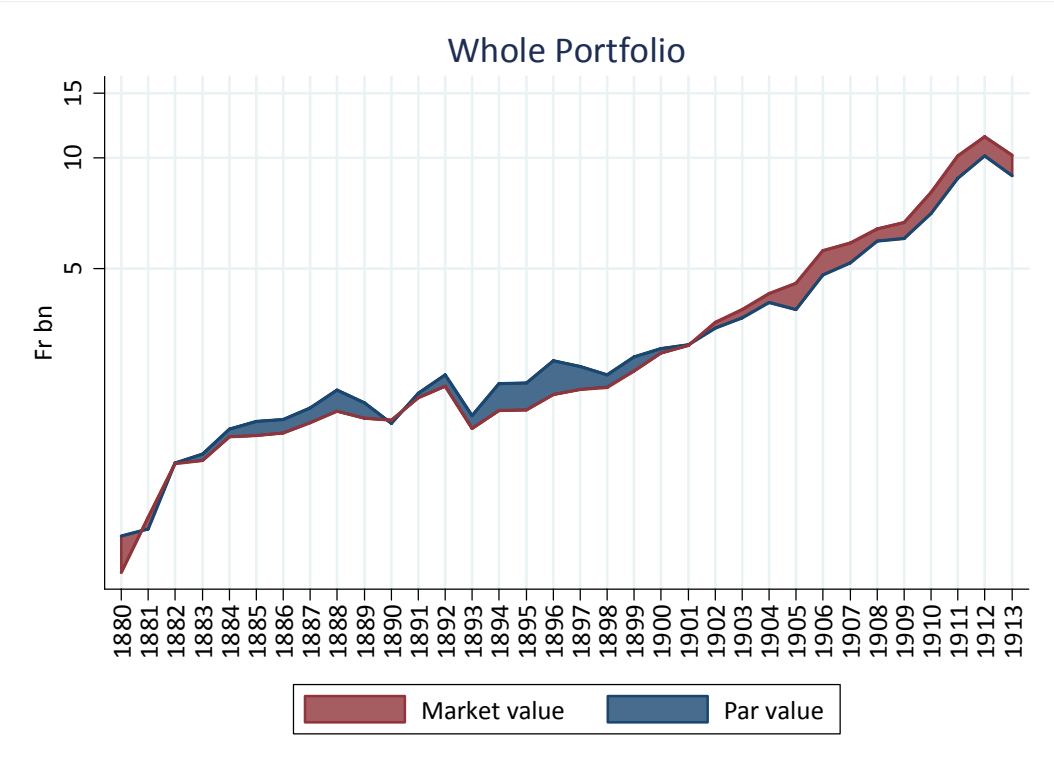
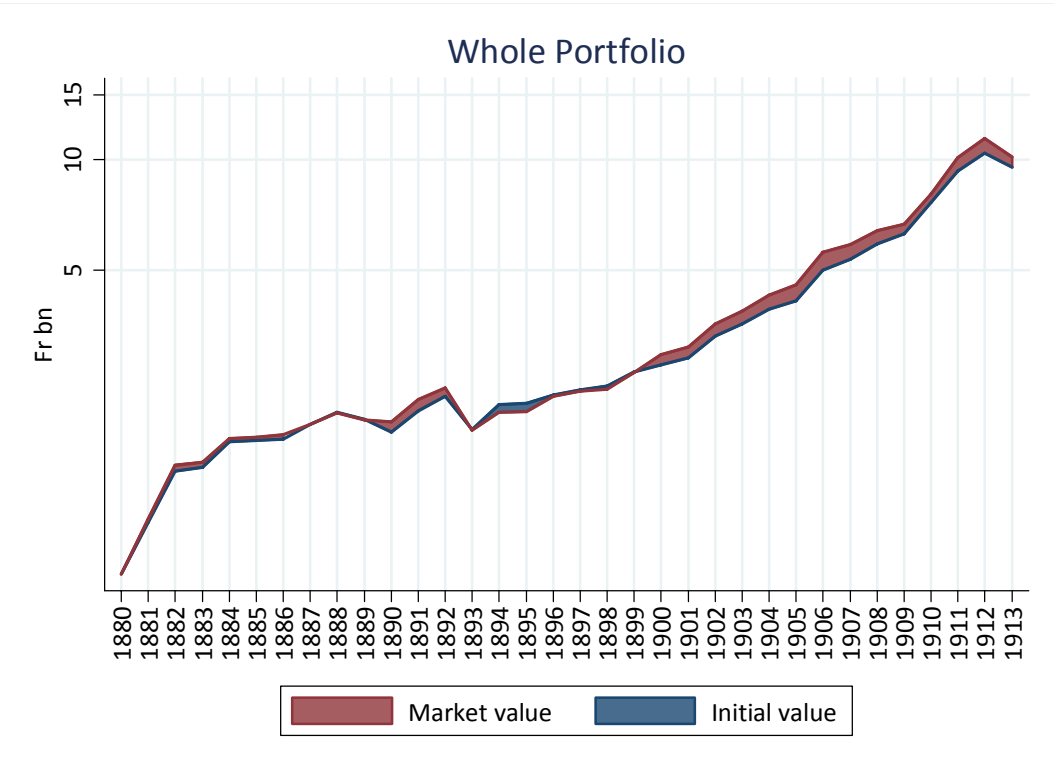
