DISCUSSION PAPER SERIES

No. 5398

**'HOME BIASES',
19TH CENTURY STYLE**

Marc Flandreau

*INTERNATIONAL MACROECONOMICS
and Economic History Initiative*

Centre for Economic Policy Research

www.cepr.org

'HOME BIASES',
19TH CENTURY STYLE

Marc Flandreau, Sciences Po, Paris and CEPR

ABSTRACT

'Home Biases', 19th Century Style*

This paper discusses the existence of 'home' biases in the 19th century global capital market, whereby colonies appear to have received a 'disproportionate' amount of capital from their metropolis. Starting from a discussion of the Bulow Rogoff (1989) problem, we argue that imperial links provided a natural institutional framework to make pre-commitment credible by ensuring an adequate degree of willingness to pay. This was not because imperial rule provided coercion or punishment, but rather because it supplied a legal framework that effectively suppressed the « sovereign » nature of colonial debts. We conclude that the greater facility with which capital migrated in the 19th century has much to do with the fact that colonies were more akin to the 'regions' of modern countries

Marc Flandreau
Professor of Economics,
Sciences Po, Paris
27, rue Saint-Guillaume
75007 Paris
FRANCE

Tel: (33 1) 4549 5931
Fax:(33 1) 4222 2085
Email: flandreau@sciences-po.fr

Submitted 21 November 2005

Several decades of international financial liberalization have shown that simply declaring the global capital market an open field does not suffice to achieve full integration (Feldstein-Horioka 1980). Capital, left to its own devices, does not flow towards higher rewards (Lucas 1990). Other things being equal, people invest more in domestic than foreign endeavors (Obstfeld and Rogoff 2002).

19th century economists were already familiar with this "home bias" and called it "the disinclination of capital to migrate" (Say 1874; Flandreau 2003). Yet putting the home bias puzzle into historical perspective complexifies it: research shows that the cross country correlation between domestic saving and investment was lower in the late 19th century than now, indicating less integration today (Bayoumi 1990, Flandreau and Rivière 1998). Bordo and Flandreau (2002) argue that this is mainly due to the lower integration of today's emerging markets. Finally, Obstfeld and Taylor (2004) show that the poorest countries received more capital per unit of GDP one century ago than they do today.

Why has the home bias grown larger? This paper deals with one possible explanation. The bottom line is the following: one characteristic aspect of today's world is the extension of sovereignty (Alesina and Spolaore 1997). But in the late 19th century, huge portions of the world belonged to common political systems. Many "nations" were really sub-sovereign entities, comparable to the regions or provinces of modern federal states: India belonged to the British Empire, Tunisia to the French Empire, etc. Some poor "nations" were thus tightly integrated into well-developed capital markets. The greater international financial integration that prevailed then was an artifact of political geography.

I. Political biases: the evidence

Table 1 gives the distribution of foreign capital for the three leading markets of the late 19th century, viz. London, Paris and Berlin. That is to say, it shows where borrowers secured capital, not the structure of investors' portfolios. The Table reveals important regional biases. If capital markets were perfect substitutes, borrowers would randomly draw resources from them and the distribution of capital should be identical across markets. It does not take a formal test to see that this is not the case.

Economic historians have traditionally interpreted these biases in terms of political/imperial influence (Platt 1968). According to Davis and Huttenback (1988), "That the [British] Empire

received favorable treatment in the [London] capital market has been well recognized". In Table 1, the London market's main destinations include English-speaking dominions, Asia and Africa, where Britain had major colonies, and the "informal" Empire in Central or South America. Table 1 also displays the Paris market's taste for the French colonies in Asia and Africa. Davis and Huttenback (1988) implicitly interpreted these biases in terms of moral hazard, suggesting that political/imperial ties served as institutional magnets. Recent research on Empire and finance has mostly dealt with empirics (Ferguson and Schularick 2005, Michener and Weidenmier 2005). This paper argues that theoretical aspects are paramount.

Table 1

II. A simple model

Bulow and Rogoff (1989) show that in a world of anarchy countries have no incentive to repay their debts. The reason is that, if countries have sufficient opportunities to save, then it is optimal for them to borrow in one market, put the money in another market, and default. Therefore, repayment cannot be motivated by a country's desire to preserve a reputation. The key factor in this result is that there is "perfect" competition in credit facilities: as soon as this is assumed, credibility can be re-established. Wright (2003) demonstrates that a country's concern for reputation can enforce repayment if there are incentives for lenders to tacitly collude in punishing a country in default. Therefore, if credit facilities are not perfect substitutes, switching to another market entails costs, inducing discipline in borrowers' behavior.

