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Foreign Capital in Latin America in the Nineteenth and Twentieth Centuries

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ABSTRACT

This paper examines the history of foreign investment in Latin America in the two centuries since independence. Investment flows to the region were sometimes large and always volatile. Symptoms of overborrowing, sudden stops, debt, default and crises have been evident from the beginning. In general the economies in the hemisphere struggled for most of the nineteenth century to develop reputations for macroeconomic stability and sound finance, and foreign capital was thus repelled for the long periods. In the twentieth century, most of the region, like the rest of the world, turned inward and against foreign capital markets, a policy trend that emerged in the interwar period and has only recently begun to reverse. These historical perspectives shed light on the region's current relative isolation and its future economic challenges.

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To understand the impact of globalization on the developing countries of the periphery, one has to study Latin America. As historians of the area understand, this is the region whose economic fortunes have been most significantly shaped by external forces in the five centuries since the voyages of discovery first made a global economy a distant, but realizable, possibility. Only late in this process, from the nineteenth century, did external capital markets play any major role, but once in place they became important in many dimensions. They served as an engine of growth for the region, changed patterns of income distribution and sectoral growth, and as a problem in political economy they prompted complex and ambivalent responses which shaped subsequent development.

The subject of this chapter is capital flows between countries or regions, that is, international investments. Specifically I consider only their long-term function, focusing on areas other than the “needs of trade” (short-term commercial credit) a topic that is best reserved for discussions on the evolution of international trade. My goal is to document what we know of these flows. In the colonial period there is not much evidence, but the flows were probably small. In the nineteenth century, when good records begin, the flows increased over time as global capital market integration increased. Economic growth had fallen behind the core countries in the early 1800s, as the struggles for independence weighed on this peripheral region and the industrial revolution lifted the core, but parts of the region managed to regain ground in the late 1800s, and capital inflows helped. In the region, as in the rest of the world, the twentieth century record of global capital market integration is famous for its U-shape: high in the early and late decades, and low in the middle, but the upswing of the 1980s and 1990s is still more a feature of the developed than the developing countries.¹

By many measures, Latin America is still much less globalized today than 100 years ago in capital markets, and the persistent postwar legacy of controls, interventions, and distortions is largely responsible. This conclusion offers both hope and gloom: if the benefits of tapping into the global capital markets can be enjoyed again, the region could enjoy an era of investment-led growth like that seen a century ago. Why it has not done so already suggests significant political and institutional obstacles to that end.

¹ Obstfeld and Taylor (2003ab).

The Colonial Backdrop

Although this chapter focuses on the nineteenth and twentieth centuries, we should say a word about antecedents. “Globalization” has swept into Latin America in four waves after European contact according to a persuasive chronology of that slippery concept presented by Coatsworth.² We are concerned here only with the economic manifestations of globalization, and in the first two centuries after 1492 economic interaction was limited indeed, and confined to the trade in a small quantity of goods, and the migration of a small numbers of peoples.

The extent of “economic globalization” under the Spanish empire circa 1700 was much smaller than that found under the British empire two centuries later. Throughout the colonial period, however, capital flows of the type we wish to study were very small in all countries. In the sixteenth and seventeenth centuries, this is perhaps not too surprising. The instruments of market-based international investment were not truly established on any scale within a European context until the development of securities markets in Amsterdam and London in the late seventeenth century, and their use did not spread further until much later.³

Did it matter that such flows were so small? Did this reflect the institutional failure of the colonizing power, as argued by North, and a failure to see the development potential of the region? Or did the region actually prosper quite well all the same? Coatsworth found that the region enjoyed respectably high per capita incomes on the eve of independence, perhaps 66% of the U.S. level. Certainly there was no “great divergence” between the region and the core at that time. To the extent that investment played a role in economic growth, along Solovian lines, we might infer that pre-modern pre-industrial growth in the colonial period was supported by a supply of local saving that was small, but ample for the modest demands of the time.

The coming of the modern era, and the economic shocks of the nineteenth century, changed this equilibrium. In growth terms, Latin America had kept pace with the developed countries in the preceding centuries. The nineteenth century was when Latin America fell behind, with only a hint of convergence at the end of that era. What role did the external capital market play in this new growth environment?

² Coatsworth (2001, 23).

³ Neal (1990).

The First Frenzy

Connections to a wider capital market expanded in the postcolonial era. The countries of an independent Latin America could approach the burgeoning international capital markets of Northwestern Europe in search of funds, for their fledgling governments seeking to establish security and infrastructure, and later for their private sectors in search of development finance. This was a time of potentially fortuitous coincidence of wants. The borrower was capital scarce, with funds needed for nation-building and economic development. The lenders were increasingly capital abundant, as modern economic growth generated increasing savings, accumulation, and diminishing returns at home.

Only a mediation of the arbitrage opportunity was needed, but this required a political and institutional foundation, in addition to the technical apparatus of financial markets that had developed over centuries. The most significant early investors in this period were the British, who in the 1820s were excited at the prospects for overseas investment in an emerging market expected to enjoy fine economic prospects once freed from the yoke of Iberian imperialism and its restrictive economic practices. The decisive victory at the Battle of Ayacucho in December 1824 coincided with a bull market on the Royal Exchange, and Marichal notes that a “financial fever intensified with the announcement that silver-mining enterprises would be formed to exploit the legendary riches of Mexico, Peru, Colombia, and Brazil.” In 1822 government bond issues were floated by Colombia, Chile, Peru, and the fictitious “Poyais” with a face value of £3.65 million; in 1824 by Colombia and Peru (again) plus Buenos Aires, Brazil and Mexico to the tune of £10.4 million; and in 1825 by Peru (yet again) plus Brazil, Mexico, Guadalajara, and Central America for a further £7.1 million. Selling at a moderate discount, these £21 million in government bonds realized on net £16 million for the borrowers. Private parties also joined the frenzy with mining companies alone raising £3.5 million in capital, and gaining authorization for up to £24.1 million. This investment boom dominated activity in London for a couple of years and far exceeded any investment in other regions of the world. Of the 624 new issues on the Royal Exchange in this period, 46 were Latin American, but being large enterprises they accounted for almost a third of total investment.⁴

⁴ Rippy (1959, 17–24); Marichal (1989, 13–14).

Many of these IPOs turned out to be a fraud. Rippy describes the period as a “wild speculation spree” on the part of credulous British investors who put up their capital for improbable schemes.

Associations were formed to obtain precious metals from the Andean cordilleras, where there were few workers, no fuel for the fires, and no roads for the vehicles; technicians and machinery were hurried off in utmost ignorance of the almost impenetrable mountains and matted jungles that awaited them, There were companies to fish for pearls, to inaugurate steamboat lines, to cut through the American isthmus, to furnish steam engines for mints, to establish colonies of farmers and herdsmen. A churning company was formed to send out milkmaids to the pampas; furs and warming pans were shipped to the tropics!⁵

Thus the new adventure turned sour. When political uncertainties and fiscal burdens escalated in the wars of independence and subsequent civil wars the unseasoned sovereign borrowers soon found themselves with no means to service the loans, and a wave a defaults ensued. Losses were heavy, and some issues tanked precipitously, as when, reported by Rippy, “the Poyais loan of 1822, the bonanza investment offered by ‘King’ Gregor McGregor, rose only a point above the issue price of 80, but soon descended to the appropriate level of 0.”⁶ All of these government bond issue were in default by 1827, and many remained in arrears, in some cases for decades. The investments in mining, canals, steamboats, butter and the rest fared no better.⁷

Economies in the region suffered deep macroeconomic instability for decades, bond issues went into default, new lending dried up, and a resort to seigniorage ignited the inflationary fire that has raged or smoldered ever since. The still ongoing pattern of

⁵ Rippy (1959, 18).

⁶ McGregor, a swashbuckling émigré Scots clansman who fought alongside the liberator Bolívar, invented the kingdom of Poyais to embellish an area of miasmal swamplands on the Mosquito Coast that had been granted to him by an Indian elder. Self-styled a Prince, he and his bride (Bolívar’s niece) were then received at the court of George IV as honored guests. Having fooled the royals and gained celebrity, Gregor was able to sell junk Poyais bonds (and real estate) in London, Edinburgh and Paris, was subsequently jailed in England and France, escaped each time, and returned with his Princess to Venezuela as a hero.

⁷ Rippy (1959, 18–21); Stone (1977, 692).

lending booms followed by a default crisis and macroeconomic adjustment was thus inaugurated in the region, a topic to which we shall return later. Suitably chastened, foreign investors held off from investing in the region until political and economic stability seemed more assured, and waited for a resolution of outstanding debts (Table 1).

In the long-nineteenth century, Britain's long-standing involvement in the region was to endure, but not without more of these ups and downs. In addition to being the leading foreign investor in the nineteenth century, Britain was the "preeminent" foreign investor in Latin America from 1820 to 1914. After the 1820s fiasco, foreign capital beat a retreat from the region. Popular memory of the swindles of 1824–25 would fade, but erratically. Seventy years on, Oscar Wilde made an Argentine canal scam a central part of the plot of *An Ideal Husband*.

The notion that modern capital markets have a weak memory is certainly pervasive and the benefits of reputation can seem hard to detect. Nonetheless, many of these bad debtors paid for their defaults by being excluded for long period from the financial markets.⁸ With some justification, Rippy refers to the initial experience of investment in Latin America as one of "early imprudence and vexation."

The Second Surge

Despite vexation, the keenest investors were not to be deterred forever. By the 1850s "there was a marked renewal of interest in Latin America by the London capital market with the flotation of new government bond issues and the commencement of railroad investment."⁹ Enthusiasm grew in the next two decades, even if the investors were by now savvy enough to avoid the riskier locations and follow the signals given by the few countries that had tried, however sporadically, to maintain some kind of debt service. Of the various 1820s sovereign issues that quickly failed, only the Brazilian default was quickly resolved in 1829, but most remained in default for decades, with refunding attempts frequently subject to failure as well, as shown in Table 1. As Rippy noted,

⁸ On default histories, punishments, and reputation in economic history see Lindert and Morton (1989) and Tomz (2001).

⁹ Stone (1977, 690, 692–93).

In view of this record, one might have expected British investors to shy away from Latin American government securities. But grandsons seem to profit little from the experience of their grandfathers in the investment field. During the 1860's and early 1870s Englishmen went on another investment spree. It is true that they revealed no enthusiasm for the issues of Colombia, Ecuador, and some of the Central American countries, but they seemed eager to invest in the government paper of most of the others involved in the defaults following the boom of the 1820's.¹⁰

Despite the checkered debt history of the region, flows did resume and “the trickle of British investments of the 1830's and 1840's became a fairly large stream during the next three decades, branching out into at least seventeen countries.”¹¹ By 1880 these new investments had accumulated into a sizeable stock that dwarfed the cumulative totals of the previous boom in the 1820s, and by then a total of £179 million was outstanding to Britain, £123 million in government bonds (69 percent) and £56 million in private enterprises (Table 2).

One of the main fundamentals behind this new surge in investment was the trade boom experienced by the region, and most of the world, from the 1850s until the onset of the Great Depression of the 1870s. This brought increased economic activity to merchants and landowners, more exports and imports, and thus more revenues (principally from customs duties) that governments could use to amortize loans. The continued dominance of the public sector was based on three very different types of loan: loans for rolling over old debts, loans for military purposes, and loans for railway construction, which was heavily state supported. Only the latter represented a real net contribution to local capital formation, most of which was supplied by the slow and steady accretion of retained profits in a world of financial underdevelopment. Thus, the significance of these flows should not be overstated for overall economic development. Yet they represented a major increase in leverage for the public sector and a test of the governments' creditworthiness after three decades of “financial hibernation.” A

¹⁰ Rippy (1959, 28).

¹¹ Rippy (1959, 26).

remarkable total of fifty major foreign loans were negotiated from 1850 to 1873, most of them in London, and a few in Paris and other European markets¹²

The impacts of the boom varied by country. Some countries now looked like a good bet. With respect to sovereign loans, Brazil had worked harder than other countries to honor debts and was duly rewarded with the largest share. Rippy notes that “during the sixty years following 1824 Englishmen preferred Brazil as a field of investment to any other Latin American country, largely for the reason that Brazil was politically more stable.”¹³ One might add, that as a consequence Brazil could get her act together to service debt.

Other countries did not. For example, not until the Argentines resolved their internecine disputes and settled the national question in the 1860s (and made some attempt to resume service old debts in 1857) did capital again flow beginning with the national government’s loans of 1866 and 1868, the latter critical for the Paraguayan war. Several Argentine provinces also floated loans in 1870–74. Even the defeated Paraguay sold its first bonds in London in 1871. Uruguay and Bolivia could do likewise in 1872 (the first Bolivian issue in 1864 had failed). Chile floated issues in 1858, 1865, 1866, 1867, 1870 and 1873 totaling £8.5 million. Costa Rica, Guatemala, and Honduras all issued non-refinancing debt (i.e., net inflows) in the peak of the investment boom from 1867 to 1872.¹⁴

The terms of these loans varied greatly, and reflected a high variance in interest rates across debtors worldwide, prior to a great convergence in these rates up to 1914, which we shall discuss shortly. Many of these loans were floated at less than favorable interest rates, reflecting a high assessment of country risk by the creditors, which we can say with hindsight was a wise judgment. The country risk also correlated roughly with past bad behavior—both how bad it was, and how past. In this period a “good” risk like Brazil or Chile could float loans with 5 percent coupons at 80 or 90 for a yield of under 6 percent. Peru did about as well. Argentine coupons ran to 6 or 7 percent, and the issues sold at around 90. Costa Rica floated 6s and 7s and sold them for about 70. War-torn

¹² Marichal (1989, 68–79)

¹³ Rippy (1959, 150).

¹⁴ Rippy (1959, 31); Marichal (1989, 243–44).

Paraguay's coupons paid 8 percent and Honduras as high as 10, but such issues could not sell for more than 80.¹⁵

As in the 1820s, however, there were intimations again of an “overborrowing” binge, and questions soon surfaced about the ability of governments, some of them still governing relatively immature and unstable polities, to fulfill their promises to pay on this new mountain of debt. Some loans emerged with a bad smell, most notoriously the Paraguayan fraud: the country was in total disarray after defeat and could never repay, a state of affairs that did not trouble the bankers who had received their commission or the corrupt politicians who had whisked the gold credits off to Argentina bank accounts and real estate. The worst abuses tended to be in the smaller republics, often aided and abetted by the European financiers.¹⁶ Their governments' loss of reputation was to have consequences for their access to credit when new lending resumed. But even the genuine loans in the larger republics caused servicing problems as the depression spread.