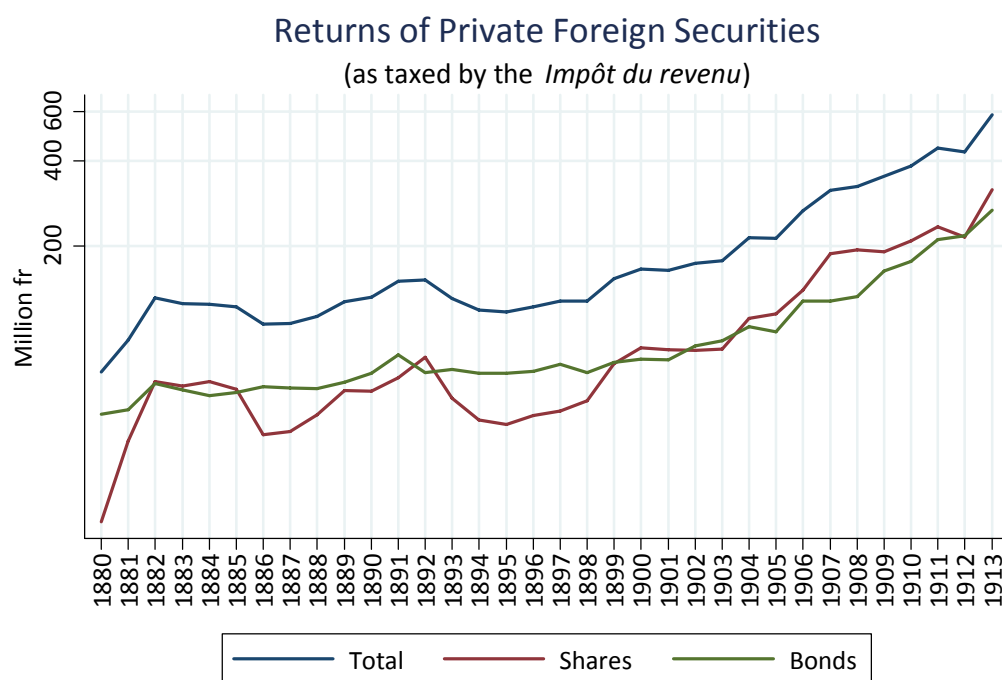