To illustrate this point, suppose that we have n borrowing countries ("colonies") denoted by $i=1,\ldots n$ and n lending facilities ("metropolitan capital market") with one investor in each market denoted by $j=1,..,n$. Money can circulate: investors and borrowers can access any market at zero cost. The financial world is integrated. Moreover, there is no "ability to pay" problem: the only real issue is willingness. Suppose now that markets differ in the following way: each metropolis is equipped with an "enforcement technology" that is borrower-specific. For simplicity, we assume that market i enforces full repayment by country j if $i=j$, but zero repayment if $i \neq j$. In other words, each market can only enforce repayment of sums borrowed by the country it has control over. The precise mechanism

through which repayment is achieved will be discussed later. In short, country i is a colony of metropolis i.

Suppose now that each lender has one unit of capital and each colony wants to borrow one unit. The risk-free rate is r. Who's lending to whom and through what market? The answer to the second question is: capital calls by colony i take place in the market that "owns" an enforcement technology that operates on it. To see this, suppose that colony i borrows from country j, i≠j. It can transfer the sums to any other market k≠j and default. The result is that lenders will never lend to country j through capital market i when i≠j. By contrast, if lending to a colony occurs through its metropolis' capital market, the risks incurred are zero and the risk-free rate r.

Another implication of the model is that the answer to the first question – who will lend to whom? – is indeterminate. Lenders from capital market j can very well lend to country i, provided they do this through capital market i. In a world of perfect capital mobility, the existence of political links between given markets and borrowers leads to a geography of lending where markets specialize in the borrowers they control best but lenders can diversify. Put plainly, this explains why the bonds of India were issued in London only, and those of Tunisia in Paris only. This also explains why it may be difficult to retrieve evidence of political biases by looking at the capital outlets of *one single market* as in Williamson and Clemens (2002). The availability of enforcement technologies creates selection biases, since by definition, issuance of a bond in a given market supposes that moral hazard problems have been addressed by that market.

The model explains why political factors serve as an attractor for international finance. To see this in the clearest light, suppose a world where only one country owns a repayment technology that works for all borrowers. The outcome is that this country's capital market is the world capital market. Contrary to what Lenin (1917) famously argued, causality runs from power to finance.

III. Enforcement technologies: coercion vsconsent

It is now crucial to analyze carefully enforcement technologies. Their more gung-ho versions – gunboat diplomacy, trade sanctions, and imperial rule – have drawn much attention recently. Yet the earlier work of Platt (1968) emphasized the reluctance of British authorities to using power to enforce

payment of international debts. They feared that such military "bailing out" would encourage irresponsible behavior and cause ever rising levels of political involvement (Platt 1968 pp 34-53) and were always careful to have a legal case before intervening, limiting the number of occasions when force was used. While the reader is referred to Platt's account in the case of sovereign countries, this section argues that little-noticed legal aspects were also highly important for a sizeable fraction of borrowers within the British colonial empire.

The mechanisms for dealing with moral hazard within colonial empires come in two main categories. Where the native population dominated numerically, democracy was repressed and tight financial control was imposed by the center. This was the case in India and the so-called "dependent" colonies (such as Ceylon or Jamaica) within the British Empire. After the Sepoy Mutiny of 1857, India had been placed under the authority of a Secretary of State who was a member of the British cabinet, and thus was run from London, politically and financially. Debts could not be contracted without the approval of the British government. Moral hazard could not therefore be a problem. Similarly, the finances of the dependent colonies were formally under local administration; autonomy was kept on a tight leash by the control exercised by the "Crown Agents". The Crown Agents had a monopoly over all the external commercial and financial transactions of the dependent colonies (Sunderland 1999). Initially part of the Treasury, their office was transformed after 1880 into a semi-private agency controlled by both the Treasury and the Colonial Office. The British cabinet controlled the Agents, whom it appointed, revoked, and paid extremely well. The British government also appointed the local administration. Challenging the center could compromise individual careers, and there too, moral hazard could not be a concern.

The French colonial arrangements were similar. The French Empire was still recent, and much of the expenses devoted to administering and developing the overseas possessions were borne by France. As a result, until 1914 there was almost no local budgetary autonomy for the colonial "governments". All taxes were decided with the approval of central authority. Debts were incurred under the tight stewardship of the Ministry of Finance. Loans had to be approved by the French Parliament. "Colonial banks", i.e. government-sponsored banks acting as quasi-central bank, currency board and

commercial bank, were constituted by the Treasury to serve as underwriter of colonial issues. All this obviously ruled out moral hazard.

