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Volume Author/Editor: Gerardo della Paolera and Alan M. Taylor

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## Postscript

After decades of monetary anarchy since independence, the enactment of the Monetary Law of 1881, and the subsequent experiments of the 1880s with bimetallism and free banking regimes, marked a moment when Argentina's policymakers started to search for monetary and fiscal stability. In the face of challenges common to all developing countries on the periphery of an integrated global economy, this search was marked by struggles and failures, most notably the spectacular Baring Crisis of 1890–91, which can be seen as the first emerging-market crisis of the modern era.

The lessons of the crisis informed the design of new institutions. From 1891 until the creation of the central bank in 1935, the Caja de Conversión, Argentina's first currency board, unilaterally enforced a hard gold-standard monetary regime in an attempt to provide a firm nominal anchor and restore the confidence of foreign investors. Monetary stability was achieved and economic growth was impressive, at least prior to the First World War. But the system didn't last, and there were signs of increasing vulnerability in the financial sector during the interwar period. The monetary regime prevented any Lender-of-Last-Resort actions, so volatility in world financial markets hit Argentina hard.

Our book has shown that institutional “learning by doing” in the search for macroeconomic stability was a notable feature of Argentina from 1880 to 1935. To invoke an expression of Charles Kindleberger, one senses that Argentine economic history could be summed up as being part of the never-ending struggle of “rules versus men.”<sup>1</sup> However, we have shown that the extremely rich political-economy story can be interpreted and rationalized in the light of the modern apparatus of economic analysis. In this way, we have integrated in one approach extremely complex features such as money, public debt, and private finance. Employing such formalism, we seek the advantages of explicitly spelling out the underlying economic models. Though the formal approach requires more effort, it is of the utmost importance in revealing the

1. Kindleberger (2000).

rationales of Argentine policymakers, and why their economic strategy switched back and forth between strict “rules of the game” and broad discretion.

### Original Sins: A Tale of Monetary Double Standards

As a concrete example of what we have learned from this approach, recall the chronic use of the inflation tax in the decades after independence, from the 1820s to the early 1860s (Figure 1.3). It should not be perceived as having been just an inefficient tax on domestic money holders but, moreover, as a dispute over the distribution of seigniorage among the different provinces. This was at the heart of the struggle between one of the most powerful economies of the hemisphere, the Province of Buenos Aires, and the other provinces in the Argentine Confederation. It was not only a fight over who would have the power to tax international trade, but also about more subtle ways of financing the governments’ public expenditures. As Samuel Amaral has put it, the discovery of inflationary finance in the Province of Buenos Aires “enlightened” the political class and the *caudillos* of the other provinces, and in the issuance of fiduciary money they all saw a most welcome way to enlarge fiscal resources.<sup>2</sup>

Of course, it was here that the first major monetary design problems began for the small open economy of Argentina. Policymakers started thinking that money could function under a double standard: one standard for internal purposes (for this, read “try to extract as much seigniorage as you can”), another standard for external purposes (an internationally accepted standard to promote international finance and trade). The inherent contradictions of this plan did not stand in their way. From the time of independence in 1810, until the creation of the Conversion Office in 1890, domestic and external goals habitually alternated as the focus of Argentina’s monetary policy regime, a corollary of alternating political-economy decisions. And, as it later became clear, this was not an easy habit to break.

The first external convertibility plan, from 1868 to 1875, failed. It gave way in the 1880s to a new doctrine that favored a system of plural banks of issue, permitting those banks to issue gold-guaranteed paper notes (wrongly described as a “free banking law”). This system was established alongside the 1881 law that established gold and silver as the bimetallic legal tenders for internal transactions, an attempt to restrict competition between different metallic monies. The new plan was derailed by attempts to deploy activist monetary policy despite the force of the macroeconomic trilemma. This scheme, plus the attempt to limit the use of other metallic monies—which may be seen as a very primitive precursor of capital controls—was a recipe for sure disaster. But it provided a wonderful laboratory for economic historians, namely the Baring Crisis.

2. Amaral (1988).

### The First Emerging Market Crisis: Local Causes, Global Effects

We have shown that the Baring Crisis of 1891 was a phenomenon that entirely originated in domestic political-economy choices, namely an acute mismanagement of public debt and serious violations of time consistency in economic policies. It is now well understood that if a sovereign country is to have good standing, or a sound reputation, in its two major liabilities, money and bonds, then the expected solvency of the government should be beyond question.

If a country violates the consistency between monetary and fiscal policies and, hence, the intertemporal government budget constraint is not met, we know that at some point the government will have no option but to choose among several bad outcomes. In other words, if the “promised” values of money and debt cannot be sustained through time because of budget constraint violations, then there is no way out. A government will have to default either to money holders, or to bond holders, or distribute the losses in some particular way in the form of a partial default to both.