Figure 9: Evolution of the Portfolio (Capital Gains)

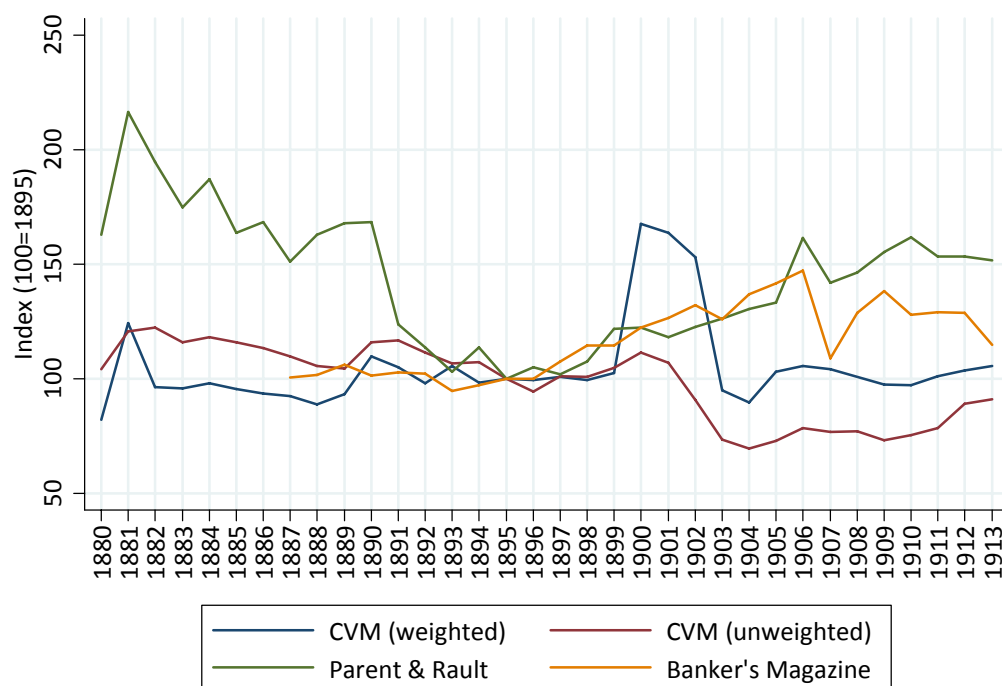


**Figure 10: Foreign Securities Payments**



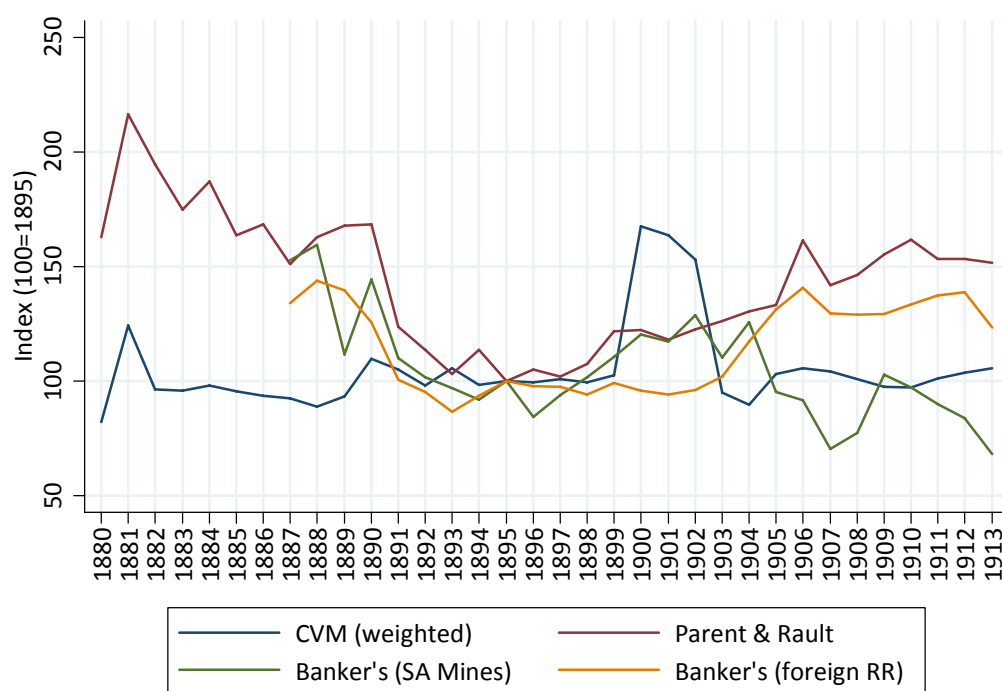
Source: *Annuaire Statistique de la France*

**Figure 11: Share Price Indices**



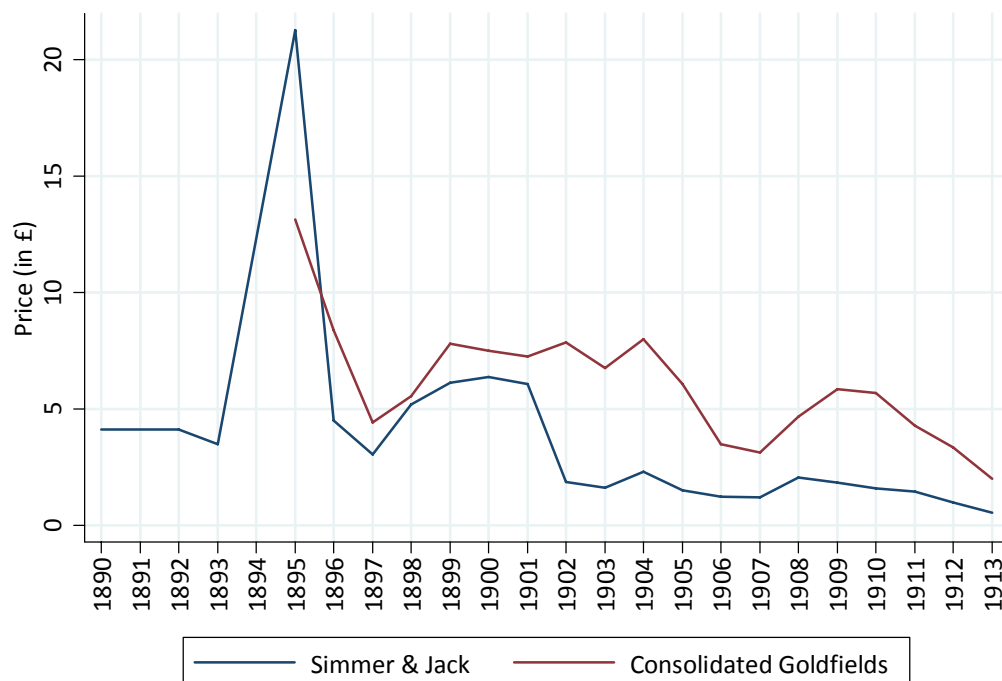
Sources: Parent and Rault (2004), Global Financial Data, and author's calculations