A different pattern prevailed in the British self-governed Dominions where white people predominated. There, local authorities were fully responsible for voting and executing budgets, and direct interference rfrom London was tempered at the most. Before 1877, moral hazard had been mitigated by the existence of Imperial conditionality. Debts issued under "imperial guarantees" carried central government underwriting that could be rescinded should borrowing governments' behavior be judged inadequate. However, in the 1870s, the English Treasury became increasingly anxious regarding the liabilities that the Imperial guarantees might create. There had been a case where money borrowed by Canada had been used for a different purpose from the one initially stated and the guarantee had not been rescinded. The British government feared that political transaction costs would make it hostage of the Dominions, and imperial guarantees became exceptional after 1877. This led Davis and Huttenback (1988, p. 143) to identify what we may call the self-governed colonies puzzle. In their words, "[while] the recognition of continuing government scrutiny helped make the issues of dependent colonies attractive to investors […], it is not so clear why those investors maintained confidence in Dominion issues".

The answer, I argue, is the legal and institutional framework in which the debt issues mechanism of the self-governing colonies was embedded. The Colonial Stock Act of 1877 set the conditions under which colonial debts could be "registered", i.e. listed in a special directory. Registration enabled the British government to "inscribe" the said stock with the Bank of England, thus exempting it from stamp duties on transfers, and providing other benefits. One key condition for registration was that English courts should be competent in matters of registered debts. The Act provided for "proceedings in an English court by any person claiming to be interested in any stock registered under the Act" (Section 20). It also stipulated that the Colonial Government having issued that stock would undertake to recognize the judgment of the court, and furnish its agents in London with funds for the payment of any amounts for which they may be declared liable. In sum, the Colonial Stock Act of 1877 clarified the legal framework applying in case of default, gave British authorities a clear motivation for intervention, and therefore ruled out strategic default.

This arrangement was further elaborated under the Colonial Stock Act of 1900. The Act facilitated investment by "Trustees" in colonial securities (these supervisors of investment funds for the middle class were subject to rules of prudence and transparency): it thus expanded the benefits of the Act of 1877. This advantage, not coincidentally conceded at the request of the Canadian Premier (W. S. Fielding), was secured in exchange for recognition by colonies of the junior nature of their legal system. Indeed, the Act required that Colonial Governments "place on record a declaration that any future colonial legislation which altered these provisions to the injury of stockholders, or involved a departure from the original contracts, would properly be disallowed by the Imperial Government" (*The Economist*, 23 June 1900, p. 875). As far as international debts were concerned, colonial legislation was subordinated to English law and Imperial arbitration. There was no judicial sovereignty within the Empire. This shows the importance of the legal framework as a way of dealing with moral hazard, an aspect that is missing from modern research on Empires. It should be noted, in conclusion, that contemporary observers understood very well the importance for capital exports of this "legal continuity" between colonists and coloniesAccording to Leroy-Beaulieu, a French economist (Leroy-Beaulieu 1891, p. 710),

> "…The emigration of capital can take place without colonization. That is true. However, it is better, other things being equal, to export one's capital in one's own colonies than in thoroughly foreign countries. One is surer to find in the former a good administration, a balanced justice, a more favorable reception and a fairer treatment from the public and the government. …From that point of view, the risks incurred by capitalists are smaller in colonies which are in some sense an extension of the metropolis".

IV. An extension of the metropolis

I now need to drive the point home (no pun intended). So far, the discussion has shown why certain issuers prefer certain markets. No inference was made on the effects that this may have on investors' portfolios, which I assumed to be diversified. But as soon as transaction costs on cross border investment are introduced, market biases can become "home biases" in portfolios. In this section, I provide an account of how this happened in the context of the 19th century. The intuition is that addressing problems of moral hazard also facilitated the emergence of institutions for reducing switching costs between home and colonial bonds. The result was a close relation between market biases and home biases, explaining why empires became vehicles of international financial integration.

Consider government guarantees: they were extended in the French and British Empire in return for political control. Because control eliminated the risks of having to bail out colonies, domestic governments were happy to provide a backing that eliminated colonial default premiums. But this backing encouraged central banks to accept colonial securities as collateral. The implication is that guaranteed colonial bonds and, to a slightly lesser extent, the securities of the dependent colonies or the non-guaranteed bonds in the French empire were almost perfect substitutes for the respective central government securities.