The inconsistencies in public debt management were clear in Argentina for the years 1888–91, a time when the government was pursuing an expansionary fiscal policy while simultaneously precommitting to restore a gold-standard regime. For a while, capital inflows could finance the conflicting monetary and fiscal actions, but the policy of sterilization after the balance of payments turned negative only financed an intense process of currency substitution by private agents as the speculative attack loomed. Collapse came about when all the government’s specie was virtually depleted.

The specific details of policy inconsistency during the 1880s give us a new perspective on what an old and enduring problem we have in emerging-market crises. We have argued that the Baring Crisis can be seen as the first occurrence of this new breed of crisis. The Argentine policy mix included a fixed exchange-rate commitment (which at times degenerated into a dirty float); the free mobility of capital; a developing economy that for a short time was the darling of the world’s financial markets; banks that made dubious loans to cronies (including their provincial overlords); balance sheets that were beset by maturity and currency mismatches (borrowing short in gold, lending long in pesos); no effective prudential banking regulation and oversight; and a monumental crash that brought intervention from a would-be International Lender of Last Resort, the Bank of England.<sup>3</sup>

3. Compare to a typical description of the recent Asian crises: “So what is the underlying cause of financial crises in the 1990s? More often than not, they have been triggered by external financial shocks that are amplified by failed fixed exchange rate regimes. However, the root cause is usually a weak banking system. In many developing countries, undercapitalized and badly supervised banks borrowed too much short-term money abroad and lent it to dubious projects at home. Cronyism and corruption made these weak banks even weaker as they made loans to very risky, unworthy projects owned by their shareholders and managers” (Minton Beddoes 1999).

The Baring Crisis is also one of the first examples of how an ill-fated small open economy can produce devastating spillover effects that radically change the size and direction of international capital flows in the world as a whole. In the early 1890s the London capital markets hastily retreated from investments overseas, after seeing such a massive and unprecedented crisis that almost wiped out a major house. The resulting tightening of capital markets depressed economic activity in many newly settled countries, such as Canada and Australia. The “contagion” thus affected countries that were, initially, very far from the events in Buenos Aires that precipitated the crisis.

Similarly, the recent 1997 Asian crisis developed in relatively small economies but had negative effects for emerging capital markets as a whole, and followed again despite the intervention of a different body seeking to act as International Lender of Last Resort, this time the IMF. After the recent crises in Asia, the ingredients in the Baring Crisis all sound very familiar, and likewise the outcomes. An optimistic reaction is to feel assured that the fundamental features of these crises have not varied so much in the long run, suggesting common economic and institutional problems and potential solutions. A pessimistic reaction is to wonder why, a century later, we are still left trying to figure out what those solutions are.

### **Curing a Bad Hangover: Good versus Bad Default**

One important lesson from the Argentine experience is that when collapse arrives because credibility has totally eroded, even if the government attempts to implement textbook reforms to restore good economic policies, it is probably too late. The transversality condition will only be met by defaulting on some government obligations. This could be interpreted as a discretionary action *ex post vis-à-vis* what *would have been* the “correct” policy to implement *ex ante*. Basically you have no choice and you need to reset the initial fiscal conditions that will make credible the future adoption of intertemporally consistent monetary and fiscal policies. Paradoxically, in this state of classic debt overhang, you can only regain reputation for the future through default, by shedding the insolvency created by obligations inherited from the institutionally flawed past.

The Baring Crisis delivers some important lessons for the present. In fact, history seems to have repeated itself with the Argentine hyperinflation of 1989–90 and the convertibility plan devised to end the crisis. In the recent case, in 1990, before the adoption of a currency board and a dollar-exchange standard, the Argentine government had to default in some way. They chose to convert, by decree, all short-run time deposits (on average, seven-day maturity deposits invested in very short-run public bonds by private banks to finance the public sector) into a new ten-year public bond denominated in U.S. dollars called the

Bonex 89 yielding the LIBOR rate.<sup>4</sup> This was one way to smooth out public finance outlays by a forced rescheduling of the debt payments. The lesson again is that, before the highly orthodox convertibility plan could be put in place, the government had to rely on a very heterodox institutional shock to satisfy the transversality condition.

In our historical context, exactly one hundred years prior to the so-called Bonex plan, in 1891 Argentine policymakers chose a similar path. They elected to heavily tax (read, default on) domestic money and deposit balances through a large devaluation and the closure of a large number of domestic financial institutions (more than 40 percent of total financial intermediation). President Carlos Pellegrini's choice was to preserve Argentina's reputation in international debt and capital markets. One detail that is not very well known here is that the Argentine Republic never technically defaulted on its bearer external debt or bonds. This was thanks to the Bank of England, which acted as an International Lender of Last Resort for the benefit of, in essence, the widely dispersed group of bondholders.