**Figure 12: Share Price Indices, by Sector**



Sources: Parent and Rault (2004), Global Financial Data, and author's calculations

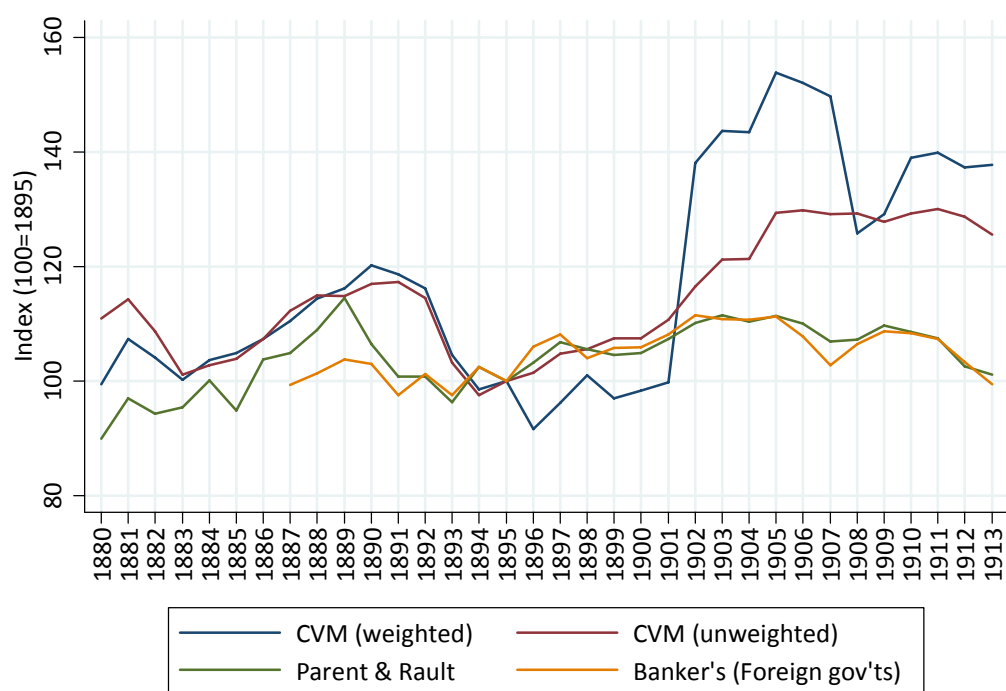
**Figure 13: End-of-year Prices of Two South African Mining Companies in London**