A global macroeconomic and financial crisis was stirring yet again, and a second wave of defaults soon spread over the region in the 1870s. By the end of 1880 of the £123 million of British capital invested in Latin American government bonds, more than £71 million (58 percent) were in default (see Table 2). This was only a small part of a much wider global debt crisis: already as of 1876 fifteen non-European nations had defaulted to the tune of £300 million, including in that very year the large defaults by Peru, Egypt and Turkey. The capital flows again ground to a halt and irate bondholders chased down the insolvent republics long into the 1880s. The creditors tended to emerge victorious, but the settlements were drawn out and the payoff was incomplete.¹⁷ Defaulting governments were shut out of new borrowing during negotiations and often for many years beyond.

The crisis cemented in investors mind the untrustworthiness of Latin American sovereign borrowers, a reputation that was to expand in the years ahead and which persists even to this day. According to Tomz, of the 77 government defaults from 1820 to 1914, 58 involved Latin American countries, and from 1914 to 1931, 13 of 21. Compared to other periphery countries, the economic potential and sovereign independence of the region obviously encouraged this outcome: the potential for high returns encouraged

¹⁵ Marichal (1989, 243–44).

¹⁶ Marichal (1989, 118–21).

¹⁷ Marichal (1989, 110).

more borrowing *ex ante* and the independence from Empire gave more freedom to default *ex post*. Yet, clearly the borrowers in the region could not manage their fiscal affairs with anything approaching the prudence of most borrowers in the core countries. Figure 1 shows the incidence of sovereign default in the region from 1820 to 1940 and the fraction of years that debtors spent in default status is impressive, 38% on average. The better-behaved borrowers like Uruguay (12%) or Brazil (17%) managed to maintain a pretty clean sheet, but the odds of getting repayment from others like Honduras (79%) or Mexico (57%) were no more favorable than a coin toss.¹⁸

The 1870s crisis bore some similarities to the events of the 1820s, obviously, but there was one key difference. The poor behavior of the sovereign borrowers was not in any way matched by the private sector, an important divergence. It was not only the sovereign borrowers but private enterprises that returned to the capital markets in the 1860s and 1870s. In the frenzy of the 1820s only a handful of firms had paid a nonzero return on investment, and even then most had failed by 1850. For a while little private capital had flowed to the region, but this had begun to change.

By 1875, 77 Latin American firms were listed on London's Royal Exchange.¹⁹ In mining, of the 18 British companies operating in Latin America in 1880, only 3 dated from before 1850, and 9 had been founded in the 1870s. Railway investment got on track in a small way in 1849, but again the major construction boom had been in the 1870s, and in the 34 railroads with British stakes, 24 had been set up in the 1870s. Three tramways, four sanitation projects, and seven submarine telegraph companies were set up by the British from 1868 to 1880. Of the £56 million total of foreign capital invested in private enterprise, £34 million sat in railways, £11 million in public utilities, and £3 million in mining. These were widely dispersed over a dozen countries (see Table 2). Other enterprises supported included shipping, an emerging banking and finance sector, some meat processing and packing on the pampas, and guano in Peru. Real estate investment remained very limited.²⁰

In fact, the private enterprises established in Latin America continued to pay handsomely, and an investor widely diversified in the region would have noticed a marked asymmetry between the public and private shares of the portfolio. In 1880, the

¹⁸ Tomz (2001).

¹⁹ Marichal (1989, 78) based on Stone's data.

²⁰ Rippy (1959, 32–35).

£56 million of investments in private enterprise, though less than half the size of the sovereign debt, generated a far larger income for investors, since the former probably yielded at least 6 percent of par value, but only £52 million of the government loans were actually being serviced, for a yield of perhaps 2 percent of total par value. Most private firms paid good dividends and serviced their debts promptly.²¹

Soon the usual accusations were flying. Rippy summarized the first sixty years of foreign investment in the region's government bonds as a "decidedly poor investment" and asserted that "British bankers and not a few Latin-American governments alike had been scandalously dishonest. English bankers, brokers, and exporters and grafting Latin-American bureaucrats had profited at the expense of British investors."²²

Two Great Waves and a Great Crash

A new investment boom began in the 1880s, bigger than before, as the global depression receded and economic activity, and especially trade, recovered. Rebuilding a tattered reputation took time for the public borrowers, especially for the defaulting governments. Investment flows changed accordingly. By 1890 over half of the London issues went to the private sector.²³ The overall flows were massive, and by the end of 1890 total British investments were £426 million, more than double the 1880 total. Of this, £194 million sat in government bonds, surpassed by a slightly higher share, £231 million, in private enterprises.²⁴ After an intervening global depression in the 1890s, and a particularly nasty financial and macroeconomic crisis centered on the River Plate, this investment boom was to resume with even greater vigor from 1900 to 1914, at least for the nations lucky enough to have access to the market.

It was soon quite clear that the regional distribution of the investment was to favor only a few countries, namely those that prospered the most in the new trade boom. In the 1880s capital inflows to the region were concentrated in just 5 countries: 37 percent in Argentina, 17 percent in Mexico, 14 percent in Brazil, 7 percent in Chile and 5 percent in Uruguay. Other countries, where trade stagnated, such as Peru and Colombia, received

²¹ Rippy (1959, 35).

²² Rippy (1959, 32).

²³ Stone (1977, 690, 692–93).

²⁴ Rippy (1959, 37).

little new investment. Looking at government loan issues, the flows were even more skewed, with 60 percent of all new loans going to Argentina and Uruguay, leading Marichal to term the 1880s a time of “loan frenzy on the Río de la Plata”; more generally, this period seemed to open a new era in Latin American economic history where “the overall picture is one of a handful of economically dynamic nations that had begun to outstrip the poorer republics of the subcontinent in terms of growth rates.” Foreign capital played its part in creating this distinction.²⁵ There is another way to look at the division: of the big five, four had maintained debt service in the previous crisis; they were rewarded, but defaulters were not.²⁶

Capital flows now supported all manner of infrastructure and industry. Railways were always the largest component of these investments, but other important uses included tramways, buses, electricity, canals and docks, finance and land. Despite the initial promise and the widespread perception (which last until today) that the region’s growth would center on the exploitation of its mineral wealth using imported capital, mining and other raw materials enterprises never constituted more than 4 percent of foreign investment after 1865.²⁷ Instead, other economic enterprises rose to prominence. Railways accounted for an enormous share, and in 1890 comprised £146 million (93 companies) of the £231 million (289 companies) invested in the private sector. Public utilities came next with £20 million in 42 enterprises; mining accounted for £13 million in 69 firms; and real estate had grown considerably with £8 million in 22 firms. Nitrates, finance, shipping and manufacturing each account for £4 to £5 million.²⁸

External developments made this surge of foreign investment in the region possible. In the latter half of the nineteenth century a free-wheeling global capital market, still centered on London, began to boldly supply credit to the developing world within

²⁵ Marichal (1989, 126).

²⁶ And the Mexicans might have been forgiven after a regime change: they suspended payments in 1867 and only resumed in 1884, but there the issue was caught up in a much larger diplomatic dispute over the Maximilian regime, where “spurious” loans had been taken out to finance the French garrison (Marichal 1989, 95).

²⁷ Stone (1977, 690, 692–93).

²⁸ Rippy (1959, 37).

and beyond the empire.²⁹ The important distinction noted by Stone—a gradually rising share of private sector recipients in total British foreign investment—was not true just of the Latin American share, but of the entire portfolio.³⁰ One might interpret this as evidence of a tendency over time toward greater depth, integration, and maturity in the London market.³¹

Although impressive in its reach, the universality of this market should not be taken for granted—the country risk perceived by foreign investors remained high and only a handful of Latin American countries had reputation enough regularly to issue external debt. Even as late as 1913, the point of deepest maturation of the global capital market before the 1980s and 1990s, the five countries of Argentina, Brazil, Chile, Mexico and Uruguay accounted for 90% of outstanding Latin American issues in London. Countries like Peru and Venezuela made occasional issues, often merely rollovers of earlier defaults. Others were out of the game entirely.³²

For the major players, an examination of bond yields allows us a crude comparative perspective. Figure 2 shows the London bond spread relative to the British Consol on government bond issues for a select group of Latin American countries. It can be seen that before 1890 the spread was much greater than that prevailing on bonds issued by governments in core countries and in the British Empire, though not unusual by the standards of the periphery. The average spread was about 300–500 basis points in Brazil, Chile, and Argentina, around 1,000 in Uruguay and Mexico.

Why were spreads so high, much higher than in the empire? Investors seem to have perceived the risks of default as quite grave in these independent countries, even if gunboat diplomacy and other hardball tactics could, in a desperate moment, be used to enforce some kind of partial repayment. If Latin America was part of some informal empire, it must have been very informal indeed, insufficient to buy it any special preferential access to the capital markets. The spreads are important, however, since, as in all markets, price is likely to affect quantities demanded. The unobserved countries

²⁹ On the first boom and bust see Bulmer-Thomas (1994, chapter 2), who draws on Dawson (1990). For longer run perspectives see Fishlow (1985) and Marichal (1989). For a general view of the global capital market in these years see Obstfeld and Taylor (2003ab).

³⁰ Stone (1999).

³¹ Obstfeld and Taylor (2003b).

³² Bulmer-Thomas (1994, 102–104).

with prohibitively high spreads were effectively priced out of the market. Of those in the market, the economies with lower costs of capital could justify a larger range of investment projects than those more tightly rationed. Only an integrated view of price and quantity data can keep this link in view.

After peace broke out in the region, political stability in the recipient countries was an important stimulus, but institutional conditions were highly favorable to these developments. International capital controls were unknown in this era, and a gradual convergence of national economic policies on the gold standard supplied “common currency” externalities. Besides promoting trade, the gold standard also facilitated capital mobility not just through lowered transaction costs and reduced exchange risk, but by providing some kind of a commitment mechanism. Evidence shows that countries that adhered to gold in this era benefited from a lower cost of capital, whereas membership in the British Empire had relatively little effect.³³

Thus, as costs fell, demand rose, and agents from the private and public sector sought funding from foreign markets that appeared better disposed than in the past. After a global retrenchment during the 1870s recession, the first great wave of capital flowed in to the region in the 1880s, was halted by a crash, with a further wave to follow from the late 1890s until 1913. Moreover, although the principal source was always Britain, several other creditor countries now invested heavily in the region, expanding the supply of capital. The United States’ long-term investments in Latin America grew from \$308 million in 1897 to \$1.6 billion in 1914; French assets grew from \$651 million in 1902 to \$1.7 billion in 1913. German holdings were estimated at \$678 million in 1918. These figures compare to a British total of £1.2 billion (\$5.8 billion) in 1913.³⁴

Over the course of a few decades a very significant amount of foreign capital thus entered Latin America rising from initially almost insignificant levels. By late in the period, around 1900–13, for the largest countries the ratio of foreign capital to GDP stood at around 2.7, its highest level in history in a developing region. For comparison, in Africa the level was 1.1, in Asia only 0.4. In this era, scaling appropriately for this perspective by the size of the recipient economy, the most exposed emerging-market for

³³ On the spread of the gold standard see Eichengreen (1996). On its relation to trade see López-Córdova and Meissner (2003), Estevadeordal and Taylor (2001). On capital markets, see Bordo and Rockoff (1996), Obstfeld and Taylor (2003ab).

³⁴ Stone (1977, 694, 721).

foreign investment was Latin America. This was the region in the world economy most assisted by, and yet most at the mercy of, external forces in the capital market (Table 3).³⁵

Hence, at least for those countries, regions, and industries involved, it can rightly be claimed that “the connection of the industrial centre with Latin America was the driving force behind the capital accumulation process throughout the continent.” Whence came this remarkable inflow? The two major investment sources for the entire period 1870–1914 were Europe and the United States. Europe’s investments came earlier and were spread more broadly through the region; Britain’s investments were most prominent, followed by France and Germany, all three going heavily to the major economies of Argentina, Mexico and Brazil. U.S. investments came later and were more heavily weighted toward direct investment and geographically more concentrated in Mexico and Cuba. The two major creditors, overall, were Britain and the United States. Britain accounted for around half of the foreign investment at this time, the United States for almost 20%. Though a sectoral breakdown is not within the scope of a paper directed at long-run macroeconomic trends, we can note that over the entire pre-1914 period public debt issues absorbed perhaps one quarter of these flows. Private-sector direct investments (including portfolio investment in “free standing companies”) accounted for about three quarters. Railroads and public utilities, key infrastructure components, were of particular importance in the latter.³⁶

An overview of forty years of inflows, seen as a whole, obscures one important detail of the process, however: its fluctuations, and occasionally sharp volatility. The bond yield data hints that the costs of credit were far from smooth, and an examination of the correlations of quantity with these price shocks fills out the picture. As in developing country contexts today, international investment flows were often rudely interrupted by crises, leading to sudden stops, even reversals. In Table 4 we can follow this process in some detail based on Stone’s record of capital calls in the London market (unfortunately, similarly detailed annual data is not available for other source countries).

³⁵ See Twomey (2000). I thank Michael Twomey for use of unpublished data. There has been some controversy on the accuracy of the sources for these foreign numbers, for example as noted by Platt (1986), who disagrees with sources such as Paish (1914). Yet Feinstein (1988) has reworked this data and considers the bottom line to be reasonably accurate. See Twomey (2000). The longer run in these measures trends are discussed later in this chapter.

³⁶ Glade (1986, 39).

The 1880s were famously years of “heavy borrowing”—to use Williams’s description of the country which went to the well more than anyone, Argentina, where British investment grew by a factor of six in the 1880s (24% per annum).³⁷ Mexico’s exposure quintupled, and Brazil and Uruguay’s almost tripled. Peru saw little change. For the region as a whole, British investment swelled at a rate 8% per annum for ten years, more than doubling. The slump in the 1890s is in stark contrast: investments grew at a mere 3% per annum, though this decadal rate disguises a period of stagnation from 1890 to 1895. After 1900 investments in the region continued to grow at a respectable rate until 1913, but again only in certain countries, jumping up by a factor of four in Cuba, and doubling in Argentina, Brazil, Chile and Mexico. The patterns are similar for both private and total investment (Table 4).