Similarly, the Colonial Stock Acts of 1877 and 1900 established the "investment grade" nature of the securities of the self-governing colonies. Compliance with a legal procedure in case of default enabled British authorities to avoid concerns about the responsibilities of active promotion of colonial investment, including the extension to colonies of all the liquidity advantages that *Consols* [i.e. British government bonds] enjoyed. According to *The Economist*, the main goal of the Act of 1877 had been to put colonial "stocks on the same footing as Consols" (p. 850, July 21, 1877).

The ranking of investments according to the categories I have mentioned was reflected in stock market bulletins. In the 1900s, the chronicle of the London Stock exchange listed Indian bonds along with the guaranteed securities of Egypt and Transvaal under "British funds". The securities of the rest of the Empire, both dependent and self-governing, came afterwards, in a special section on "colonies" located above "foreign government bonds". The Paris list opened with a "French government bonds" section that included colonial securities with a government guarantee. Immediately after came the section on non-guaranteed "colonial and protectorate" bonds. This in turn preceded the section devoted to French municipals and was listed far above the section on "foreign stocks".

Before we conclude, a formal test of the proposition in this paper is in order. Table 2 reports the results of OLS regressions of individual bond yields on central government securities for both Paris and London. I have grouped countries in terms of their institutional relation to the metropolis: guaranteed, non-guaranteed, dependent, self-governing, sovereign. A prediction of my central argument is that "idiosyncratic" contributions to the determinant of bond prices must decline as we move away from full sovereignty (say Japan or Russia) towards full control (guaranteed Empire bonds). This prediction is fully borne out by the data. The adjusted R^2 coefficients measure the

information in borrowers' bond prices that is contained in metropolitan securities. Their values do indeed cluster according to group of countries, and decrease in stages as sovereignty increases. While the guaranteed bonds as well as the stocks of the dependent colonies are excellent substitutes for respective central government debt, the securities of sovereign countries obey pricing rules of their own. In between, the very significant R^2 for the self-governing colonies illustrates the role of legal frameworks for "home biases", 19th century style.

Table 2.

V. Conclusion

This paper develops an analytical framework for discussing the economics of international financial integration in the late 19th century. I have interpreted the observed "political" market biases as the by-product of institutions that proved particularly effective in dealing with moral hazard. In contrast with the conventional view that has emphasized force and constraint, I have focused on law and consent. The explanation why capital flowed abroad more easily in the 19th century than today is that it really circulated within the scattered regions of worldwide "nations", bound together by constitutional and legal arrangements.

The analysis suggests some interesting parallels with today. One such is with the modern emergence of legal instruments to deal with default, such as Collective Action Clauses in sovereign bond contracts. Another is with the current situation in Europe. As we know, Europe has achieved an unsurpassed degree of financial integration. Some observers talk of an emerging European bias. Several features of the European capital markets are reminiscent of the situation of colonial securities one century ago. The European Central Bank deals indiscriminatelyin the securities of Eurozone governments (Buiter and Sibert 2005), and legal systems have converged. Just as one century ago, financial integration is an artifact of political geography.

September 2005

References

Alesina A., and E. Spolaore, 1997, "On the number and size of nations", *Quarterly journal of economics*, pp. 1027-56.

Bayoumi, T., 1990, "Saving-investment correlations: immobile capital, government policy or endogenous behavior?", *IMF Staff papers*, 360-87.

Buiter, W. and A. Sibert, 2005, "How the ECB open market operations weaken financial market discipline and what do do about it", mimeo, LSE.

Bulow J. and K. Rogoff, 1989, "A constant recontracting model of sovereign debt." *Journal Political Political*, 155-178.

Bordo, M. and M. Flandreau, 2002, "Core, periphery, exchange rate regimes and globalization", in Bordo et al. (eds.) *Globalization in historical perspective*, NBER.

Davis L. E. and R. A. Huttenback, 1988, *Mammon and the pursuit of Empire, The economics of British Imperialism*, Cambridge: Cambridge University Press.

Feldstein M. and C. Horioka, 1980, "Domestic saving and international capital flows", *The Economic Journal*, 314-29.

Ferguson, N. and M. Schularick, 2005, "The Empire effect: the determinants of country risk in the first age of globalization 1880-1913", draft.

Flandreau, M., 2003, "Crisis and punishment: moral hazard and the pre-1914 international financial architecture", in Flandreau (ed.) *Money doctors: The experience of International Financial Advising 1850-2000*.