Source: *Investor's Monthly Manual*

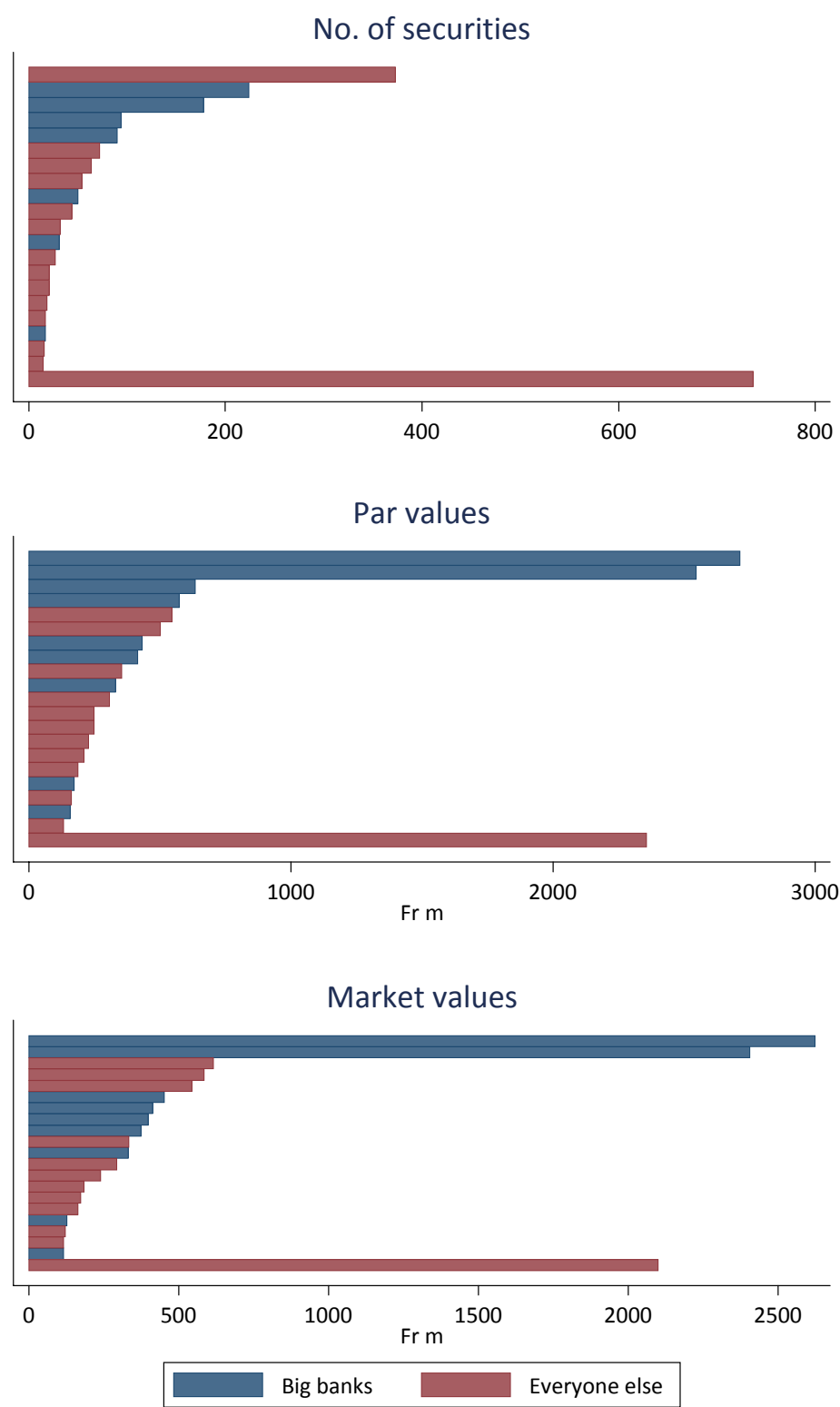


**Figure 14: Bond Price Indices**

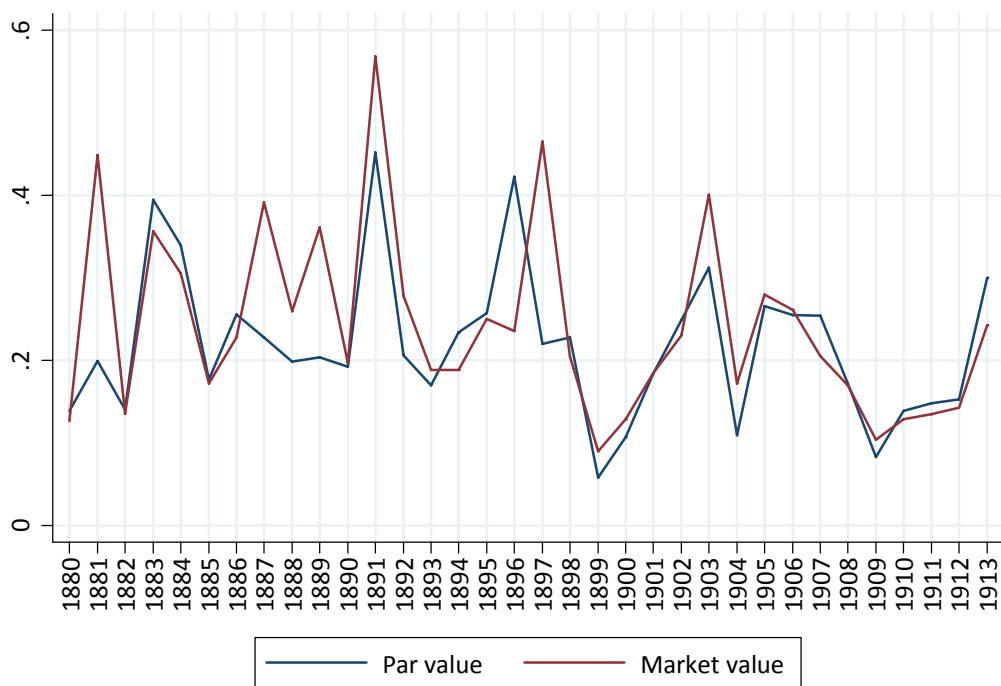


Sources: Parent and Rault (2004), Global Financial Data, and author's calculations