What benefits did foreign capital bring to the region? Using a rough capital-output ratio of 4, we might guess that during this historical era about one third of the capital stock of Latin America was supplied from external sources, a striking contribution. Certainly, no developing country or region today enjoys such a large boost to its capital stock from overseas, and the positive growth implications can be gleaned from a simple counterfactual that imagines such capital being instantaneously removed: wages and output levels would have plummeted. Table 5 explores such a simplified counterfactual using Twomey’s data and the results show what a positive contribution foreign capital made to aggregate development circa 1913. In its absence, and *ceteris paribus*, incomes in the region would have been about 17% lower on average, which a much greater loss in countries like Argentina, Brazil, and Chile, where foreign capital played a bigger role.³⁸

These benefits were significant, but did not come without some offsetting costs, however, since open capital markets required greater discipline, could quickly punish the guilty for their inconsistent policies, and even hurt innocent bystanders through and volatility during the business cycle and contagion during periodic crises. Not every crisis large and small warrants mention here. Many defaults were isolated and some defaults simple went on for years. The troubles that beset the region’s least creditworthy countries mattered less—capital was flowing at such a dribbling rate into most of these inveterate

³⁷ Williams (1920).

³⁸ See also Taylor (1992) for more detail on the Argentine experience. Of course, in general equilibrium, a counterfactual loss of capital like this would impinge on other markets, for example, lowering the wage level, and discouraging immigration. For such an exercise see Taylor and Williamson (1997).

defaulters, and at such a high cost in risk, that an interruption in its movement was not a major event. These countries struggled along relying more on domestic saving to finance investment and government finance. This isolated them more from the volatility of the global capital market—but it also restricted their saving supply and choked off growth, a harsh tradeoff. However, the major crises in the 1890s for two major foreign capital recipients deserves mention.

The first crisis was in Argentina, where a calamitous monetary and financial crash, the Baring Crash, brought capital inflows to a screeching halt and plunged the economy into a deep recession for several years. As may be seen from Figure 2, country risk exploded not only in Argentina, but, in a classic example of contagion, throughout the region. Neighboring Uruguay was badly affected. Students of the global capital market also see connections to events in Australia and the United States.

This was arguably the world's first example of a modern “emerging market” crisis, combining debt crisis, bank collapse, maturity and currency mismatches, and contagion. As financial development and monetization in Latin American economies grew in the late nineteenth century government-induced macroeconomic crises were felt more widely. As sovereign risk spreads expanded the capital market tightened. Domestic banks found themselves in distress, and a credit crunch followed, squeezing local borrowers. Whereas government defaults in the 1820s and 1870s could bypass pre-modern economic modes of production that relied more on retained profits and less on financial intermediation, by the 1890s the region's more modern economies risked more resounding economic crises after a default.

Argentina's bold development strategy of the 1880s had bubble tendencies from the start, employing as it did a nefarious leveraging system involving the banking sector, which borrowed short in gold, and lent long in pesos. When this scheme exploded the fiscal gap could be covered only by money printing, which predictably broke the exchange rate peg in short order, and sent the economy into an inflation spiral and a generalized financial and banking crisis.³⁹ For Argentina, stabilization and debt restructuring took the better part of a decade, and in these years foreign capital again bided its time, while a global recession contributed to a delayed recovery. New capital flows began as country risk gradually fell in the mid-1890s.

³⁹ della Paolera and Taylor (2001).

The other major crisis then hit, in Brazil. It was viewed by commentators at the time almost as a replay of the Baring crash, and there is evidence to suggest that contagion in country risk from Argentina to Brazil was a contributing factor. Yet there was much else going haywire in Brazil's plan for rapid economic development known as the *Encilhamento*. Political instability was great in the first years of the 1890s following the proclamation of the Republic, the country was adjusting to the abolition of slavery, the gold standard had been abandoned, and inconsistent monetary and fiscal policies had the printing presses running at high speed. The money supply almost doubled in the year 1890 alone, and a stock market bubble was underway. The currency steadily devalued by a factor of 3.5 from 1890 to 1898, adding to the domestic costs of debt service. Yet, remarkably, the country maintained debt service, and kept issuing new debt to finance ongoing deficits, obtaining new funding from London in 1895–97. and did not default until 1898–1900, and again in 1902–09. However, the real economy was by now in deep recession, having never really recovered from the financial instability of the early 1890s. Matters were made even worse by a severe terms of trade shock caused by a steep decline in coffee prices on world markets. In 1898 the government could no longer meet its obligations. Bonds which had traded at 90 in 1890 were by then trading at 50.⁴⁰

The two crises did bear one similarity—with each other, as well as with the events of 2001–03. Both Argentina and Brazil had cranked up their government debt levels at a fast pace. There was and is but one cause for this phenomenon—persistent and large deficits, and inability of a government to balance its books and set out a sustainable debt path. But eventually Argentina and Brazil each hit a debt ceiling, and markets were unwilling to roll it over one more time. Both paid a price during messy clean ups that followed. Argentina's national debt service was backstopped by rollovers agreed to by the 1891 Rothschild Committee, but at such a punitive interest rate that the deal had to be renegotiated almost immediately by Romero in 1891; the provincial and municipal issues were in disarray for the better part of a decade before being nationalized at a deep discount, a bailout that still appears questionable. Brazil's 1898 Funding Loan, another Rothschild product, had conditions as harsh as any IMF agreement.

A broader overview of this heyday of international capital markets can give a better sense of the volatility of capital flows and their stop-and-go nature, Figure 3

⁴⁰ Cardoso and Dornbusch (1989); Fishlow (1989); Triner (2001).

presents annual data on capital flows to the region. The Baring Crash emerges as a major convulsion, but by no means the only important capital-market crisis during this period. If the trends are compared to the default and risk data (Figures 1 and 2) a more complete picture of the global crises emerges. Booms were typically associated with a convergence in bond spreads; defaults were associated with a sudden stop of capital flows and dramatically increased country risk.

The global capital market quickly recovered from the crisis of the 1890s, although countries badly affected, most notably Argentina, took longer to recover. However, compared to the 1870s boom and bust, this one was not associated with widespread default in the region, but rather a more general and global increase in country risk that slowed foreign capital flows for the better part of a decade. Inflows to Argentina and Uruguay were sluggish in the 1890s, but in other countries in the region the tap was still open as shown in Table 4. Foreign investments had grown at a frenzied 12 percent per annum in the 1880s in the “Big 7” countries (20 percent in Argentina!) and this slowed to just 2 percent in the 1890s (and just 2 percent in Argentina).

When flows resumed they were brisk, and investments grew now at 6 percent per annum in the “Big 7”, as shown in Table 4. British private investments in the region doubled from 1900 to 1913, and overall increased by about 60%, showing the continuing trend toward more private investment. Britain in 1900 was still the principal investor with over half of the investments in the region. Other core countries were joining in quickly. In 1900 France and the United States became major players in the region, and by 1913 they each held about 18% of foreign investment in the region. Of the rest, Germany held about 10%, Britain a still large 42%, with the remainder spread among other creditors.⁴¹

In summation, the period 1870 to 1914 is now rightly regarded as an epoch of economic globalization as great as, or even greater than (by some measures), the one we live in today. Ratios of trade and foreign investment to GDP, and the scale of international migrations, make this period stand out from its predecessors, and the period that immediately followed.⁴² Whether this phase of globalization was more economic than political will continue to fire debates—but the independent Latin American countries were major players in the process.

⁴¹ Woodruff (1967, 154).

⁴² Bordo, Eichengreen and Irwin (1999); Taylor (1999); O’Rourke and Williamson (1999); Obstfeld and Taylor (2002).

Under these conditions global foreign investments climbed to levels not seen before, and the flows to Latin America surged again in the last great wave of the long nineteenth century from 1900 to 1914. This was one of the smoother booms for the countries of the region. Some had sorted out the worst of their fiscal problems and the post-independence era with its dysfunctional political economy and endless wars was becoming a distant memory. Many countries now aspired to adopt the gold standard, joining the core countries in establishing a globally stable monetary system that facilitated commercial and financial transactions. There were few warning signs that economic turmoil lay ahead for the countries in the region. Here and in so many other respects, their fate was to rapidly to change once the shocks of the interwar period were unleashed.

The Interwar Crisis of World Capital Markets

In the space of the next few decades, the integrated global markets for goods, capital, and labor that had been built over the course of the long nineteenth century were effectively destroyed. Their former vigor and sudden disappearance was lamented by contemporaries, but with the historian's benefit of hindsight, and the economist's bent for quantitative measurement, we are better placed now to understand this phase of closure in world markets in a sharper long-run and comparative perspective.

The outbreak of war led to capital controls, and this step, along with subsequent inflationary war finance, marked the effective end of the gold standard regime in the combatant countries until its ill-fated resumption in the late 1920s. Reliant on heavy borrowing in the United States, the European core countries were no longer in any position to export capital to the developing world as they had during the previous golden age. Britain's role, so essential to the pre-1914 global capital market emerged, from the war quite diminished and from 1918 through the 1920s explicit embargoes on foreign investment were occasionally implemented. Britain had supplied the region with £89 million (\$431 million) in public loans from 1900 to 1913, but from 1918 to 1931 supplied only £55 million (\$250 million); in contrast, from 1918 to 1931 the United States supplied the vast majority of the roughly \$2,000 total in public loans that were issued, with Britain only accounting for roughly one eighth.⁴³

⁴³ Figures from Stone (1999), Atkin (1977) and Marichal (1989, 187).

The center of the world capital market gradually shifted from London to New York in these years as a result, but the American capacity to supply funds to the rest of the world did not as rapidly fill the void left by the British.⁴⁴ The shift was by no means smooth, but by the late 1920s capital flows to the region had recovered and in some boom years surpassed the levels seen in the last boom of 1900–14 (Figure 2). There was considerable distress in the region in the wartime years: Brazil defaulted again, for example, as did Uruguay and revolutionary Mexico; but Argentina did not, despite a brutal recession. The 1920s were then a period of marked improvement for Latin borrowers, notwithstanding the still uncertain outlook in the world economy. In fact, for a few brief years in the late 1920s no Latin American government was formally in default, though this was soon to change (Figures 1 and 2).

Uncertainty in the global economy reflected the postwar tensions and distrust. Although efforts were undertaken in the 1920s to rebuild the gold standard, free capital markets from wartime controls, and undo the tariffs and quotas imposed on trade, progress was slow, and ended in 1929. The arrival of the world depression brought macroeconomic crisis to the region and its creditors and trading partners. Default became widespread again and country risk exploded again in the uncertain environment (Figure 3). The gold standard went into its final death throes. Commodity prices, key to most of the region's export performance, continued a steep downward trend that had begun earlier in the 1920s. To the extent that markets remained open for goods trade or capital export, the channels increasingly turned to favor connections with colonies or with bilateral partners willing to make a deal.⁴⁵

The commitment to an open, multilateral, world economic order would then remain dormant for most of the rest of the twentieth century, until reviving recently. This had a predictable impact on the periphery, where markets for their exports dried up, and sources of credit failed. The impact was, understandably, felt hardest in the countries which had, up to then, been most dependent on foreign capital and trade, and which, by dint of their political independence, couldn't count a break from anybody's imperial preferences. As we have noted, that region was Latin America. In this region, in these

⁴⁴ Atkin (1977); Kindleberger (1986); Eichengreen (1996); Obstfeld and Taylor (1998, 2001, 2002).

⁴⁵ On the shift in investment patterns by the source countries to favor colonies, see Twomey (2000, 194). On commercial policy see Kindleberger (1989). The most famous imperial preferences were those established at Ottawa.

times, force of circumstances demanded new economic thinking, and gave birth to new ideologies. The inward turn by the core hurt economically in the short run, but in the longer run did more damage by undermining outward-oriented development strategies, creating an understandable isolationist backlash that would endure for decades, and still haunts us in the present.

Some measures of the impact of closure in global capital markets can be gleaned from data on foreign investments from this period. In all developing countries foreign investment as a fraction of GDP remained static between 1914 and the 1930s at around 95%, although foreign direct investment actually rose slightly from 40% to 51%. The latter is an intriguing, perhaps a reflection of a need for control in the face of increased economic and political risk and the temptation to “tariff hop” in an age of increased protectionism. However, all of the FDI increase was contained in colonies, and none in the independent countries, which essentially means Latin America.⁴⁶ Although FDI volumes held up, other components did not. The ratio of total foreign investment to GDP fell by almost a half in Latin America during this same period, from the level of 2.7 in 1914 to 1.3 in 1929 and 0.87 in 1938. If the FDI component was fairly level in this period, then the remaining investments, debt and other equity, initially accounting for half of the total, effectively vanished. No other region saw so quite dramatic a retreat of foreign capital from such high levels: in Africa the FI/GDP ratio fell from 1.3 in 1914 to 0.35 in 1938, in Asia from 0.4 to 0.26.⁴⁷ Evidently the spike in U.S. capital flows to the region seen in Figure 2 was rather brief, and apart from that blip foreign capital inflows ran mostly dry in this period.

This starvation of investible funds proved very damaging to the economies of the region, since a switch to alternative domestic sources of savings supply was quite infeasible in the short run. Even by 1914, domestic capital markets in Latin American countries remained weak. Foreign capital, in contrast, came (and also went) embedded in an organizational form, with branch banks and distant stock markets that gave institutional support to the problem of raising finance. Though domestic markets are not the topic of this chapter it is crucial to recognize their interaction, on important margins,

⁴⁶ Twomey (2000, 194–95).

⁴⁷ See Twomey (2000). I thank Michael Twomey for use of unpublished data.

with external finance.⁴⁸ Not only did foreign capital bring the resources themselves, it also brought the financial technologies and acumen, the human capital of the financial business enterprise; that is, solutions to both the problems of mobilization and allocation.

