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Chapter Title: A Monetary and Financial Wreck: The Baring Crisis, 1890-91

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A Monetary and Financial Wreck: The Baring Crisis, 1890–91

The Baring Crisis originated in Argentina but it was felt all over the world, first in London. Borrowing from Britain had dominated the capital inflows of the 1880s boom. So when the bust arrived, its impact was sure to be felt by the major creditors. One famous institution had become deeply exposed to Argentine securities: the world's largest merchant bank, Baring Brothers & Co., commonly known as Barings.¹ Fortunately for them, there was a swift intervention by the Bank of England. The Governor was notified by telegraph to hastily return to the City from his ski vacation in Scotland and, before the markets knew anything of the parlous state of Barings' balance sheet, the Bank cajoled a rescue package from a syndicate of private banks.² This chain of events gave the crisis its name, but the nomenclature is unfortunate to the extent that it encourages a focus on events in Britain rather than Argentina. For the impact on the British economy, once the rescue was secured, turned out to be very limited indeed.³ Argentina did not escape so lightly.

- 1. This bank no longer exists. Readers with an eye for contemporary events might wonder which Baring Crisis we are talking about. Despite surviving its eponymous crisis in the 1890s, Barings collapsed a century later. In the "other" Baring crisis, in 1994–95, the cause was internal: a "rogue trader," Nick Leeson of the Singapore office, who ran up unauthorized bets on Japanese equity, government bonds, and associated options worth around \$30 billion. With bank capital at \$600 million, when these bets went south Barings failed spectacularly. It was eventually put into receivership and absorbed by ING, a Dutch house.
- A contemporary analog would be the rescue of Long Term Capital Management by several New York private banks orchestrated under closed-door secrecy and with heavy moral suasion by the Federal Reserve Bank of New York after the Asian and Russian crises in 1997.
- 3. Several scholars have examined the impact of the crisis on the British financial system. For Pressnell (1968, pp. 200–04), the crisis did not spread to the entire financial system thanks to timely intervention by the Bank of England as a Lender of Last Resort. He viewed the Baring Crisis as a typical banking crisis. In such a scenario, a single bank suddenly cannot "realize" a large portion of its assets. Rumors about the virtual insolvency of the house spread in the inner financial circles of London. The Bank of England, with guarantees from a syndicate of bankers, advanced sums to meet Barings' immediate maturing liabilities and then liquidated the bank over a period of years. Batchelor (1984) refined Pressnell's argument, emphasizing that the problems were specific to Barings and not the whole money market.

The Crisis and the Trilemma

Our earlier examination of the statistical record for 1890–91 has shown that the crisis had severe macroeconomic implications for the Argentine economy. One immediately striking aspect is the discrepancy between changes in the monetary base and in the money stock, or, equivalently, in the volatility of the money multiplier. In 1890, there was a 40 percent increase in the monetary base, but an increase of only 11 percent in the money stock.

Such contractionary effects resulted, as we have seen before, principally from the public's behavior (Table 2.4). The rise in the currency-money ratio contributed negatively to money growth, and this effect, all else being equal, would have reduced the money stock by 32 percent. More cautious behavior by the commercial banks was another important factor, evidenced by a rise in the reserve-deposit ratio that also contributed negatively to the change in the outstanding stock of money.

In 1891 there was a sudden reduction in the rate of growth of the monetary base to an annual rate of 6.4 percent. But the public's preference for monetary base over bank money was still growing and the money stock fell by a further 26 percent. The money multiplier dropped from 2.2 in 1890 to 1.6 in 1891. In addition, banks began to fail with implications for the broad money supply. Notable here was the demise in 1891 of the most important commercial bank, the Banco de la Provincia de Buenos Aires, which, by itself, explained 31 percent of the decline in the money multiplier.

Thus, at first, the Baring Crisis exhibited the symptoms of a typical banking crisis in which the money stock is reduced through three channels: increases in the currency-money ratio by the public; increases in the reserve-deposit ratio by banks; and the liquidation of some financial institutions, implying the destruction of deposits.