Figure 15: Density of Representatives

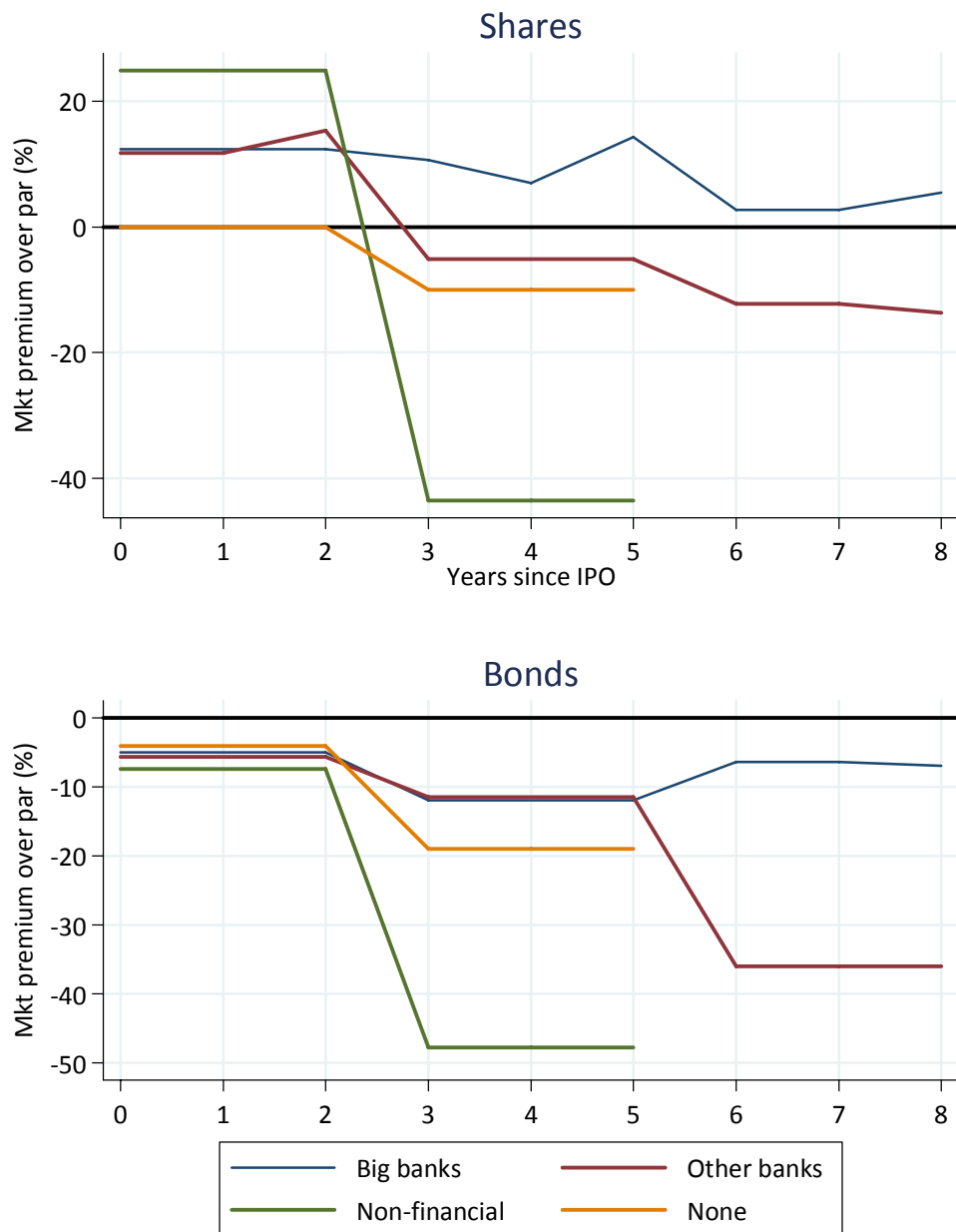


**Figure 16: Hirschman-Herfindhal Indices**



Note: values exclude securities without representative

**Figure 17: Long-term Performance of IPOs, by Class of Representative**



## Appendix: Fac-similes of CVM's minutes

### 1: Rio Tinto 5% bonds, session of 11 May 1880

Société anonyme Du Rio-Tinto,  
dont le siège est à Londres.

Représentant responsable: la Société générale.

La société du Rio-Tinto a émis tout en France qu'à l'étranger, le 10 mai 1880, 125.000 obligations hypothécaires 5 % de 500<sup>f</sup> (2<sup>me</sup> série).

La souscription a complètement réussi. Il résulte de l'enquête à laquelle il a été procédé que le nombre des titres demandés par le public s'est élevé à 375.000 environ.

Lors de la répartition, 52.468 obligations ont été attribuées à des Français et le surplus (72.532) est resté entre les mains de souscripteurs étrangers.

La moyenne de la circulation en France ne paraît pas devoir dépasser le nombre des titres qui y ont été souscrits. Car il convient de remarquer que les actions sont toutes placées en Angleterre où la société jouit de la faveur du public, en sorte qu'il se produit un déplacement, le mouvement s'opérera certainement en faveur du marché anglais.

La Commission propose, en conséquence, au Board de décider que la quotité imposable sera fixée aux 21 cinquantièmes des titres émis (52.500).

2: A. Goerz & Co. common shares, session of 19 December 1905

Société "A. Goerz and company, limited," dont le siège est à Johannesburg.