When the capital left, so did many of the slowly learnt entrepreneurial skills. Problems of misallocation arose. In the country most affected by the withdrawal of foreign capital, Argentina, domestic banks tried to fill the void, but only filled their balance sheets with bad loans, with eventually calamitous effects on the whole macroeconomic regime.⁴⁹ But even with sound allocation a deeper problem was how to generate a domestic savings supply equal to the “lost” foreign savings. In some countries, up to half of capital accumulation had been foreign financed, as we have seen. Could domestic savings be doubled overnight to fill the gap? Of course not, since savings are a notoriously slowly evolving component of GDP, determined by many factors, notably expectations for future economic growth and demography, as well as the tax structure, financial frictions, and a host of other influences. Research indicates that here Latin America would find no easy solution. Much, if not all, of the inflow of foreign investment to the countries like Argentina, Brazil, Chile and Mexico before 1914 was in essence a response not just to an “investment opportunity gap” (higher return projects on the periphery, so higher demand) but also a “savings supply gap” (higher savings capabilities in the core, so higher supply). The former is often stressed as part of the story of economic development, but the latter can make a huge difference depending on whether the external accounts are open or closed.⁵⁰

The major consequences of this shift in capital markets can be guessed at, and in some cases have been measured. The effects were seen from 1914 to 1929, and later. Growth slowed in Latin America, as in the rest of the world, and in the core itself. But the misfortunes of the core during and after the great war— isolation, hyperinflations, excessive debts—were not essentially Latin American problems (though they would be later). Instead, the problems of the core were visited on Latin America through international transmission mechanisms in goods and factor markets. The fall in the terms of trade in the former, and the rising scarcity of capital in the latter were fundamental,

⁴⁸ Bulmer-Thomas (1994, 108). For studies of domestic finance see, e.g. the chapters by Haber, Hanley, and Triner in the volume of Coatsworth and Taylor (1999).

⁴⁹ della Paolera and Taylor (2001).

⁵⁰ Taylor and Williamson (1994).

and intertwined, shocks to the region's growth prospect. In a country such as Argentina, most of the retardation relative to the core during the interwar period is attributable to the sudden collapse in foreign capital supply.⁵¹

In the 1930s, the situation grew gloomier. The core was mired in its deepest recession yet from 1929 to the bottom in 1933. The gold standard had been patchily rebuilt only to fail again, with Britain suspending in 1931 and the U.S. in 1933. Capital controls and competitive devaluations were breaking out as macroeconomic policy became activist and non-cooperative. Tariff and quota wars, already looming in the 1920s, reached full force with after the 1930 Smoot-Hawley Act in the U.S. and the British imperial preferences adopted in Ottawa.

Set this example, and with not much to lose by then, Latin American countries joined in the spirit of these policies, especially the larger countries which adopted a new "reactive" stance in policymaking. In capital markets, the measures began with capital controls, and were sometimes followed by attempts to manage multiple exchange-rate regimes, an exercise in trying to apply multiple prices for a single good (money) that led immediately to a black market. According to Bratter's chronology, most of the controls were put in place between 1931 and 1936 (Table 6). This represented a serious departure from the principles of sound finance.

The geographical variation in these controls has always invited comment on the political economy of the process. When the Monroe Doctrine is to be invoked as a causal factor, it is noted that the smaller countries of Central America, and also Mexico, stand out among the countries not adopting controls—and these are the same countries with heavy exposure to U.S. investments. Beside the 800-pound gorilla, an alternative or complementary explanation for the pattern might be the internal political economy of each country in the region, where the structure of the polity, measured by representation, autocratic tendencies and democratic pressure, also partially explains the outcome. The most "reactive" countries also tended to be those most open to democratic or, in the sphere of economics, "populist" pressure. In line with the argument of Eichengreen for the core, drawing on Polanyi, we would expect such countries to feel most acutely the tensions in the classic macroeconomic "trilemma": that no economy can simultaneously have both a fixed exchange rate, free capital mobility, and an activist monetary policy.

⁵¹ Taylor (1992).

Only two out of three are feasible, and pressure for the third inevitably compromises the first two “gold standard rules.”⁵²

Despite the seeming departures from the principles of sound finance signaled by the abandonment of gold, wholesale default, and widespread controls, many countries in Latin America remained engaged with capital markets as best they could in the 1930s. A small few, notably Argentina, did not default, and they were rewarded with favorable access to the new trickles of capital in the late 1930s. Perhaps hoping for a resumption of normalcy, negotiations continued with creditors to renegotiate debts. Soon other governments could borrow once again, partly because recovery in the region was faster than elsewhere in the world, and partly because many governments had shrunk their debt burden through the unsavory and clandestine buyback of their own debt at a deep discount in the secondary market. Through such tricks, unilateral offers to creditors, or by renegotiation several countries achieved substantial debt forgiveness. In this decade, at least, default had little stigma attached—almost every bank, enterprise, or country was afflicted by it. Reputations could be rebuilt, then, but as it would turn out another war and a global policy response that would seek to contain *haute finance* would soon render these efforts moot, and no significant capital flows would be seen again in the region for three of four decades.⁵³

By the end of the 1930s, the stand off was complete. Investors in the core countries had virtually abandoned periphery, either by dint of their own domestic controls, controls in the developing countries, or just because of a general increase in economic and political risk in the world as a whole. The Great Depression is a defining moment in world economic history precisely because it was the emergence of these frictions that shaped the greater part of twentieth-century experience. From the 1940s to the 1980s, the constraints on global capital markets were to fluctuate, but not until the 1990s did notions of globalization surface again, and even then, it could be said, prematurely.

⁵² On the democratic pressure for macroeconomic management see Polanyi (1944); on the trilemma see Obstfeld and Taylor (1998); on Europe in the 1930s see Eichengreen (1992; 1996); on Latin America see Taylor (1999); on reactive policies and the Great Depression see Eichengreen and Sachs (1985); Campa (1990).

⁵³ Eichengreen and Portes (1989); Jorgensen and Sachs (1989).

The Postwar Period

Virtually no foreign capital flowed from rich to poor countries for most of the postwar period. A flow picked up in the 1980s and 1990s, but it tended to flow to areas other than Latin America, taking this region that was once highly favored by world investors down a different path. In 1914, and similarly in 1938, the region accounted for about 55% of world stock of foreign investment in developing countries, but by 1990 only 37%.

Though Latin American postwar economic history labors under the perjorative “inward-looking development” label, it is important to recall that postwar economic isolation was the norm, in both core and periphery, from the start. Trade barriers remained high globally as GATT (now the WTO) began its task of rebuilding a multilateral trading system. By the 1970s and 1980s the work of GATT was bearing fruit, though the successive (Tokyo, Kennedy, and Uruguay) rounds of negotiations, although progress was generally slower in developing countries than in the core. In capital markets, however, progress was slow everywhere.

It is crucial to see developing country policies in the larger, global context. Under the articles of the IMF, the new watchdog of international finance, capital mobility was initially repressed. Architects of the Bretton Woods system, like Keynes and White, sought to protect trade, and a system of fixed exchange rates, and feared that footloose capital would threaten one or both. In Europe, even current account transactions remained inconvertible in the late 1940s and 1950s, necessitating a cumbersome bilateral payments system to keep trade flowing. The dollar was for a while the only freely convertible currency, but other core currencies joined in the 1960s. This was the end of the Bretton Woods system, as even limited mobility put strains on the balance of payments of member countries. Exchange rate pressure hit Britain and Germany, and then ultimately the United States, and in 1973 the dollar floated, taking others with it.⁵⁴

Sitting on the sidelines in this period, most developing countries bided their time and maintained currency controls, even multiple exchange rates, being unwilling to risk their fixed pegs in a truly open capital market. This did not, of course, insulate them from devaluation pressures, as black market rates slid away from official rates, and periodic official depreciations were enacted to maintain some illusion of respectability.⁵⁵ In this

⁵⁴ Obstfeld and Taylor (1998).

⁵⁵ Reinhart and Rogoff (2002).

way, most of the policy innovations of the 1930s, forged during the great economic crisis, eventually persisted and became established components in the postwar policy environment, an era of *dirigisme* and short-lived faith in state planning.⁵⁶ Once again, we should stress that in terms of macroeconomic distortions, at this time Latin America did not stand out from other parts of the periphery. Table 7 (panel 1) shows that in the 1960s, level of the black market premium, distortions in relative capital prices, and rates of depreciation were fairly high in both Asia and Latin America.

The comparative picture soon changed. By the 1970s and 1980s observers started to notice a troubling phenomenon. Notwithstanding the predictions of theory, enough economic data was by then being collected to permit serious empirical research on policies and growth in the postwar period. (This became a major academic industry in the 1990s.) Econometric evidence confirmed what was starting to become obvious to the naked eye: four East Asian NICs had radically shifted their orientation towards openness, and were reaping rewards in fast export-led growth. Latin American economies, still locked into a more autarkic position floundered. Table 7 (panel 2) also shows this development. Detail in panel 3 shows some surprising policy persistence from the 1930s: still the most reactive countries, where distortions ran highest, were those in the Southern Cone. The extent to which this policy mix retarded Latin American growth is central to policy debates today, and the issue of openness has been extensively discussed. There are few robust correlations in the growth literature, and maybe the only one is between investment and growth; thus, understanding why the region invested so little can explain why growth was so slow.⁵⁷

What then is the importance of this discussion for our understanding of foreign investment? Foreign investment, as noted already, fills the “gap” between domestic saving and domestic investment. But if the latter is repressed, there may be no gap left to fill. This turns out to be a fairly accurate description of postwar Latin America. In econometric exercises one can show that the distortions in Table 8 accounted for almost all of the region’s low investment rate and low growth, relative to the NICs.⁵⁸ In a counterfactual where such distortions are removed what would have happened?

⁵⁶ Lal (1985).

⁵⁷ See Levin and Renelt (1992); Rodriguez and Rodrik (2000). Growth accounting exercises also show the central role of capital formation in Latin American growth; see Elias (1992) and Hofman (2000).

⁵⁸ Taylor (1998b).

Investment rates (and growth) would have surged, pulling in huge amounts of financing from abroad as a side effect. For the region as a whole, investment as a share of GDP would have risen by about five percentage points, something similar in magnitude to the capital flows seen before 1914. Thus the potential was there for Latin America to reintegrate into a global capital market after World War Two, but policy-induced frictions barred the way.⁵⁹

Is this a convincing explanation why capital did not flow to Latin America and most other developing countries? Another way of looking at this problem proves instructive, where instead of looking at econometric quantity estimates we look instead directly at investment prices and expected returns. An exercise of this form was proposed by Robert Lucas, who used the simple uniform technology Cobb-Douglas production function for per capita income, $y = f(k) = A k^\alpha$ where k is capital per person, and α is capital's share of income.⁶⁰ Under the critical, but implausible, assumption of identical technologies across countries (A is constant), then the marginal product of capital, $MPK = f'(k) = \alpha A k^{\alpha-1}$ varies inversely with y , such that for two countries $(MPK_1 / MPK_2) = (y_1 / y_2)^{(\alpha-1)/\alpha}$. In this set up, when $\alpha=0.4$ and India has a per capita income 1/15 that of the U.S., we predict a marginal product of capital in India 58 times that in the U.S. Such arbitrage opportunities seem unlikely, casting doubt on assumptions of perfect capital mobility or uniform technologies or both.

The mystery soon vanishes once one begins to use auxiliary information on each of these assumptions. Capital prices are heavily distorted upwards in many developing countries, as we have seen, so that the returns to investment are pushed down due to the high cost of (physical) capital. Uniform technologies in the U.S. and India would also imply that the capital output ratio k/y (a scalar multiple of MPK) would also be 58 times higher in India, yet data on capital stocks can be adduced to falsify this assumption. Correcting for both these problems, an appropriate measure of the differential marginal incentive to invest in two economies is $(MPK_1 / MPK_2) = (y_1 / p_1 k_1) / (y_2 / p_2 k_2)$, where p is the relative price of capital and k the capital per person.

Compared to the raw measure, this measure shows remarkably little variation across countries in the postwar period, as seen in Table 8. Lucas's raw measure of MPK

⁵⁹ Taylor (1995; 1998a).

⁶⁰ Lucas (1990); Taylor (1998a).

(column 2) implies huge incentives to move capital to all regions, with MPKs at least 10 times the U.S. level, sometimes over 100 times, except in the NICs: a huge market failure? Not so, once we correct for technology differences (column 3) and price distortions (column 5). The first correction lowers the dispersion of MPKs considerably (column 4), though still with an 80% premium in Latin America and over 100% in Africa and South Asia. But those turn out to have been the economies with the most distorted prices, so this correction eliminates all of the excess marginal return in every region, such that in the end the range of MPKs is from 90% to 130% of the U.S. level. Thus, even absent explicit capital controls (which were only lifted fairly recently), unless underlying distortions had changed there was little incentive for capital to migrate to Latin America.

A Long Run Summary

To summarize, only recently have economic reforms begun to undo the price distortions that have been built into the Latin American economies since the generalized interwar autarky and specific policy reactions of the 1930s. Prior to those reforms the region remained unattractive to foreign investors not only because of its low levels of technology (low productivity) but also because unfortunate price twists lowered the realizable rate of return on capital. As a result, investment and accumulation was effectively constrained to a lower level, limited by the mobilizing determinants of domestic saving and the allocating capacities of the domestic financial system—and economic growth was held in check.⁶¹ Yet if the region were to embrace the kinds of policies seen in the late nineteenth century, there is reason to believe that a similar degree of globalization in the capital market would ensue, with positive spillovers for aggregate growth.

Between the past and present eras of globalization, Latin America, like the rest of the world participated in the dramatic ebb and flow of foreign capital seen everywhere, the only difference being that the retreat was sharper and the resurgence slower. In this, Latin America followed a pattern generally shared throughout the periphery, only more

⁶¹ On Argentina see Taylor (1994); on the growth consequences in the whole region see Taylor (1998b), where it is shown that the capital price distortion is endogenous and a large share of its cross-country variation can be explained by tariffs, black market premia, government spending, and other policy variables.

so. A few summary statistics round out this picture. An examination of Twomey's foreign investment data for the entire developing world in Table 9 recaps some of the data mentioned so far and presents it in a coherent fashion for the whole twentieth century. In panel A, total foreign investment (in constant 1900 dollars) rose rapidly to 1914, reaching \$15 billion; then fell to 1929, and remained at or below its 1914 level until well into the 1960s.