These patterns may sound familiar, but in one crucial way the Argentine experience differed from the typical banking crises of the nineteenth century as experienced in core countries. Despite a fall in the nominal stock of money, there was a rise in both the price level and the income velocity of money (defined as the ratio of real output to real cash balances). The velocity index abruptly changed from an average value of 1.6 in 1884–90 to 3.1 in 1891, a rise clearly influenced by the demise of the banks of issue.⁴

That velocity was volatile and rising reveals how adjustment in the fiduciary system worked once capital inflows stopped. In a typical specie standard system, in which specie is a major component of monetary assets, hoarding generally

4. We should also note that this result is not dependent on a velocity definition that stresses the role of money as an asset (that is the use of broad money as the definition of money). An index of the transactions velocity of currency redefined by using the monetary base shows the same pattern: from an average value of 3.8 in 1884–91, the index rises to 4.9 in 1891 reflecting sudden illiquidity in an inflationary situation.



Cartoon 3.1. John Bull ordena que los bancos oficiales sean reducidos a cenizas asi prevaleceran en absoluto el Banco de Londres y las ordenes de la City. (John Bull orders that the official banks be reduced to ashes, so that the power of the Bank of London and the orders of The City will prevail.)

Notes: This cartoon is a reference to the massive shock to the financial system during the Baring Crisis that left the domestic banking sector in ruins. Only the foreign banks survived, many of them British. Seat and bank are the same word in Spanish (banco)—a play on words. Finance Minister Vicente Fidel López (left) and President Carlos Pellegrini (right) make firewood from seats bearing the names of the Banco de la Provincia de Buenos Aires and the Banco Nacional. Already in flames are the other provincial banks. The Englishman supervising the pyre clutches a bag of libras esterlinas (pounds sterling) as teary-eyed financiers look on.

Source: El mosquito, año 28, no. 1473, April 12, 1891.

increases in reaction to banking crises and the transactions velocity of currency falls.⁵ In the Argentine case, we have seen that already, from 1887, metallic hoarding had been steadily increasing. This reflected the failure of the monetary authorities to establish a credible mixed specie and fiduciary standard in which paper would exchange at par with gold.

Why was the Argentine velocity volatile and rising in this period? There was, in essence, a divergent movement in what we might term the "paper" velocity and the "specie" velocity. In this context, currency substitution eventually nullified the expansionary actions of the government. We might say that the sterilization policies of 1888–89 had had the "benign" effect of expanding the economy without generating inflation in the very short run; but once the sources of outside money became depleted, as gold stocks were run down, nominal variables adjusted upward from their "repressed" values. This view can be interpreted as showing that, in a small open economy with free capital mobility and a fixed exchange rate, one can only have an independent monetary policy in the *very* short run—a facet of the famous open-economy "trilemma." In short, the inconsistent policies of the Argentine authorities were in the process of being exposed.

The Key Events of the Crisis

We now document the unfolding of the crisis in more detail. Historical statistics complement the narrative, but we are hindered by the paucity of data in certain areas. For many financial variables we have the benefit of some high-frequency data. The real sector of the economy also shared the burden of adjustment, although the extent is hard to gauge. The rapidly changing trajectory of the real sector is partially obscured by the use of annual data, making it difficult to identify channels through which the banking crisis affected the real economy. The timing and intensity of the crisis can be seen in Table 3.1, and the data reveal much about the internal and external monetary and financial deterioration.

The first run on the financial system occurred in the first quarter of 1890 and was focused on the two leading banks: the Banco Nacional and the Banco de la Provincia de Buenos Aires. It came as a culmination of a year of continuous drain on the specie reserves of all the banks of issue and was aggravated by

^{5.} The transactions velocity of currency is defined as real output divided by the amount of metallic currency held by the nonbank public. See Bordo and Jonung (1987, pp. 22–28).

^{6.} The "paper" velocity index took the following values: in 1888 1.3, in 1889 1.4, in 1890 1.7, and in 1891 3.1. The "specie" velocity (defined as real activity index divided by metallic hoarding) took the following values: in 1888 20.2, in 1889 12.6, in 1890 8.1, and in 1891 6.4.

^{7.} The "trilemma" is the statement that of three policy objectives—a fixed exchange rate, free capital mobility, and an independent monetary policy—only two out of three are attainable at once. See Obstfeld and Taylor (1998) and Chapter 1 above.