Représentant responsable : La Banque de Paris et des Pays-Bas à Paris, 3 rue d'Antin, Agréée par décision du Directeur Général de l'Enregistrement du 20 mars 1899.

Cette société acquitte la triple taxe à raison de la négociation en France de :

1° 800.000 actions de I L, N<sup>os</sup> 1 à 800.000;

2° 200.000 -----id----- 800.001 à 1.000.000.

La quotité imposable des 800.000 titres de la 1<sup>re</sup> série fixée par décision ministérielle du 21 mars 1900 à 1/10 ou 80.000 titres a été maintenue, à défaut de révision, pour la période triennale en cours qui <sup>a pris</sup> ~~prendra~~ fin le 7 avril 1905.

La quotité imposable des 200.000 actions de la 2<sup>e</sup> série a été arrêtée également à 1/10 ou 20.000 titres par décision du 24 décembre 1902 pour la période triennale qui <sup>s'est</sup> ~~fini~~ <sup>terminée</sup> le 1<sup>er</sup> juin 1905.

De sorte que 100.000 actions, sur 1 million, <sup>étaient</sup> ~~sont~~ <sup>alors</sup> ~~aujourd'hui~~ assujetties à la triple taxe.

La société a demandé le maintien de cette quotité.

Pour établir qu'il n'y a pas plus de 1/10 de ses titres en circulation dans notre pays, elle <sup>a</sup> ~~explique~~ <sup>explique</sup> que l'assem-

blée générale extraordinaire, tenue à Johannesburg le 22 juin dernier, ayant votée l'augmentation du capital social et ayant donné aux actionnaires le droit de souscrire à l'émission de 220.000 actions nouvelles dans la proportion d'une action de cette émission pour cinq anciennes, 60 % des nouveaux titres ont été souscrits par ses actionnaires, dont 10.059 par des français, possesseurs, par conséquent, de 50.295 titres anciens. A supposer que les actionnaires français aient usé du privilège réservé aux anciens porteurs dans la proportion de 60 % indiquée ci-dessus, le portefeuille français aurait compris, au 13 juillet <sup>1904</sup> ~~dernier~~, date de la clôture de la souscription, 83.825 actions  $(\frac{50.295 \times 100}{60})$ .

En outre, depuis cette émission, la société a formée une nouvelle compagnie sous le nom de "Van Dyk proprietary mines", dont 132.500 actions, soit une action pour dix actions Goerz ont été offertes à ses actionnaires. Or, 8.014 de ces titres ont été souscrits par des français; ce qui autorise à penser qu'il n'y a dans notre pays que 80.140 actions Goerz, environ.

Sans s'arrêter à ces explications ni faire état de ce fait que sur 512.104 actions représentées à l'assemblée générale tenue à Johannesburg le 10 juin 1904, 2.265 seulement appartenaient à des français, le service local a proposé de rehausser la quotité imposable pour la prochaine période.

D'après l'enquête à laquelle il s'est livré, le nombre des coupons payés, en France, sur les titres précités s'est élevé, savoir :

pour l'exercice 1901 à	209.200
et pour l'exercice 1902 à	179.475
Total.....	388.675



soit une moyenne de 194.337 titres.

La société a objecté, il est vrai, que, sur ces coupons, 115.000 en 1901 et 85.000 en 1902 proviennent de titres déposés par des étrangers. Mais elle n'a fourni de justifications, sur ce point, que pour 19.011 actions.

Enfin, on a fait remarquer que la valeur jouit d'une certaine faveur auprès des capitalistes français à raison de la bonne administration de la société.

La proportion de titres circulant sur notre territoire a été déterminée par suite, de la manière suivante:

Si de la moyenne des coupons soldés en France	
ci .....	194.337
on déduit ceux dont la provenance étrangère est	
établie .....	19.011
Il reste .....	175.326

et la proportion des titres détenus par nos nationaux ressort d'après cette base à :

175.326	
-----	ou 0,1753
1.000.000	

Le Directeur à Paris a proposé, en conséquence, de fixer à 175/1.000 la quotité imposable des actions dont il s'agit, soit à 140.000 titres de la 1<sup>re</sup> série, pour la période triennale qui s'est ouverte le 8 avril 1905 et à 35.000 titres de la 2<sup>e</sup> série pour la période triennale qui a commencé le 2 juin 1905.

Dans sa séance du 21 mars 1905, la Commission a émis l'avis suivant :

" En l'état des justifications produites par la société, la proposition du Directeur peut être adoptée; mais en égard à l'importance du rehaussement (75.000 titres) et



comme, d'ailleurs, il n'est pas formellement établi que ladite société a été mise en demeure de compléter la preuve de ses allégations relatives à la provenance étrangère d'un grand nombre de coupons payés en France, la Commission est d'avis qu'il y a lieu de lui réserver la faculté de fournir des justifications complémentaires à cet égard pendant un délai de trois mois à compter de la notification de la décision ministérielle à intervenir."