This was roughly half a century of lost progress, given the overall growth of the world economy and the divergence in income levels over this period, factors that would have led one to expect ever increasing investment flows. Slowly, the flows began again and rose by a factor of 3 to 1980, and by a factor of 5 to 1990. This certainly looks like a resumption of globalization, until one considers the normalization more carefully. In panel B, we see that relative to GDP, foreign investment has reached nothing like the levels seen in 1914, and as of 1990 was at roughly one half the peak level, 42% versus 89%. The fall in Latin America is greater still, from 270% to 47%, with only a small rise from 1967 to 1990. The rather more impressive surge to Asia, a tripling in FI/GDP since 1967, is indicative of a general shift in the most desired location for foreign investment over the century. An important part of this story would be the "economic miracles" of first Japan, and then the East Asian NICs.

However, some countries have experienced an increase in FI/GDP ratios to levels above and beyond those seen in 1914. These are the core countries, and, for this to be consistent with the above data, it goes without saying that the gross flows from the core countries are now, principally, *to other core countries*. What is going on? The key difference today is that globalization in capital markets though high in such crude volume terms, has a very different form than 100 years ago.⁶² Most gross capital flows are forms of portfolio risk diversification flows between developed countries, and very little takes the form of development finance in the poorer countries.

This is clearly seen in Figure 4, using a broader data set for all foreign investment. Here we see an inverse U-shape, with a different message. As can be seen, Latin America and all developing countries saw their share of world liabilities peak in the mid century. At that point, the periphery stocks of foreign capital accumulated before 1914 were still present and growing, and the core was in disarray. After the war, those stocks began to

⁶² Obstfeld and Taylor (1998, 2001, 2002).

atrophy: nationalizations, expropriations, capital mobility restrictions, price distortions, devaluations and defaults took their toll on existing assets and discouraged new flows from coming. Especially after Bretton Woods broke (the 1970s) and core countries liberalized the capital account (the 1980s), the core countries found themselves able and willing to invest in each other.

The IMF design succeeded in its own way. Capital flows were repressed for two or three decades. To some degree, so were major developing country macroeconomic and financial crises, especially the latter.⁶³ And debt crises were *ipso facto* ruled out since there was so little portfolio investment to speak of. Once capital flows resumed under the less restricted global capital markets of the post-Bretton Woods era major crises have again swept over the region in a manner eerily reminiscent of the experiences from the 1820s to the 1930s. Sovereign debt issues exploded in the 1970s, especially to banks in core countries eager to find new investments during the growth slowdown of the 1970s and recycle the so-called petrodollars of newly-rich OPEC creditors. International bank lending to the “Big 3”—Argentina, Brazil, and Mexico—doubled from 1979 to 1981. In 1982 a default crisis engulfed these countries and many others in the region and elsewhere on the periphery. A recession in the core, high interest rates, weak commodity prices and overborrowing caused another *déjà vu*. Renegotiations and an orderly work out of this fiasco took almost a decade. The door to global financial markets was temporarily shut once again and the region endured more political and economic turmoil as fiscal adjustments ensued, inflations and hyperinflations were tamed, and political regimes (democratic or otherwise) came and went.⁶⁴

Another boom and bust cycle soon followed, and the two can be seen in Figure 5. The emerging market boom of the early 1990s led some to believe that a new era was about to begin under the sway of “neoliberal” policy reforms, with development finance flowing to the periphery as it had in the distant past, both to public and private recipients this time, and with more and more countries imitating the NICs and experiencing convergence to high levels of income. It hasn’t quite happened yet. The crises and contagions of the late 1990s, not least in the East Asian miracle countries themselves,

⁶³ Bordo et al. (2001).

⁶⁴ Sachs (1989).

have disrupted that cosy vision of the future, and we are left with the realization that supposed policy reforms have, in many cases, been adopted weakly, if at all.

Whether there was a convergence of developing countries on a “neoliberal consensus” in the 1990s is a matter of debate. That there was is a popular belief, but widespread evidence remains to be found in the actual data used by political scientists and other researchers to assess changes in economic and political regimes. Overall, measured by the admittedly crude indices of corruption, rule of law, and the like, the institutional gap between rich and poor countries has remained wide.⁶⁵ But such characteristics, or deep determinants, do not directly illuminate the recent crises, where the more proximate causes appear to involve an embrace of open capital markets without an adequate of the implications and constraints on other economic policies. There remains a possible role of contagion and “animal spirits” in the market, though proving the existence of these forces has proved difficult for economic researchers in the 1990s crises. The presence of poor fundamentals has been more robustly identified, as in the crony financial structures and fiscal weakness of the Argentine state.⁶⁶

However, the “Washington consensus” account of the 1990s should not be overemphasized. Although the recent opening of capital markets has been tried here and there with mixed degrees of enthusiasm and mixed results, the overall record for the region as a whole (and the rest of the world) suggests that the opening of developing countries on the capital account has proceed very slowly indeed, and measures of capital account restrictions show that these countries remain on the whole very closed compared to the developed countries, as shown in Figure 6. The restrictions measure takes a zero or one value and is averaged across all countries, using the left scale. We see that in 1970 about 80% of advanced countries had closed capital markets, falling to 10% in 1998. But in developing countries the ratio has remained fairly steady at around 80% for the entire period. The opening of markets has been unevenly spread across countries and the timing has been spasmodic. The pattern in Latin America shows considerable shifts in policy: a shift to openness in the 1970s coincided with a major capital inflow, but controls were reimposed in several countries in 1978–82 as the debt crisis unfolded. Controls were only later lowered in the early 1990s, when a new influx began.

⁶⁵ See, for example, the high correlation between institutions and incomes documented by Acemoglu, Johnson, and Robinson (2001).

⁶⁶ della Paolera and Taylor (2003).

In the same figure, it is striking, also, how these measures of restrictions correlate with the extent of foreign investment in each region of country grouping, measured by the ratio of foreign investment (proxied by cumulated capital inflows) to GDP, using the right scale. Note that the scale for developed countries is different: they have witnessed a huge expansion of foreign investment from about 0.15 to 1.3 on this scale, almost a ten fold increase. The other scales only run up to 0.3 and reflect the much smaller flows of foreign capital to developing countries. There, the ratio has risen from 0.15 to about 0.35, a little more than doubling. The rise was somewhat steeper in Asia, but rather flatter in Latin America.

The lessons from these data are clear: for all the talk of the globalization of capital markets in the last few years, two facts have been overlooked. First, the process has been going on for two or three decades. Second, the process has largely by passed developing countries, and in large part that reflects their choice, that is, the persistence of autarkic policies in those countries, combined with an institutional environment inimical to foreign investment. Overall, we might wonder not at how much capital has penetrated developing countries today, but how little. As we have already seen in Figure 5, capital flows to developing countries are far smaller today than in the first age of globalization.

The contrast with the historical position in 1913 adds greater perspective and only reinforces the impression that the intellectual frenzy over recent symptoms of globalization has been overwrought and misdirected. A century ago a much greater share of global finance reached poorer countries, and not just under the auspices of empire. The volume of capital flows, although higher to colonies, was not higher to rich countries.⁶⁷ Colonies and independent regions like Latin America all had access to the London capital market. From an analytical perspective, the region gave an important test case for historical explanations that rely on the logic of trade (and finance) “following the flag.” In the so-called “Age of Empire” here was the first, and at that time only, developing region to have achieved total independence. At the same time it was able to enjoy access to world markets for goods and capital, often to a greater extent than the many of the colonies themselves. It made both sovereign issues and private-sector issues, and

⁶⁷ Clemens and Williamson (2002).

attracted direct and portfolio investment.⁶⁸ Country risk was not significantly higher for non-Empire countries, once we control for policy choices and other characteristics. Why is today's globalization so different?⁶⁹

Problems in sequencing reforms have exposed many countries to highly mobile capital flows at a time when their financial systems, regulatory and oversight capacity, and institutional strength have still changed little. This has raised questions as to whether international capital mobility can serve to benefit developing countries without complementary reforms that attack corruption, enhance rule of law, increase transparency, and strengthen property rights. In Latin America, the Argentine debacle of 2001 exposed key weaknesses in all these areas, and left a very bitter taste. Once paraded as a model of emerging market success, it has reverted from poster child to *enfant terrible*.

Without fundamental institutional reforms the region may not be able to handle foreign investments, but it could benefit from them if it can establish a stable order. In Latin America since 1914 foreign capital has played only a minor role, a parallel of the trend in most developing countries. In contrast the first era of globalization a century ago, most of the postwar investment successes and failures of the region have been home grown. Under these conditions per capita incomes in the region have not fallen behind the core in relative terms.⁷⁰ But they did not achieve rapid convergence to the core's level of income per capita, as one might have hoped. Some of this persistent divergence is technological, and can trace its origins to the uneven spread of the industrial revolution and subsequent technological advances since the mid 1800s. But a large share of the gap, perhaps one third to one half, is attributable to capital formation.⁷¹

For poor countries with low savings, capital formation can only be quickly and significantly augmented through an external supply of capital that is allowed to flow

⁶⁸ In 1914, in a remarkable calculation, Twomey shows that the ratio of foreign *direct* investment to GDP (what one might think was a more politically sensitive subcategory of investment) was no different between colonies and the independent Latin American countries.

⁶⁹ See Obstfeld and Taylor (2003bc). On the role of empire, see Fergusson (2002).

⁷⁰ Coatsworth (1998, 2001).

⁷¹ Hall and Jones (1999).

without impediments.⁷² This was an option exploited by much of the region from 1870 to 1914 with reasonably favorable results for aggregate growth, but under political economy equilibria that were sympathetic to the domestic policy constraints implied by open capital markets. The subsequent historical record shows that most of the world remained closed to foreign capital until the last decade or two, and, in comparative terms, Latin America opted for choices quite that were some of the most autarkic. In the last decade a greater inclination of developing economies to open capital markets has often collided with political economy constraints that have generated serious crises as policymakers struggle to follow the implied rules of the game.

⁷² If technology levels remain low in the region, gains could be small. But Gourinchas and Jeanne (2002) show convincingly that access to foreign capital *combined* with an elimination of domestic distortions can generate significant welfare gains.

References

- Acemoglu, Daron, Simon Johnson, and James A. Robinson. 2001. The Colonial Origins of Comparative Development: An Empirical Investigation. *American Economic Review* 91 (December): 1369–96.
- Atkin, John Michael. *British Overseas Investment, 1918–1931*. New York: Arno Press, 1977.
- Bordo, Michael D. et al. “Is the Crisis Problem Growing More Severe?” *Economic Policy* (2001): 51–82.
- Bordo, Michael D., Barry Eichengreen, and Douglas A. Irwin. “Is Globalization Today Really Different Than Globalization a Hundred Years Ago?” *Brookings Trade Forum* (1999).
- Bordo, Michael D., and Hugh Rockoff. “The Gold Standard as a “Good Housekeeping Seal of Approval”.” *Journal of Economic History* 56, no. 2 (1996): 389–428.
- Bratter, Herbert M. “Foreign Exchange Control in Latin America.” *Foreign Policy Reports* 14, no. 23 (1939): 274–88.
- Bulmer-Thomas, Victor. *The Economic History of Latin America Since Independence*. Cambridge: Cambridge University Press, 1994.
- Campa, José Manuel. “Exchange Rates and Economic Recovery in the 1930s: An Extension to Latin America.” *Journal of Economic History* 50, no. 3 (1990): 677–82.
- Cardoso, Eliana A., and Rudiger Dornbusch. “Brazilian Debt Crises: Past and Present.” In *The International Debt Crisis in Historical Perspective*, edited by Barry J. Eichengreen and Peter H. Lindert. Cambridge, Mass.: MIT Press, 1989.
- Coatsworth, John H. “Economic and Institutional Trajectories in Pre-Modern Latin America.” In *Latin America and the World Economy Since 1800*, edited by John H. Coatsworth and Alan M. Taylor. Cambridge: Harvard University Press, 1999.
- Coatsworth, John H. “Cycles of Globalization, Economic Growth, and Human Welfare in Latin America.” In *Globalization and the Rural Environment*, edited by Otto T. Solbrig, Robert L. Paarlberg and Francesco Di Castri. Cambridge, Mass.: Harvard University Press, 2001.