		Vault Cash at	Deposits at	Cash-Deposit		
		Banco de la	Banco de la	Ratio at	Exchange	External
		Provincia de	Provincia de	Private	Rate	Interest
Period		Buenos Aires	Buenos Aires	Banks	Paper-Gold	Rate
1889	IV	8.1	138.5	0.34	2.33	5.32
1890	I	_	126.8		2.53	5.75
	II	_	124.6	0.29	2.39	5.32
	III		113.2	_	2.42	6.02
	IV	16.2	132.0	0.32	3.09	6.49
1891	I	5.7	103.8		3.49	6.58
	II	_	77.7	0.22	3.80	7.46
	III	_	71.0	_	4.03	8.20
	IV	1.9	67.3	0.42	3.75	8.06

Table 3.1. The Baring Crisis, 1889-91

Notes and sources: Vault cash and deposits at Banco de la Provincia de Buenos Aires in millions of paper pesos. Exchange rate in paper pesos per gold peso. External interest rate is yield to maturity of long-term external public bonds, specifically the 1886–87 Argentine Bond of 5 percent. Data are from the same sources as the annual data used elsewhere. See Appendix 1.

the news that Barings had failed to fully float a loan of 25 million gold pesos.⁸ This was a signal that the supply of foreign capital was going to tighten for Argentina, and for the government in particular. Deposits in the Banco de la Provincia de Buenos Aires fell by 11.7 million pesos, an amount that could not be met out of the cash on hand the bank.⁹

One striking aspect of the portfolio management of the two banks was that they maintained a persistently lower cash-deposit ratio than the private commercial banks. For example, in 1889, the Banco de la Provincia de Buenos Aires maintained a cash-deposit ratio of only 5.8 percent, far below the 34 percent average cash-deposit ratio of private banks. This relatively illiquid situation derived in part from their role as fiscal agents of the national and provincial governments. The literature of the period argues that the banks often made advances to their respective governments in exchange for short- and medium-term treasury bills; but these treasury bills were not traded in the stock market and, hence, they were not very liquid assets. Facing massive deposit withdrawals by the public, the last resort for liquid funds was to appeal directly to the Treasury rather than sell assets in the financial market.

A complementary reason for the banks to heavily invest in more illiquid and risky assets was an expectation of low liquidity costs thanks to the state acting as a backstop. That is, the banks assumed that the monetary authorities would

^{8.} The loan in question was the soon-to-be-famous Buenos Aires Water Supply and Drainage Company Loan (Ferns 1973, p. 456).

^{9.} Unfortunately, quarterly figures for deposits at the Banco Nacional are not available. Nevertheless, there is no reason to believe that the state of affairs in this bank, and in other smaller banks of issue, was much different than at the Banco de la Provincia de Buenos Aires.

bail them out if they became illiquid; hence they could overinvest in more risky assets with higher average yields. This is the classic moral hazard problem when explicit or implicit state guarantees are extended to banks.

Thus, an informal system arose that locked in bad incentives: the governments had no incentive to control the lending procedures of the banks of issue since the governments were major beneficiaries of the banks' lending function as fiscal agents of the state. Looking ahead, only the need for postcrisis reform would eventually create the political will to radically change the risky portfolio structure of the one surviving state bank.

As expected, when the first run occurred, the national government intervened on behalf of the two banks, authorizing a new issue of paper notes to meet the withdrawal of deposits. This rediscount policy had, of course, an immediate and serious drawback that was felt as pressure in the foreign exchange market. Deposits were taken out of the system and this increased pressure on metallic assets as well as on the burden of servicing the external debt. As a result, the internal liquidity crisis was temporarily halted by a 20 percent depreciation of the paper currency and an increase in the risk premium demanded by foreign investors.

Clearly, if a return to parity was the government's goal, such note issues could not be contemplated as being the end of the adjustment process, and some fiscal action would be needed. Finance Minister Francisco Uriburu indicated that the rescue operation would be complemented by drastic fiscal changes and asked approval for an immediate 15 percent increase in trade taxes, with the suggestion that half of import duties be paid in hard currency. He still defended the role of the government as a Lender of Last Resort and indicated that the government's guarantees ought to come at a price when he demanded the resignation of the government-appointed directors of the Banco Nacional so as to implement a change in lending policies. But despite his pragmatic intentions, the minister lacked the support of his peers, and he was obliged to resign in early July. At the same time the Banco Nacional informed Barings that they would suspend debt service on the national foreign bonds.