Cet avis a été approuvé par une décision ministérielle du 4 avril 1905 notifiée à l'intéressée le 7 du même mois.

Par une lettre du 25 mai suivant, la Compagnie "A. Goerz" a demandé la révision de la décision du 4 avril 1905 et le maintien de la quotité au minimum légal de 1/10.

En ce qui concerne l'élément d'appréciation tiré du nombre des coupons payés en France, elle a présenté les observations ci-après :

"Une certaine partie de ces coupons appartient à des étrangers qui gardent leurs titres en dépôt dans des banques françaises, c'est à dire que ces titres quoique entrés en France restent la propriété entière et absolue des déposants étrangers, libres d'en disposer à tout moment, fait dont nous avons fourni la preuve à l'Administration de l'Enregistrement en lui présentant une liste de 19.271 actions qui se trouvaient en dépôt chez nous au 30 juin 1904 et cette liste a été appuyée par la communication de toutes les lettres de confirmation des clients résidant à l'étranger, lettres par lesquelles ils reconnaissent le bien trouvé de leurs dépôts. D'autre part, les établissements de crédit mentionnés ci-dessous détenaient au même titre, pour compte de clients étrangers, les dépôts

suivants d'actions Goerz :

Crédit Lyonnais .....	17.635 actions
Comptoir national d'Escompte .....	10.318 ---
Banque I.R.P. des Pays Autrichiens	7.361
Banque de Paris et des Pays-Bas....	3.850
Banque Suisse et Française .....	1.485
Crédit industriel et commercial ...	965
Alfred Gans et Cie .....	8.300

Total ..... 49.914 actions.

"En outre, environ 16.000 actions Goerz appartenant également à des étrangers se trouvaient en dépôt chez différents banquiers et coulissiers, ce qui avec les titres déposés chez nous forme un total de 85.185 actions Goerz; nous considérons donc qu'en raison du caractère de ces dépôts de tels coupons ne peuvent être assujettis à l'impôt comme provenant d'actions introduites en France.

"Pour rentrer en partie dans les lourdes charges de l'abonnement, nous avons l'habitude de déduire sur les coupons appartenant à des français la taxe sur le revenu de 4 % et, pour éviter que des coupons appartenant à des français ne fussent envoyés à l'étranger aux fins d'encaissement, tout déposant de coupons appartenant à un étranger était obligé de produire un affidavit affirmant que les titres desquels les coupons avaient été détachés n'appartenaient pas à des français.

"Nous avons pu démontrer à l'Administration de l'Enregistrement, avec preuves à l'appui, que malgré cette précaution notre Société avait encore dû supporter, la déduction sus mentionnée opérée, une perte totale de 74.872<sup>f</sup>77."

La société revient, ensuite, sur les constatations faites à l'occasion tant de l'émission des 220.000 nouvelles créées en vue de l'augmentation de son capital social, que de l'émission des 132.500 actions de sa filiale, la Société Van Dyk proprietary mines, limited". D'après ses déductions, il resterait établi, dans ces deux occasions, que le ~~titre~~ nombre des actions Goerz circulant en France était d'environ 83.825 au 13 juillet 1904 et de 80.140 au mois d'octobre et de novembre suivants.

Enfin, le 17 juillet 1905, la Société a offert de communiquer dans ses bureaux, à un délégué de la Commission, tous les bordereaux concernant la souscription aux actions Van Dyk réservée aux actionnaires de la société Goerz, les dits bordereaux portant les noms, prénoms et adresses des souscripteurs avec leur signature et les numéros des actions de la société Goerz en vertu desquelles ils ont souscrit.

Le service local reconnaît la sincérité des allégations de la Compagnie en ce qui concerne les dépôts d'actions effectués dans les établissements français désignés par des personnes résidant hors de France, et ne contredit pas les autres assertions.

Toutefois le Directeur de l'Enregistrement à Paris fait observer "qu'un grand nombre de titres déposés en France paraissent y avoir été levés par des porteurs allemands et peuvent être jetés sur le marché français du jour au lendemain".

Après lecture par le Secrétaire des observations et propositions qui précèdent, le Directeur de la Société

"A. Goerz et C<sup>ie</sup>" que la Commission dans sa séance du 28 novembre dernier a décidé d'entendre, est introduit.

Il se borne à exposer les considérations que la Société a fait valoir dans sa lettre du 25 mai 1905.

Le Directeur de la société s'étant retiré, la Commission, après un échange d'observations entre ses membres et en présence des renseignements fournis et des circonstances invoquées tant par l'Administration que par la société étrangère, estime qu'il en serait fait une juste et équitable appréciation en réduisant à 12/100 la quotité fixé à 175/1.000 par la décision ministérielle du 4 avril 1905.