Flandreau, M and C. Rivière, 1999, "La Grande Retransformation? Contrôles de capituax et integration financière internationale, 1880-1996", *Economie Internationale*.

Lenin, V. I., 1917, *Imperialism, the highest stage of capitalism*, Petrograd.

Leroy-Beaulieu, P., 1891, *De la colonisation chez les peoples modernes*, Paris: Guillaumin.

Lucas, R. 1990, "Why doesn't capital flow from rich to poor countries?" *American Economic Review*, 80, May, 92-6.

Mitchener, K and M. Weidenmier, 2005, "Super-sanctions and sovereign debt repayment", mimeo.

Obstfeld, M. and K. Rogoff, 2000, "The six major puzzles in International Macroeconomics: is there a common cause?" NBER.

Obstfeld, M. and A. Taylor, 2004, *Global capital markets: integration, crisis and growth*, NY: CUP.

Platt, D. C. M., 1968, *Finance, Trade and Politics in British Foreign Policy 1815-1914*, Clarendon.

Sunderland, D., 1999, Principals and agents: the activities of the crown agents for the colonies, 1880-1914", *Economic History Review*, pp. 284-306.

Say, L., 1874, *Rapport sur le paiement de l'indemnité de guerre*, Paris: Guillaumin.

Williamson J. and M. Clemens, "Wealth bias in the First Global Capital Market Boom, 1870-1913, *Economic Journal*, pp. 304-337.

Wright, M., 2002, "Reputations and Sovereign Debt", mimeo Stanford University.

Table 1. Cumulative capital outlets, by destination 1913
(% of foreign outlet by recipient area according to source market)

	London	Paris	Berlin
Towards			
Total Europe	5,8	53,7	45,5
Eastern/Central European	3,6	35,5	27,7
Western Europe	1,7	14,9	12,7
Other Europe unspecified)	0,5	3,3	5,1
Total European Settlements	67,7	17,7	34
Latin America	20,1	13,3	16,2
North Am. and Australasia	44,8	4,4	15,7
Other New World	2,8	0	2,1
Total Asia and Africa	26,5	28,4	20,5
Total World	100	100	100

Source: Williamson and Clemens (2002).

Table 2. Information content of bond prices: alternative countries

$$r_{it}=\alpha r_{metropolis,t}+\beta+\omega_t$$

	α (t-stat.)	β (t-stat.)	Adj-R^2
French Empire : Paris Market			
Empire Guaranteed			
Tunisia 1892 3%	0.80 (18.08)	0.39 (2.47)	0.89
Annam and Tonkin 2.5%	0.54 (14.19)	1.45 (11.89)	0.83
Madagascar 3% 1903	0.60 (10.00)	1.18 (6.14)	0.71
Afrique Occidentale 3%	0.59 (10.96)	1.42 (8.17)	0.75
Empire no Guarantees			
Govt of Tunisia 3%	0.89 (8.00)	0.67 (1.89)	0.61
Govt of Algeria 3%	0.49 (7.76)	1.82 (9.01)	0.59
Indochina 1899-1905 3.5%	0.83 (10.14)	1.11 (4.30)	0.71
Foreign Sovereign			
Spain 4% specie	0.41 (2.67)	2.95 (5.94)	0.13
Russia 4% gold	-0.10 (-0.27)	4.88 (3.96)	0.01
British Empire : London Market			
Empire Guaranteed			
India 3%	1.45 (29.99)	-0.89 (-6.04)	0.95
Transvaal 3%	0.54 (20.06)	1.5 (18.11)	0.90
Egypt 3%	0.54 (16.18)	1.47 (14.40)	0.86
Dependent			
Ceylon 4%	0.54 (13.45)	2.10 (17.08)	0.81
Jamaica 4%	0.44 (12.78)	2.47 (23.43)	0.79
Self-governing			
Canada 3.5%	0.43 (8.74)	2.24 (14.93)	0.65
Quebec 1928 4%	0.36 (8.91)	2.86 (23.16)	0.65
Queensland 1945 3.5%	0.62 (10.08)	1.74 (9.25)	0.71
New Zealand 1945 3%	0.63 (10.55)	1.58 (8.57)	0.72
Foreign Sovereign			
Brazil 5% gold	-0.46 (-2.02)	6.38 (9.01)	0.06
Japan 4% £	-0.58 (-1.86)	6.22 (6.53)	0.05

Source : author's computation, quarterly data, 1904-1914, see text.