The national government was now steering a dangerous course between foreign constraints and domestic objectives. On the external front, the stern response from a lending syndicate formed by the Bank of England, the Banque de France, and the Reichsbank was that an emergency loan would be granted only on the strictest conditions. There would be have to be no new loans for ten years, no more paper money issues, and a promise of strict economy from the

^{10.} See Williams (1920, pp. 115-16) and Ferns (1973, pp. 451 and chap. 6). During Uriburu's brief tenure of five months at the Finance Ministry, advances by the Banco de la Provincia de Buenos Aires were reduced from a monthly average of three million pesos to less than one (Cuccorese 1972, pp. 335).

government.¹¹ On the internal front, the government continued to lend openly to the official banks to stave off the liquidity crisis. This was done without any major structural reform, producing a second run on the banks.

The constraints were such that the government had to choose between two options: to liquidate the official banks and resume payments abroad with the help of the emergency loan, or to continue the rescue operation of the official banks and engage in a policy of open inflation and external default. The Executive opted for the latter, but their strategy was soon opposed by Congress and a major political crisis erupted. Only weeks after Uriburu's departure, the ruling President Miguel Juárez Celman (1886–90) resigned on August 6, to be succeeded in the remainder of his term by his Vice-President, Carlos Pellegrini (1890–92).

It was an open question whether the new government would pursue reforms or business as usual. Initially, the Pellegrini administration sent mixed signals to the markets. Even as a drastic change in the lending policies of official banks was announced, the finance ministry simultaneously decided to rediscount 60 million pesos to clean up the books of the City of Buenos Aires, the National Mortgage Bank, and the official banks. The action to prop up the banks saw some success. By the end of 1890 there was some increase in private deposits and the banks found they could replenish their reserves. The internal convertibility of deposits at the banks of issue appeared to have been ensured by the continued Lender-of-Last-Resort actions of the new government.¹²

Still, the external constraints had not changed. Despite official intentions to avoid default, the burden of the debt service was unsupportable. Annual interest on the debt amounted to 40 percent of 1890 fiscal revenues.¹³ In the short run default could not be averted, and the only hope was to achieve a dignified resolution via a debt rescheduling agreement with the foreign creditors. In November the government sent a mission to London to arrange a moratorium with Barings. The timing of this mission was hardly auspicious, since the Bank of England had only just intervened to save the merchant house from Argentina's earlier and ongoing default. Nonetheless, the Bank of England and the Argentine government concluded an agreement to overcome the crisis and, by January 1891, a new loan was advanced to Argentina to enable it to repay the annual installments of interest on the external bonds.

Of course, the loan had strings attached. The creditors wanted to see serious economic reforms. A clause of the loan required the Argentine government "to

^{11.} Williams (1920, p. 114).

^{12.} Another signal that the Pellegrini administration would not let down the official banks was the imposition of a 2 percent tax on deposits in foreign-owned banks—an attempt to motivate depositors to switch toward state and national-chartered banks (Ferns 1973, p. 460).

^{13.} The 1890 service of the funded debt amounted to 29 million paper pesos and 1890 fiscal revenues were 73 million paper pesos. On the debt service and fiscal revenues see Appendix 1 and Chapter 4.

undertake officially to cancel bank notes to the amount of at least 15 million pesos a year for three years, so long as and whenever the gold premium should be above 50 percent." This condition was to have immediate monetary and financial repercussions in the country. If the government intended to abide by the agreement, the ongoing flow of rediscounts to bail out the banks would have to stop.

Would the banks be secure without that lifeline? An answer was soon provided. A third and devastating run on the banks of issue resulted when the public again tested the convertibility of deposits into cash. The government sought to manage the run and ensure convertibility without printing money by attempting to float a 100 million peso issue, euphemistically termed the "Internal Patriotic Loan"; but when they went to the bond market the subscription failed. Only 28 million could be obtained in cash, and it came mainly from other private banks.¹⁵ There was nothing to be done. The official banks closed their doors at the end of April 1891 and the third banking crisis quickly exploded into a total financial panic. During this chaos the reserves of the private banks were hard hit, their cash-deposit ratio falling to 22 percent, the lowest level in history.

To Bail or Not to Bail?