- Coatsworth, John H., and Alan M. Taylor, eds. *Latin America and the World Economy Since 1800*. Cambridge: Harvard University Press, 1999.
- Clemens, Michael, and Jeffrey G. Williamson. "Wealth Bias in the First Global Capital Market Boom, 1870–1913." Harvard University, 2002. Photocopy.
- Davis, Lance E., and Robert E. Gallman. *Evolving Financial Markets and International Capital Flows: Britain, The Americas, and Australia, 1865–1914*. Japan–U.S. Center Sanwa Monographs on International Financial Markets Cambridge: Cambridge University Press, 2001.
- Dawson, Frank G. *The First Latin American Debt Crisis: The City of London and the 1822–25 Loan Bubble*. New Haven: Yale University Press, 1990.
- della Paolera, Gerardo, and Alan M. Taylor. *Straining at the Anchor: The Argentine Currency Board and the Search for Macroeconomic Stability, 1880–1935*. NBER Series on Long-Term Factors in Economic Growth. Chicago: University of Chicago Press, 2001.
- della Paolera, Gerardo, and Alan M. Taylor. "Gaicho Banking Redux." *Economía* (2003).
- Eichengreen, Barry J. *Golden Fetters: The Gold Standard and The Great Depression, 1919–1939*. Oxford: Oxford University Press, 1992.
- Eichengreen, Barry J. *Globalizing Capital: A History of the International Monetary System*. Princeton, N.J.: Princeton University Press, 1996.
- Eichengreen, Barry J., and Richard Portes. "After the Deluge: Default, Negotiation, and Readjustment during the Interwar Years." In *The International Debt Crisis in Historical Perspective*, edited by Barry J. Eichengreen and Peter H. Lindert. Cambridge, Mass.: MIT Press, 1989.
- Eichengreen, Barry J., and Jeffrey D. Sachs. "Exchange Rates and Economic Recovery in the 1930s." *Journal of Economic History* 45, no. 4 (1985): 925–46.
- Elias, Victor J. *Sources of Growth: A Study of Seven Latin American Economies*. San Francisco, Calif.: ICS Press, 1992.
- Estevadeordal, Antoni, Brian Frantz, and Alan M. Taylor. 2003. The Rise and Fall of World Trade, 1870–1939. *Quarterly Journal of Economics* 118 (May). Forthcoming.
- Feinstein, Charles H. "Sources and Methods of Estimation for Domestic Reproducible Fixed Assets and Works in Progress, Overseas Assets, and Land." In *Studies in*

- Capital Formation in the United Kingdom: 1750–1920*, edited by Charles H. Feinstein and Sidney Pollard. Oxford: Clarendon Press, 1988.
- Fishlow, Albert. “Conditionality and Willingness to Pay: Some Parallels from the 1890s.” In *The International Debt Crisis in Historical Perspective*, edited by Barry J. Eichengreen and Peter H. Lindert. Cambridge, Mass.: MIT Press, 1989.
- Ferguson, Niall. *Globalization with Gunboats: The Costs and Benefits the British Empire Revisited*. Jesus College, Oxford (April 2002). Photocopy.
- Fishlow, Albert. “Lessons from the Past: Capital Markets during the 19th Century and the Interwar Periods.” *International Organization* 39 (1985): 383–416.
- Fishlow, Albert. “Conditionality and Willingness to Pay: Some Parallels from the 1890s.” In *The International Debt Crisis in Historical Perspective*, edited by Barry J. Eichengreen and Peter H. Lindert. Cambridge, Mass.: MIT Press, 1989.
- Glade, William. “Economy, 1870–1914.” In *The Cambridge History of Latin America*, edited by Leslie Bethell. Cambridge: Cambridge University Press, 1986.
- Gourinchas, Pierre-Olivier, and Olivier Jeanne. “On the Benefits of Capital Account Liberalization for Emerging Economies.” Princeton University and International Monetary Fund (June 2002). Photocopy.
- Hall, Robert E., and Charles I. Jones. “Why Do Some Countries Produce So Much More Output per Worker than Others?” *Quarterly Journal of Economics* 114, no. 1 (1999): 83–116.
- Hofman, André A. *The Economic Development of Latin America in the Twentieth Century*. Northampton, Mass.: Edward Elgar, 2000.
- International Monetary Fund. *World Economic Outlook*. October 2001. Washington, D.C.: International Monetary Fund.
- Jorgensen, Erika, and Jeffrey Sachs. “Default and Renegotiation of Latin American Foreign Bonds in the Interwar Period.” In *The International Debt Crisis in Historical Perspective*, edited by Barry J. Eichengreen and Peter H. Lindert. Cambridge, Mass.: MIT Press, 1989.
- Kindleberger, Charles P. *The World in Depression, 1929–1939*. Revised ed. Berkeley: University of California Press, 1986.
- Kindleberger, Charles P. “Commercial Policy Between the Wars.” In *The Cambridge Economic History of Europe*, edited by Peter Mathias and Sidney Pollard. Cambridge: Cambridge University Press, 1989.

- Lal, Deepak. *The Poverty of Development Economics*. Cambridge, Mass.: Harvard University Press, 1985.
- Levine, Ross, and David Renelt. “A Sensitivity Analysis of Cross-Country Growth Regressions.” *American Economic Review* 82 (1992): 942–63.
- Lindert, Peter H., and Peter J. Morton. “How Sovereign Debt Has Worked.” In *Developing Country Debt and the World Economy*, edited by Jeffrey D. Sachs. Chicago: University of Chicago Press, 1989.
- López-Córdova, J. Ernesto, and Christopher M. Meissner. “Exchange-Rate Regimes and International Trade: Evidence from the Classical Gold Standard Era.” *American Economic Review* (2003). Forthcoming.
- Lucas, Robert E., Jr. “Why Doesn’t Capital Flow from Rich to Poor Countries?” *American Economic Review* 80, no. 2 (1990): 92–96.
- Maddison, Angus. *Monitoring the World Economy*. Paris: OECD, 1995.
- Marichal, Carlos. *A Century of Debt Crises in Latin America: From Independence to the Great Depression, 1820–1930*. Princeton, N.J.: Princeton University Press, 1989.
- Neal, Larry. *The Rise of Financial Capitalism: International Capital Markets in the Age of Reason*. Cambridge: Cambridge University Press, 1990.
- O’Rourke, Kevin H., and Jeffrey G. Williamson. *Globalization and History: The Evolution of a Nineteenth-Century Atlantic Economy*. Cambridge: MIT Press, 1999.
- Obstfeld, Maurice, and Alan M. Taylor. “The Great Depression as a Watershed: International Capital Mobility in the Long Run.” In *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century*, edited by Michael D. Bordo, Claudia D. Goldin and Eugene N. White. Chicago: University of Chicago Press, 1998.
- Obstfeld, Maurice, and Alan M. Taylor. “Globalization and Capital Markets.” In *Globalization in Historical Perspective*, edited by Michael D. Bordo, Alan M. Taylor and Jeffrey G. Williamson. Chicago: University of Chicago Press, 2003a. Forthcoming.
- Obstfeld, Maurice, and Alan M. Taylor. *Global Capital Markets: Integration, Crisis, and Growth*. Japan-U.S. Center Sanwa Monographs on International Financial Markets Cambridge: Cambridge University Press, 2003b. Forthcoming.

- Obstfeld, Maurice, and Alan M. Taylor. "Sovereign Risk, Credibility, and the Gold Standard: 1870–1913 versus 1925–31." *Economic Journal* 113 (2003c): 1–35.
- Paish, George. "Export of Capital and the Cost of Living." *The Statist (Supplement)* (February 14, 1914): i–viii.
- Platt, D. C. M. *Britain's Investment Overseas on the Eve of the First World War: The Use and Abuse of Numbers*. New York: St. Martin's Press, 1986.
- Polanyi, Karl. *The Great Transformation*. New York: Rinehart, 1944.
- Reinhart, Carmen M., and Kenneth S. Rogoff. "The Modern History of Exchange Rate Arrangements: A Reinterpretation." Working Paper Series no. 8963, National Bureau of Economic Research, May 2002.
- Rippy, J. Fred. *British Investments in Latin America, 1822–1949: A Case Study in the Operations of Private Enterprise in Retarded Regions*. Minneapolis: University of Minnesota Press, 1959.
- Rodriguez, Francisco, and Dani Rodrik. "Trade Policy and Economic Growth: A Skeptic's Guide to Cross-National Evidence." In *NBER Macroeconomics Annual 2001*, edited by Ben S. Bernanke and Kenneth Rogoff, 2000.
- Sachs, Jeffrey D. "Introduction." In *Developing Country Debt and the World Economy*, edited by Jeffrey D. Sachs. Chicago: University of Chicago Press, 1989.
- Stallings, Barbara. *Banker to the Third World: U.S. Portfolio Investment in Latin America, 1900–1986*. Berkeley and Los Angeles: University of California Press, 1987.
- Stone, Irving. "British Direct and Portfolio Investment in Latin America Before 1914." *Journal of Economic History* 37 (1977): 690–722.
- Stone, Irving. *The Global Export of Capital from Great Britain, 1865–1914: A Statistical Survey*. New York: St. Martin's Press, 1999.
- Suter, Christian. "Cyclical Fluctuations in Foreign Investment 1850–1930: The Historical Debate and the Latin American Case." Proceedings of the Eleventh International Economic History Congress, vol. B10, edited by Carlos Marichal. Milan: Università Bocconi, 1994.
- Taylor, Alan M. "Tres fases del crecimiento económico argentino." *Revista de Historia Económica* 12 (1994): 649–83.
- Taylor, Alan M. "Debt, Dependence, and the Demographic Transition: Latin America into the Next Century." *World Development* 23, no. 5 (1995): 869–79.

- Taylor, Alan M. "Argentina and the World Capital Market: Saving, Investment, and International Capital Mobility in the Twentieth Century." *Journal of Development Economics* 57, no. 1 (1998a): 147–84.
- Taylor, Alan M. "On the Costs of Inward-Looking Development: Price Distortions, Growth, and Divergence in Latin America." *Journal of Economic History* 58, no. 1 (1998b): 1–28.
- Taylor, Alan M. "Latin America and Foreign Capital in the Twentieth Century: Economics, Politics, and Institutional Change." In *Institutions and Latin American Economic Growth*, edited by Stephen H. Haber. Stanford, Calif.: Hoover Institution Press, 2000.
- Taylor, Alan M. "Comment [on 'Is Globalization Today Really Different Than Globalization a Hundred Years Ago?' by Bordo, Eichengreen, and Irwin]." *Brookings Trade Forum* (1999): 58–62.
- Taylor, Alan M., and Jeffrey G. Williamson. "Convergence in the Age of Mass Migration." *European Review of Economic History* 1, no. 1 (1997): 27–63.
- Tomz, Michael. "How Do Reputations Form? New and Seasoned Borrowers in International Capital Markets." Paper presented at the 2001 Annual Meetings of the American Political Science Association, San Francisco.
- Tomz, Michael, *Sovereign Debt and International Cooperation*, book manuscript, forthcoming.
- Triner, Gail D. "International Capital and the Brazilian Encilhamento, 1889–1892: An Early Example of Contagion among Emerging Capital Markets?" Paper presented to the Economic History Association Conference, Philadelphia, Pa., October 2001.
- Twomey, Michael J. "Patterns of Foreign Investment in Latin America in the Twentieth Century." In *Latin America and the World Economy Since 1800*, edited by John H. Coatsworth and Alan M. Taylor. Cambridge: Harvard University Press, 1999.
- Twomey, Michael J. *A Century of Foreign Investment in the Third World*. London: Routledge, 2000.
- Williams, John H. *Argentine International Trade Under Inconvertible Paper Currency, 1880–1900*. Cambridge: Harvard University Press, 1920.
- Woodruff, William. *Impact of Western Man: A Study of Europe's Role in the World Economy 1750–1960*. New York: St. Martin's Press, 1967.

Table 1
Default History of Latin American Government Bonds Issued in the 1820s

Country	Principal owed	Resolution, if any
Brazil	£21,129,000	Arrears on interest paid and service resumed in 1829.
Mexico	6,400,000	Refinancing in 1831 to cover principal and arrears on interest. Quickly defaulted on. New refinancing in 1837. More defaults and refunding. Resolved 1864.
Costa Rica	13,608	Inherited share of Central American confederation debt. Principal paid off in 1840, but not arrears on interest.
Chile	1,000,000	Arrears on interest paid and service resumed in 1842.
Peru	1,816,000	Arrears on interest paid and service resumed in 1849. Default in 1876.
Colombia (New Granada)	3,375,000	Inherited 50% share of Gran Colombia debt. Principal and arrears paid off by new loan in 1845. Default in 1850. Principal and arrears paid off by new loan in 1861.
Venezuela	1,923,750	Inherited 28.5% share of Gran Colombia debt. Principal and arrears paid off by new loan in 1841. Default in 1847. New arrangements and further defaults then follow.
Ecuador	1,451,259	Inherited 21.5% share of Gran Colombia debt. Principal paid off by new loan in 1855. Arrears cancelled in exchange for land warrants and Peruvian bonds. Default in 1868.
Guatemala	68,741	Inherited share of Central American confederation debt. Principal and arrears paid off by new loan in 1856.
Buenos Aires	1,000,000	Resumed service in 1857.
El Salvador	27,217	Inherited share of Central American confederation debt. Paid off 90% of debt in 1860, but balance not until 1877.
Honduras	27,217	Inherited share of Central American confederation debt. Principal and arrears paid off by new loan in 1867.
Nicaragua	27,717	Inherited share of Central American confederation debt. Paid off 85% of debt face value in 1874.

Source: Rippy (1959, 26–28).

Note: Poyais is omitted.

Table 2
British Investments in Latin America at the End of 1880

Country	Total	Private enterprise	Government bonds	Government bonds in default (year)
Argentina	£20,338,709	9,105,009	11,233,700	—
Bolivia	1,654,000	—	1,654,000	1,654,000 (1875)
Brazil	38,869,067	15,808,905	23,060,102	—
Chile	8,466,521	701,417	7,765,104	—
Costa Rica	3,304,000	—	3,304,000	3,304,000 (1874)
Cuba	1,231,600	1,231,600	n.a.	n.a.
Dominican Republic	714,300	—	714,300	714,300 (1872)
Ecuador	1,959,380	135,380	1,724,000	1,824,000 (1868)
Guatemala	544,200	—	544,200	544,200 (1876)
Honduras	3,222,000	—	3,222,000	3,222,000 (1872)
Mexico	32,740,916	9,200,116	23,540,800	23,540,800 (1866)
Nicaragua	206,570	23,540,800	—	—
Paraguay	1,505,400	—	1,505,400	1,505,400 (1874)
Peru	36,177,070	3,488,750	32,688,320	32,688,320 (1876)
Uruguay	7,644,105	4,124,885	3,519,220	—
Venezuela	7,564,390	1,161,590	6,402,800	—
General	10,274,660	10,274,660	n.a.	n.a.
Total	£179,490,261	56,412,255	123,078,006	71,097,020

Source: Rippy (1959, 25, 32).

Table 3
Gross Capital Flows from Britain, 1865–1914

	Government	Private	of which: Railways	Total	Distribution	
					World	Periphery
World	—	—	—	3,366	100%	—
Periphery	—	—	—	1,571	47%	—
of which:						
Latin America						
Argentina	78	271	201	349	—	22%
Brazil	79	93	55	173	—	11%
Mexico	16	65	30	82	—	5%
Chile	29	32	15	62	—	4%
Peru	26	11	4	37	—	2%
Uruguay	10	21	16	31	—	2%
Cuba	6	20	13	26	—	2%
Total				760	—	48%
Other periphery						
India	145	172	128	317	—	20%
Russia	70	69	35	139	—	9%
Japan	73	6	2	78	—	5%
China	48	25	15	74	—	5%
Egypt	23	43	1	66	—	4%
Turkey	25	18	9	42	—	3%
Italy	23	18	10	41	—	3%
Spain	8	26	8	34	—	2%
Greece	17	2	0	19	—	1%
Total				812	—	52%

Notes and Source: Millions of pounds, from Stone (1999).