The demise of the two official banks in 1891 soon sparked a fierce debate among contemporary pundits, policymakers, and politicians. Was the decision to let the banks fail a major policy mistake or was it simply unavoidable? The debate has continued ever since among scholars interested in this episode and the lessons it might offer for the design of sound financial systems and the provision of banking insurance. Problems of moral hazard are potentially more serious when banks might be seen, or see themselves, as "too big to fail." But despite their size and importance to the financial system, the two big state banks were left to founder and no bailout was forthcoming.

We can present only a flavor of the competing views of this episode. One tradition lays the blame at the door of the government. The contemporary observer José Terry emphatically criticized the timing of debt management policies. ¹⁶ In his view, the authorities failed to clearly define the legal relationship between the banks of issue and their depositors while granting preference

^{14.} Memorias de Hacienda (1891, pp. 207-31); Williams (1920, p. 127).

^{15.} Subscriptions to the 1891 Internal Patriotic Loan were 44 million pesos in par value; the realized value was only 29 million; that is, the bonds were floated at 65 percent of par. Of the proceeds, 11 million pesos were rediscounted to the Banco Nacional and the rest went to the Banco de la Provincia de Buenos Aires. Figures from Terry (1893, pp. 192–93). Joslin (1963, p. 126) argues that the Bank of London and the River Plate helped to float the loan but he does not present evidence on the terms or the motivation for this action.

^{16.} Terry (1893, pp. 168-77).

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to external creditors. This institutional uncertainty, he argued, produced unnecessary anxiety in the financial system until the collapse of April 1891. A different viewpoint would find more fault with the banks themselves. Williams thought that fraudulent behavior and wildcat banking were the main problems of these institutions, and therefore their liquidation was to be tolerated, even welcomed.¹⁷ Their bankruptcy simply reflected how the financial system adjusted once there was a hard commitment to a new regime and disinflation was seen as inevitable.

Such a discussion naturally requires us to consider the solvency-liquidity position of the banks in question. Table 3.2 presents some solvency-liquidity indicators for the Banco de la Provincia de Buenos Aires, where we restrict attention to the purely commercial banking operations.¹⁸ The balance sheets shown here are net of official and governmental loans on the asset side and net of outstanding paper notes on the liability side. The table reports two key indicators, which we introduce as follows.

A commercial bank faces a *liquidity crisis* if the vault cash from the last period VC_{t-1} is insufficient to cover the desired withdrawal of deposits $-\Delta D_t$ in the current period; that is, if

$$VC_{t-1} + \Delta D_t = X_t < 0, \tag{3.1}$$

where we call X_t the *liquidity level*. The bank faces a *solvency problem* if the net value of assets A_t , which equals total assets less nonperforming assets, is less than the value of deposits D_t ; that is, if

$$A_t - D_t = Y_t < 0. (3.2)$$

where we call Y_t the solvency level.

The figures in Table 3.2 seem to support Williams' view that bank solvency eroded during the Juárez Celman administration. However, the solvency indicator is an ex post realization whose causal factors need to be considered in more depth. The solvency level depends on two processes: depositor behavior and the change in the net value of commercial assets (see the penultimate expression above). The latter is, in turn, endogenously determined by two factors. First, exogenous changes in general economic conditions that could affect the performance of risky assets; and, second, internal management decisions to prune illiquid assets from the portfolio. This latter decision may generate losses and insolvencies sufficient to cause the failure of the bank.

Both failed banks had heavily invested in mortgage and real estate operations during the boom of the eighties. These assets were particularly sensitive to both

^{17.} Williams (1920, p. 120).

^{18.} Lack of complete data for the Banco Nacional precludes a similar empirical treatment of that bank's position. However, a cursory glance at its accounts suggests that the financial situation was not much different.

	Change in	Liquidi ty	Change in Net	Solvency	Relative Price of	
Year	Deposits	Level	Value of Assets	Level	Rural Land	
1886	10.4	9.2	0.7	5.9	100	
1887	-1.8	10.2	-0.1	7.6	196	
1888	17.8	18.9	27.1	16.9	375	
1889	28.4	33.2	23.8	12.3	211	
1890	-6.5	1.6	-10.8	8.0	150	
1891	-53.3	-37.1	-72.7	-11.4	95	

Table 3.2. Solvency-Liquidity Indicators, Banco de la Provincia, 1886-91

Notes and sources: Change in deposits, liquidity level, change in net value of assets, and solvency level computed from official balance sheets of the Banco de la Provincia de Buenos Aires and are expressed in millions of paper pesos. Assets are the sum of loans and advances, vault cash, and physical capital minus provincial governmental balances. The net value of assets is assets minus nonperforming assets. The relative price of rural land is the average price per hectare in the province of Buenos Aires deflated by the price level. Land prices were estimated by Cortés Conde (1979, p. 164). Price level from Appendix 1.

the business cycle and government finances. At the first sign of recession, the price of land (relative to wholesale prices) declined abruptly and this had a negative impact on the asset quality of the bank portfolio.¹⁹ A delayed change in lending practices might have caused even more insolvency problems, a self-defeating policy. So the banks signaled that funds would be rationed.

Borrowers, already distressed by market conditions, perceived that the costs of defaulting were less than the costs of repayment. In consequence, solvency levels collapsed. When such an interruption of loan service took place the ratio of nonperforming assets to performing assets rose from an average level of 6 percent for the boom years, to 21 percent by the end of 1891 (see row 19 in Table 2.3). And there was worse to follow: in addition to the currency substitution motives already noted, the public's withdrawal of deposits now responded to this portfolio deterioration. The run on deposits increased the liquidity needs of the banks and further inhibited the renewal of genuine loans, generating a vicious spiral.

Postscript: The Baring Crisis in Historical Perspective

What can be learned by a contemporary observer looking back at the Baring Crisis, the first-ever full-fledged emerging market crisis of the modern era? If there are useful lessons to be learned from it then, a century on, the persistence of such crises raises serious questions: Have the events of the past been forgotten?

19. The typical collateral assets used for security against loan losses were mortgage bonds (cédulas bipotecarias) floated by the Provincial Mortgage Bank and "other assets" (otros títulos), the latter probably consisting of company assets and the pledge of land as lien. In 1890, the value of such collateral represented 37 percent of the performing assets, shrinking to 24 percent by 1891. This reflected capital losses due to the collapse of the mortgage bond market in 1890. Figures are from Cuccorese (1972, pp. 351–52).

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Are there attributes of contemporary crises that are more difficult to manage? Or are we still trying to cope with the same institutional dilemmas that faced Argentine policymakers in the late nineteenth century?

The Baring Crisis carried all the hallmarks of an emerging market crisis. It began with an intended fixed exchange-rate commitment. Although the peg soon failed, there was a strong signal from the government of an intention to repeg at the same parity, even as the exchange rate floated away. Such an announcement corresponds to the "restoration rule" proposed by McKinnon as an antidote to currency crashes like the Asian Crisis of 1997.²⁰ Did it work in the Argentine case? The answer is no, and the reasons come down to the government seeking for too long to hide from the fundamental trilemma and the fiscal-monetary nexus of the intertemporal budget constraint.

Just as today, global capital markets were very well integrated in the 1880s, and Argentina was fully open to them. At the macro level, as we have seen, this took the form of massive capital inflows, mainly from Britain. At the micro level, a major conduit was the decision of the major banks to make a play to borrow short-term overseas in gold (hard currency) and lend long-term domestically (in paper pesos), particularly during the final spasm of the 1880s boom. This play was encouraged by the poor design the Law of National Guaranteed Banks and, given the ongoing absence of banking regulations and reserve requirements, it could be leveraged a long way. Although it was a very leveraged play it was a great gamble so long as the guarantee was good. So long as par was to be resumed, and so long as the government's best efforts managed to keep the exchange rate within reasonable bounds during the presumed-to-be-temporary dirty float, the banks stood to make high profits. The conventional wisdom on contemporary crises now begins to look like "déja vù all over again." In the 1880s in Argentina we had all the same volatile ingredients present: currency mismatches, maturity mismatches, lack of sound regulation and transparency in the operations of the banking system, and, above it all, an unsustainable commitment by the authorities to an exchange rate peg.21

Why was the exchange rate unsustainable? In one sense, it was the same old problem. The fiscal superstructure of the Argentine state was still weak, a continuing legacy inherited from the decades of monetary anarchy and an excessive reliance on seigniorage in times of crisis when other tax sources failed. An added complication, however, came from new commitments to economic modernization that were bolted on to this superstructure in the 1880s, through both legislation and day-to-day practice. Two commitments stand out in the money and banking area: the government's desire to adopt a metallic regime and commit to a peg; and its evolving tendency—organic more than systematic—to take on board a Lender-of-Last-Resort role via the state banks. Here the

^{20.} McKinnon (1999).