Table 4
Cumulative Gross Capital Flows from Britain to Latin America, 1880–1913

Type	Country	1880		1890		1900		1913		growth rates		
		share		share		share		share		1880–1890	1890–1900	1900–1913
Private	Argentina	9	3%	78	10%	102	10%	257	12%	24%	3%	7%
	Brazil	10	3%	29	4%	40	4%	90	4%	11%	3%	6%
	Chile	1	0%	12	2%	18	2%	32	2%	28%	4%	4%
	Cuba	1	0%	3	0%	6	1%	20	1%	8%	7%	10%
	Mexico	4	1%	19	2%	27	2%	64	3%	17%	4%	7%
	Peru	2	1%	5	1%	6	1%	11	1%	10%	1%	5%
	Uruguay	5	2%	12	2%	14	1%	20	1%	9%	2%	3%
	These 7	32	11%	157	20%	212	20%	494	24%	17%	3%	7%
All countries	296	100%	770	100%	1,064	100%	2,065	100%	10%	3%	5%	
All	Argentina	21	3%	132	10%	160	9%	332	10%	20%	2%	6%
	Brazil	22	4%	56	4%	74	4%	166	5%	10%	3%	6%
	Chile	8	1%	22	2%	33	2%	60	2%	11%	4%	5%
	Cuba	1	0%	3	0%	6	0%	26	1%	8%	7%	13%
	Mexico	5	1%	26	2%	39	2%	80	3%	18%	4%	6%
	Peru	27	4%	30	2%	30	2%	37	1%	1%	0%	2%
	Uruguay	7	1%	20	1%	23	1%	30	1%	11%	2%	2%
	These 7	90	15%	289	22%	365	20%	732	23%	12%	2%	6%
All countries	599	100%	1,334	100%	1,812	100%	3,203	100%	8%	3%	4%	

Notes and Source: Millions of pounds, from Stone (1999).

Table 5
Counterfactual: Latin America without Foreign Capital in 1913–14

Country	GDP	FI	FI/GDP	estimated FI/K (COR=4)	counterfactual (capital share=1/3)	
					GDP	change
Argentina	107	279	2.60	0.65	75	-30%
Brazil	23	68	2.96	0.74	15	-36%
Chile	58	122	2.11	0.53	45	-22%
Colombia	38	10	0.27	0.07	37	-2%
Cuba	127	175	1.38	0.35	110	-13%
Guatemala	38	62	1.66	0.42	32	-16%
Honduras	32	50	1.56	0.39	27	-15%
Mexico	49	90	1.83	0.46	40	-18%
Paraguay	41	35	0.86	0.22	38	-8%
Peru	33	40	1.21	0.30	29	-11%
Uruguay	106	172	1.62	0.41	89	-16%
Venezuela	18	17	0.98	0.25	16	-9%
All	670	1120	1.67	0.42	559	-17%

Source: Twomey (1998)

Table 6
Latin America's Adoption of Capital Controls as of 1939

Country	Exchange Control, 1930–39			Free Market Activity			Black Market
	None	Begun	Abolished	Tolerated	Controls	None	
Argentina		1931			•		
Bolivia		1931			•		•
Brazil		1931				•	
Chile		1931			•		
Colombia		1931				•	•
Costa Rica		1932			•		
Cuba	•			•			
Dominican Republic	•			•			
Ecuador		1933	1937	•			
El Salvador	•			•			
Guatemala	•			•			
Haiti	•			•			
Honduras		1934				•	
Mexico	•			•			
Nicaragua		1932			•		
Panama	•			•			
Paraguay		1932					
Peru	•			•			
Uruguay		1932				•	
Venezuela		1936		•			

Source: Bratter (1939).

Table 7
Distortions in Latin America, 1960–90

	BLACK MARKET	TARIFF	PRICE OF CAPITAL	DEPRE- CIATION	Latin America rank
1960s					
All	0.17	—	0.41	0.03	
Latin America	0.12	—	0.25	0.07	
Southern Cone	0.16	—	0.39	0.21	
Asia-Pacific	0.08	—	0.21	0.08	
NIC4	0.10	—	0.25	0.04	
1970s/80s					
All	0.27	0.17	0.44	0.10	
Latin America	0.26	0.22	0.27	0.37	
Southern Cone	0.32	0.27	0.19	0.60	
Asia-Pacific	0.06	0.13	0.23	0.02	
NIC4	0.03	0.06	0.14	0.00	
Southern Cone	0.32	0.27	0.19	0.60	
Argentina	0.33*	0.29*	0.34*	1.16*	1
Paraguay	0.29*	0.46*	0.46*	0.11	4
Chile	0.52*	0.21*	0.04	0.51*	5
Brazil	0.29*	0.16	0.09	0.83*	8
Uruguay	0.14	0.21*	0.04	0.41*	12
Others	0.24	0.19	0.30	0.28	
Nicaragua	0.62*	0.15	0.48*	0.90*	2
Peru	0.26	0.41*	0.25	0.77*	3
El Salvador	0.56*	0.13	0.68*	0.06	6
Bolivia	0.32*	0.13	0.26*	0.62*	7
Venezuela	0.33*	0.18*	0.21	0.12	9
Costa Rica	0.18	0.16	0.33*	0.13	10
Colombia	0.08	0.31*	0.21	0.17	11
Ecuador	0.18	0.28*	-0.08	0.18	12
Guatemala	0.14	0.08	0.51*	0.08	14
Mexico	0.10	0.08	0.22	0.27*	15
Honduras	0.14	—	0.36*	0.04	—
Panama	0.00	—	0.12	0.00	—

Notes: Annual averages from cross-section data. GROWTH: growth rate of per capita GDP; BLACK MARKET: black-market premium on the exchange rate; TARIFF: own-weight tariff incidence; PRICE OF CAPITAL: relative price of capital goods; DEPRECIATION: rate of depreciation of the currency. na: not available. Southern Cone: Argentina, Brazil, Chile, Paraguay, and Uruguay; NIC4: South Korea, Taiwan, Hong Kong, and Singapore.

Sources: Taylor (1998b).

Table 8
Why Didn't Capital Flow to Developing Countries?

Region	(1) Income per capita Int'l dollars	(2) Lucas MPK (OECD=1) (a=1/3)	(3) K/Y World Prices	(4) MPK (OECD=1) World Prices	(5) PI/PY (World=1) Local Prices	(6) K/Y Local Prices	(7) MPK (OECD=1) Local Prices
OECD	24,077	1.0	1.2	1.0	0.9	1.1	1.0
Middle East	23,851	4.5	0.9	1.3	1.3	1.0	1.1
NIC	14,195	2.3	1.1	1.1	1.1	1.2	0.9
Caribbean	12,047	14.8	0.8	1.4	1.6	1.1	0.9
Latin America	9,806	12.0	1.0	1.8	1.5	1.2	1.3
East Asia	5,285	24.0	0.8	1.4	1.7	1.2	0.9
Africa	3,551	129.5	0.6	3.3	2.7	1.7	1.1
South Asia	2,964	99.1	0.8	2.2	2.2	1.6	1.0

Source: Taylor (1998a). Omitted are the centrally-planned economies and Oceania.

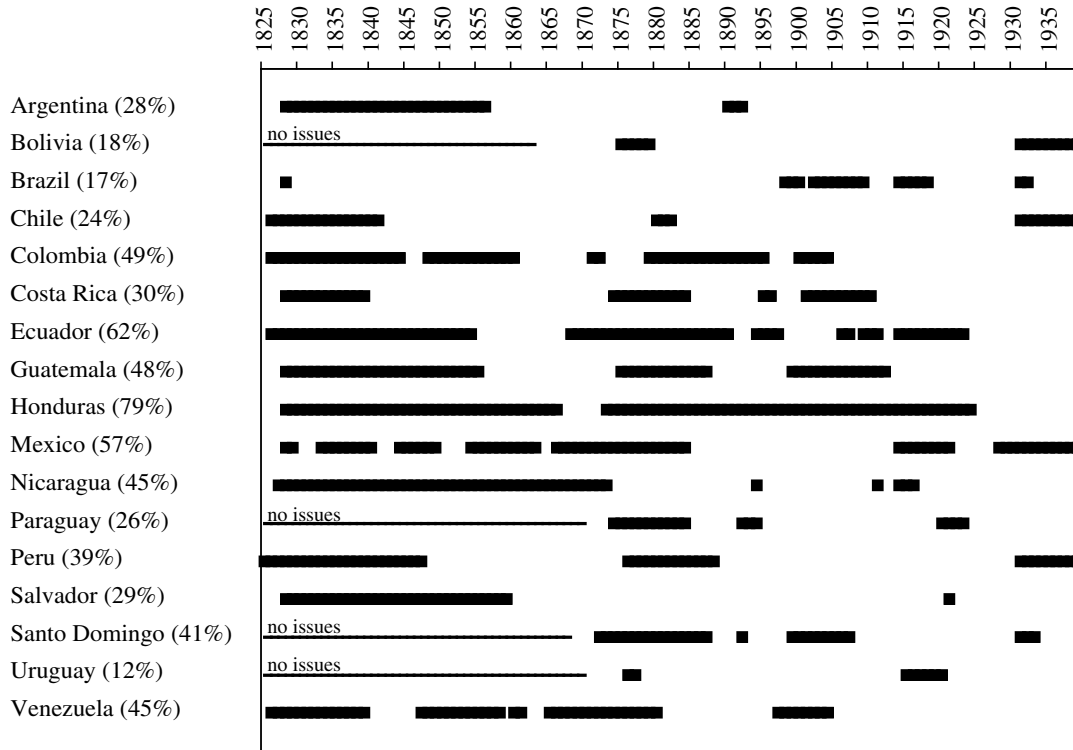
Table 9
Foreign Investment in Latin America, Asia, and Africa, 1900–90

Year	1900	1914	1929	1938	1967	1980	1990
<i>A. Foreign Investment</i>							
Total	6.3	15.7	11.0	11.6	16.5	45.5	74.5
Latin America	2.2	8.4	6.5	5.5	9.0	20.7	27.7
<i>Share of total</i>	.35	.54	.59	.47	.55	.45	.37
Asia	1.8	5.1	3.7	4.8	4.7	13.7	30.7
<i>Share of total</i>	.29	.32	.34	.41	.28	.30	.41
Africa	2.3	2.3	0.7	1.4	2.8	11.0	16.1
<i>Share of total</i>	.37	.15	.06	.12	.17	.24	.22
<i>B. Foreign Investment as a share of GDP</i>							
Latin America	1.20	2.71	1.26	0.87	0.33	0.33	0.47
Asia	0.17	0.40	0.23	0.26	0.11	0.15	0.32
Africa	1.33	1.17	0.24	0.35	0.23	0.34	0.74
Total	0.44	0.89	0.45	0.41	0.2	0.24	0.42

Notes: Panel A: Total stock of foreign investment, billions of U.S. dollars at 1900 U.S. prices. Panel B: Same as a ratio to GDP, except for Argentina the dates are 1900, 1913, 1929, 1938, 1970, 1980, and 1989, and the ratio calculation is at domestic prices.

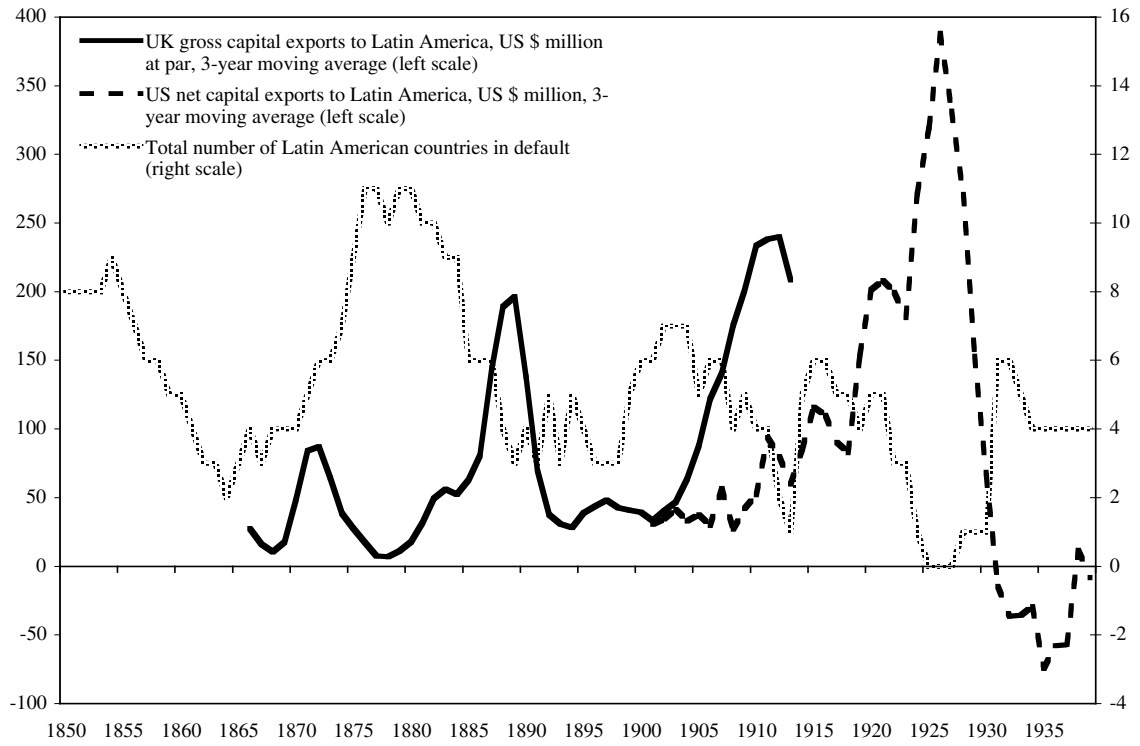
Source: Twomey (1996, Tables 2, 4, 5).