^{21.} Calvo (1996; 1998).



Cartoon 3.2. Con sus amores arteros la dejaron cual la ves, y hoy que la Patria está en cueros quiere cubrirla el inglés. (With her cunning lovers that left her as you see her, today Argentina is naked and the Englishman wants to cover her.)

Notes: The cartoon conveys the idea that with the wealth of the country having been misused by the local politicians in the 1880s—and also because of this—only the English financiers stand ready to save the country in its time of crisis. The republic is left naked, sitting on a pile of debts, and the rascals escape having stolen her clothes. The various thieves are the politicians in the guise of their popular caricatures: the monster-gaucho is Marcos Juarez; the sailor, Leandro N. Alem; the fox, Julio A. Roca; the sheep, Mansilla; the monkey, Ramon Carcano; the donkey, President Miguel Juarez Celman. Alem was one of the principal members of opposition politics, the leader of the famous uprising known as the Revolución del Parque, which is why he has a heart bearing the inscription el del parque. He wears the typical white beret of the Unión Cívica party, which soon become the Unión Cívica Radical after Mitre left to make a pact with Roca.

Source: Don Quijote, año 7, no. 37, May 17, 1891.

trilemma bites with great force. Absent other fiscal devices, Lender-of-Last-Resort actions will press the government to untie its hands and deviate from a purely endogenous money supply process.

Thus, with its combination of monetary-fiscal inconsistencies and imprudent financial regulation, there was hardly a dangerous ingredient that the Baring Crisis did not have. It was only a matter of time. At the eleventh hour, Finance Minister Uriburu had seen the need for drastic action to close the fiscal gap, for real taxes to supplant money printing, but few others were persuaded. Yet, within only a few weeks the situation had detriorated so much that President Pellegrini found persuading the doubters suddenly very easy, with the banks on

the brink of a devastating run, foreign creditors holding a gun, and the hopes for a return to parity having disappeared as quickly as the gold reserve.

What still might seem remarkable is the courage and conviction with which the government rose from this absolute nadir. They achieved this by a series of tough choices informed by a clear realization of fundamental economic principles such as the trilemma, the government budget constraint, and moral hazard. A new commitment to parity was made credible by the adoption of a currency board. Serious fiscal reforms were adopted so as to take seigniorage out of the policy mix. Banks were allowed to fail. But restoration at the old par was, despite some efforts, eventually given up as unattainable. The costs were seen as too high, as we shall see. The float had gone so far out of control and had passed through so fully into prices that a harsh deflation all the way back to par would have created a deep recession via debt-deflation and expectation effects.

For all the reforms, however, the new Argentine economic regime was still left ill-prepared for the future in some respects. Although the macroeconomic reforms were clearly signposted and adopted with firm resolve, the microeconomic foundation remained fragile. There was no new clear and comprehensive set of banking regulations. Admittedly, in the short run, the harm that could be done was very limited: many banks had failed, and the ones that survived were chastened by the experience. Overborrowing and high leverage were not on their agenda for a while, not that access to international markets was soon forthcoming to permit it. But eventually, in the distant future, this lack of attention to correct even just one of the institutional failures of the 1880s was to come back and cause further havoc.

Last, it is ironic that, while Argentina struggled after the crisis to overcome a reputation for irresponsible internal economic shocks, in the decades ahead the shocks that were to rattle the Argentines were not of their own making but rather emanated from the core of the world economy. In economic and other affairs, the generation of Sarmiento and Pellegrini had hoped to emulate the "civilized" countries, and in economic policies this had meant converging on the gold standard consensus of the time, playing by the "rules of the game," and embracing open markets. After 1900, this dream started to become reality. The triumph of the Belle Époque was that Argentina succeeded better than anyone might have expected in this imitation, becoming along the way the darling of foreign investors and one of the fastest growing economies in the world. The tragedy—for Europe, the World, and for Argentina—was that the assumptions that lay behind this strategy were about to be destroyed by wars, protectionism, distrust, and a global depression. Looking ahead, our discussion resonates with contemporary policy analysis of optimal developing country reforms, and here Argentine history clearly illustrates how global shocks can have particularly unfortunate consequences for peripheral countries with open markets for goods and capital, but immature monetary, fiscal, and financial systems.