Figure 1
Sovereign Default in Latin America, 1825–1940



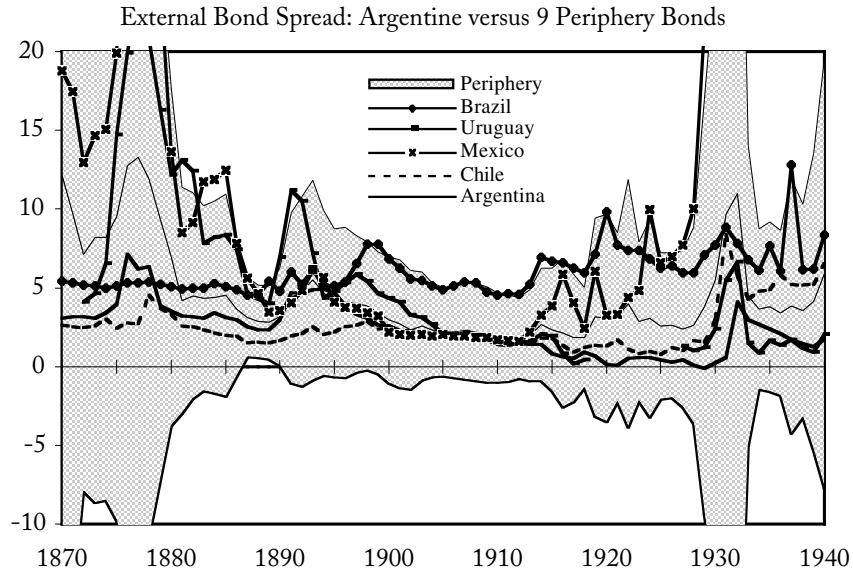
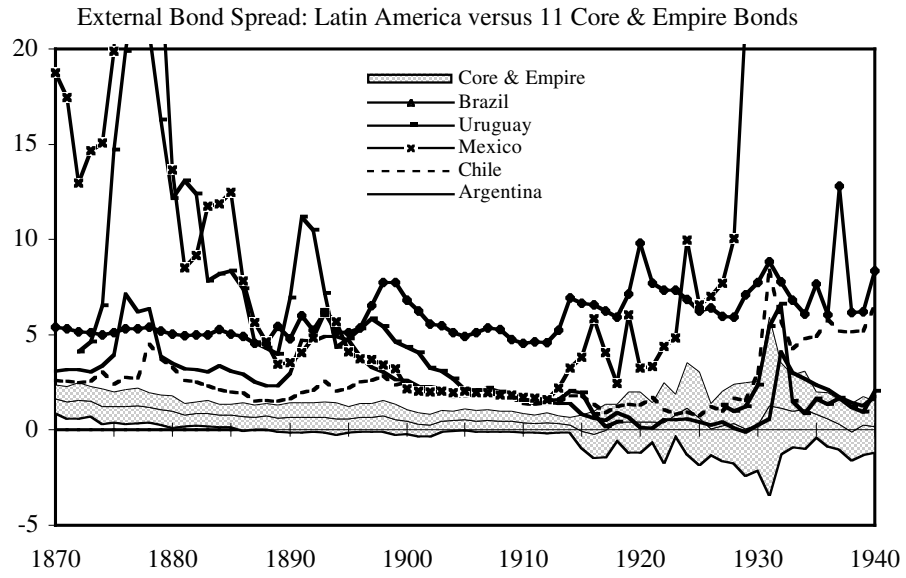
Notes: Fraction of years in default shown in parentheses.
Sources: Default data from Tomz (2001), issue dates from Marichal (1989).

Figure 2
Boom and Bust Cycles in Latin America, 1850–1940



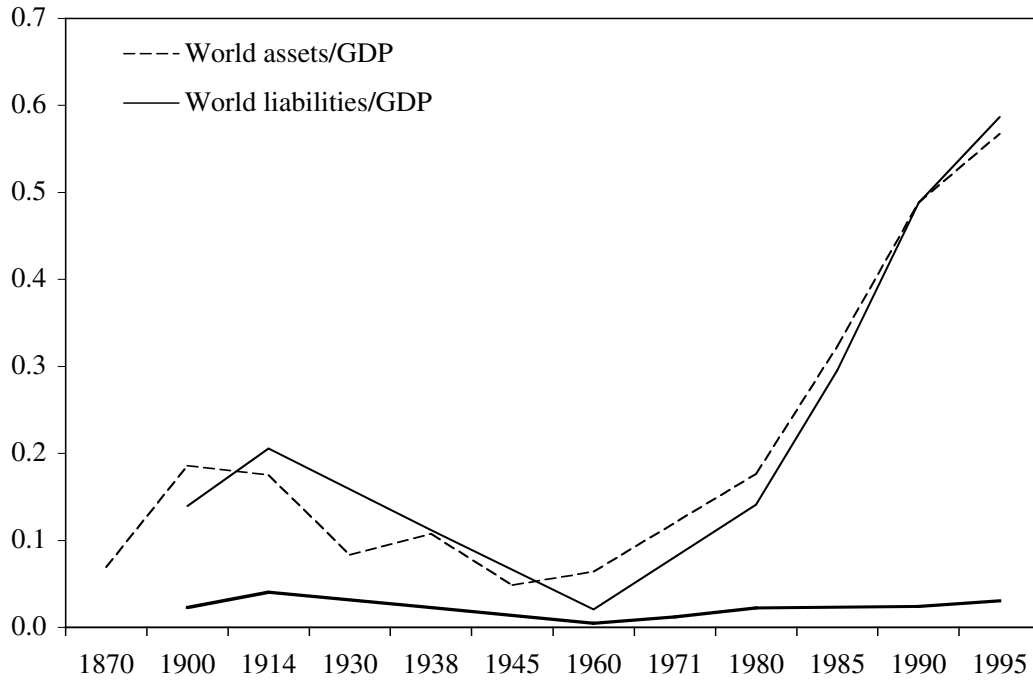
Sources: Following Suter (1994); default data from Tomz (2001); U.K. flows from Stone (1999); U.S. flows from Stallings (1987).

Figure 3
Country Risk, 1870–1940

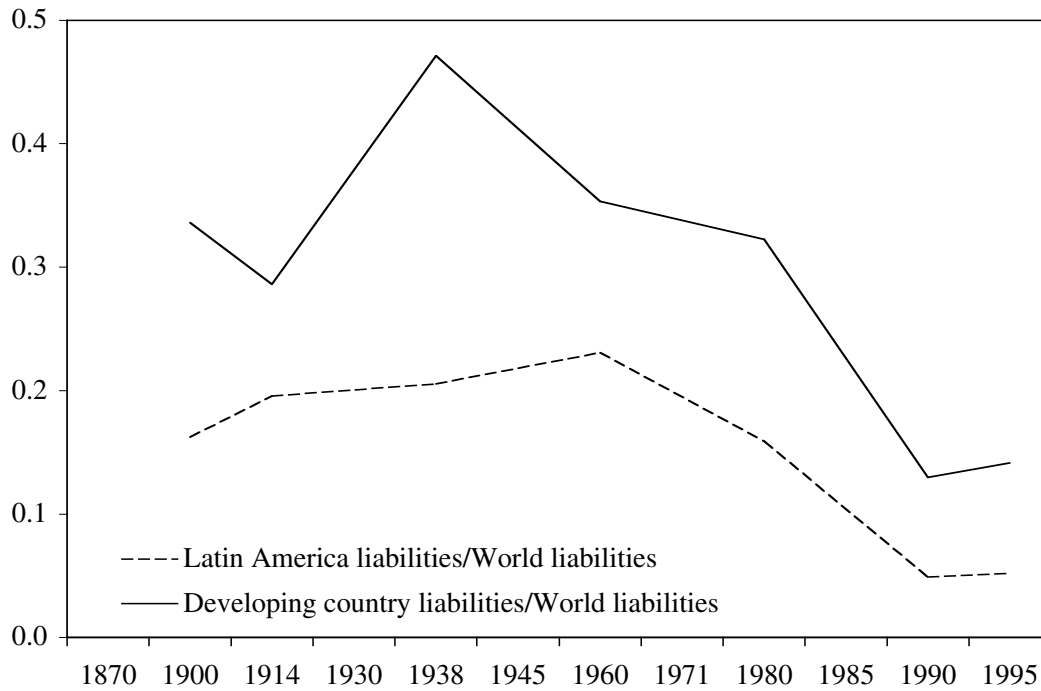


Source: Global Financial Data and other sources. See Obstfeld and Taylor (2003abc).

Figure 4
World Financial Liabilities, 1870–1995
(a) Size

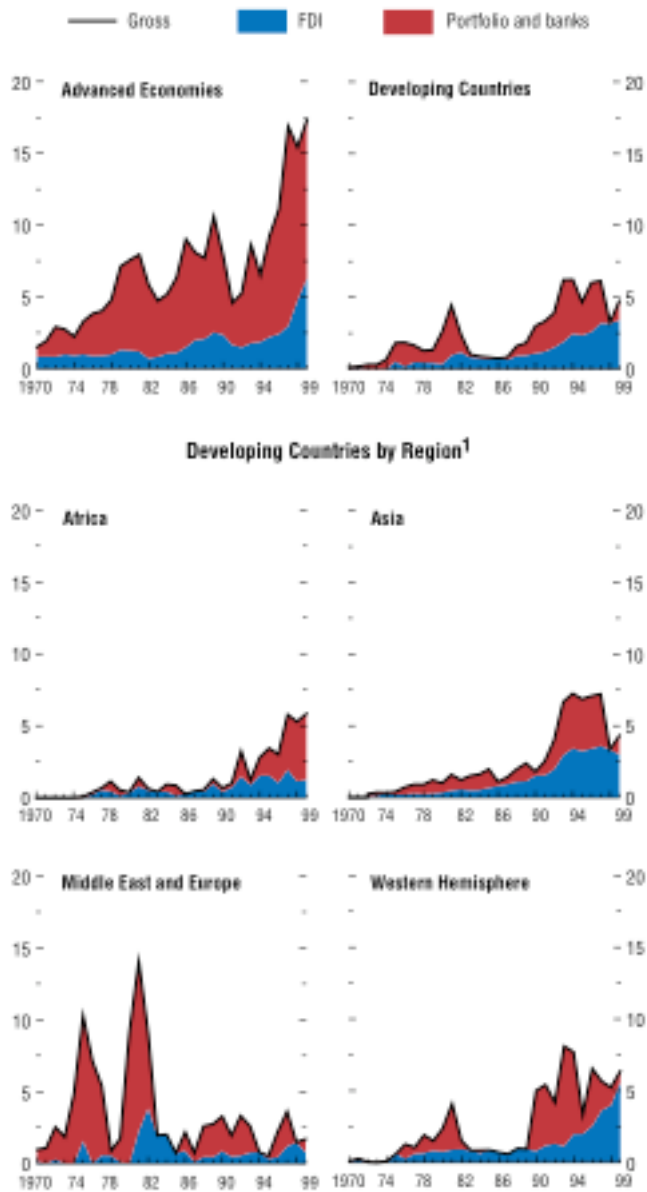


(b) Distribution



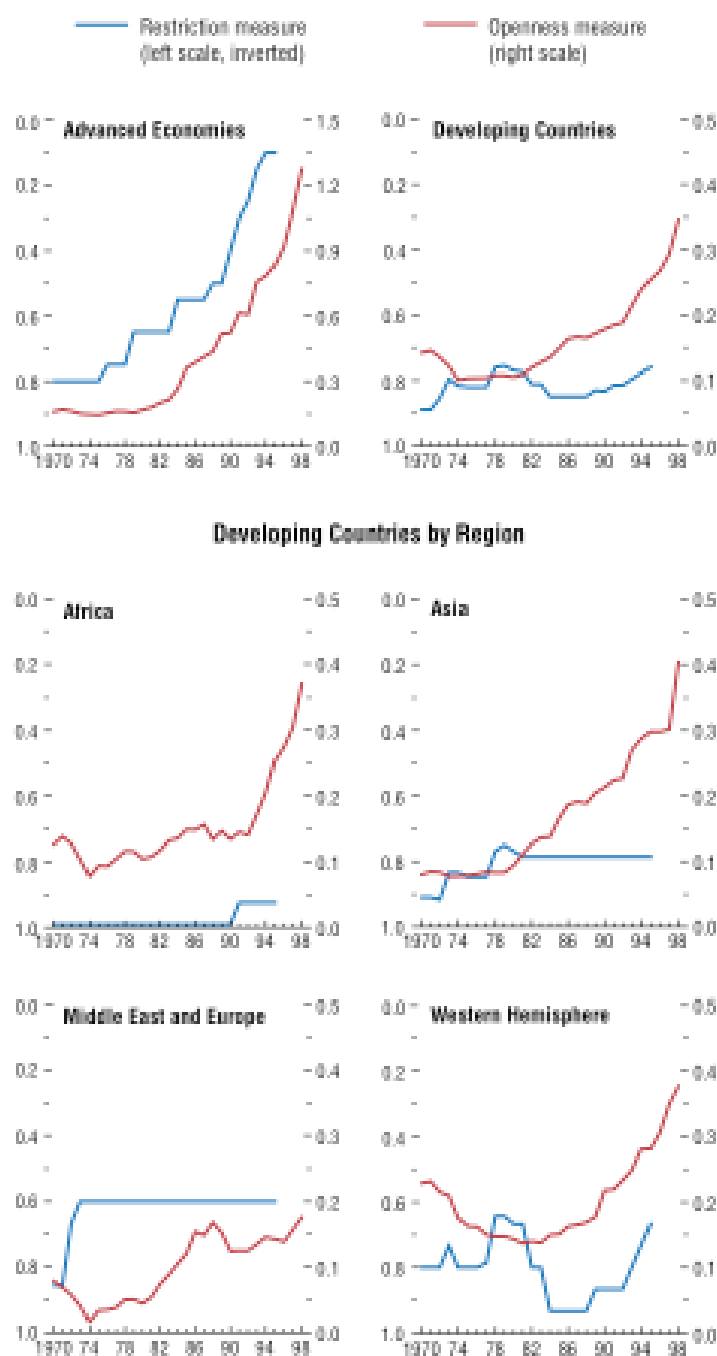
Source: Obstfeld and Taylor (2003ab).

Figure 5
Boom and Bust Cycles, 1970–2000
Gross capital flows as a percent of GDP



Source: IMF (2001, Figure 4.1).

Figure 6
Openness and Restrictions, 1970–2000



Source: IMF (2001, Figure 4.2).

Notes: The restriction measure is calculated as the “average” value of the on/off measure for the country group. The openness measure is calculated as the average stock of accumulated capital flows (as percent of GDP) in a country group. All respective left and right scales are the same, *except* in the first chart on the right.