The importance of the leadership shown by Pellegrini is clear. He convinced congress that the prospects of the Argentine economy were intimately linked with international markets for goods, labor, and, especially, capital. To have opted to default in that international scenario would have risked condemning Argentina to a long period of autarky, at that time surely a suboptimal strategy of economic development for a capital-scarce economy. Even with a policy of "good behavior" in international capital markets from then on, Argentina had to take the extra step in 1898 of nationalizing all the provincial and municipal external debt—only after that, could it tap fresh funds in the international capital markets.

### Escape from a Trap: The Asymmetry of Inflation and Deflation

After the crisis, fresh problems appeared. The drastic monetary, fiscal, and financial reforms of 1891–92 produced a new economic phenomenon. A deflationary scenario set in under a monetary rule that we termed the Gesell-Friedman rule, by which the government switched to a goal of fixing the quantity of monetary base to halt the depreciation of paper money.

There was a protracted deflation of domestic prices and observers like Silvio Gesell, who was later quoted by Irving Fisher and John Maynard Keynes, saw the asymmetric effects of inflationary and deflationary regimes. Gesell's arguments about the disruptive effects of deflation on domestic investment proved convincing. The extremely costly dynamics of monetary policy, aimed at restoration at the old par via a steep deflation, were stopped. Thus, the years

4. LIBOR is the London Inter-Bank Offer Rate, a global interest rate benchmark for safe assets. The Bonex 89 bonds carried no premium, but were floated at a deep discount.

1891–99 provide an extraordinary laboratory to allow us to understand the differences between disinflating an overheated economy, and the danger of going too far and entering a path of deflationary expectations.

As we saw toward the end of the book, deflationary expectations were not avoided during the short-lived 1927–29 Gold Standard period. However, we showed how, under those extreme circumstances, with the use of good economic intuition backed with credibility and a sound monetary and fiscal situation, some very able policymakers were able to put in place a new macroeconomic regime to drastically alter the deflationary expectations prevailing until 1931. We constructed a dynamic model of exchange rates, prices, and interest rates to illustrate how good policy actions mattered for Argentina's recovery from the Great Depression.

The search for price and monetary stability this time took the form of a change in the optimal monetary and exchange rate regime. By using up a relatively abundant and idle government asset, namely international reserves and specie in excess of the legal requirement of the convertibility law, the monetary regime shifted in 1931 toward targeting and anchoring the nominal quantity of money and the level of prices. Only this could convince agents to discard their views as to the likely persistence of deflationary pressures. This, in turn, lowered *ex ante* real interest rates and boosted recovery in the real sector. The policy was a success in that, by any standard, Argentina was only mildly affected by the Great Depression. This turnaround constituted a classic example of the real effects of changing expectations à la Sargent. It showed how one can use an inflationary regime change to escape a liquidity trap, that is, when one is close to the nominal interest rate floor in a deflationary scenario.

With the so-called "taming of inflation" witnessed in many countries in the 1990s, discussion again has turned to the threat of deflation in the event that central banks err too far on the side of tightening policy. This could be particularly harmful in the event of a major recession coupled with deflationary expectations. It is no wonder then that current events in Japan are prompting such fears, and justifying comparisons to the 1930s and, for those with longer memories, the 1890s. The Argentine experience is highly relevant here, since once the economy stabilized in the late 1890s there began a spectacular period of economic growth and prosperity that is rightly remembered as the Belle Époque. We can only wonder whether some contemporary Japanese equivalent of Silvio Gesell waits in the wings to argue for a radical policy shift to change expectations and restart economic growth in what is, by long-term measures, an economy with still outstanding prospects based on fundamentals.

### Local versus Global Finance: Bank Stability in an Open Economy

We noted that previous scholars have curiously neglected the question of the extent of financial deepening in emerging countries during the interwar period. We have shown that Argentine financial intermediation technology was not very strong and could not fill the void left by the downsizing of the London capital market after 1914. Here we found some important features that differentiate the banking experience of Argentina from, say, that in Canada or in the United States. For the latter, it has been said that the absence of a well-diversified branch banking system made financial institutions extremely fragile in the event of a negative idiosyncratic shock to a particular city or region. In the case of Argentina, there was an ongoing process of branch banking and geographic diversification—but the financial system was nevertheless prone to recurrent crises and the banks, especially the domestic ones, were subject to sizeable capital crunches. In particular, there were markedly different lending responses in domestic and foreign banks when subject to shocks.

The volatility of lending by banks in a globalized international capital market is something that deserves close scrutiny. In the Argentine case, while foreign banks brought more efficient and voluminous lending, they also “overreacted” to changes in the fundamentals of this emerging market economy. The issue is obviously relevant today, given the almost unanimous belief that the internationalization of banking is always welfare enhancing for a small open economy.

The usual argument says that if there is an idiosyncratic shock, a well diversified bank (read, an international bank) will basically smooth out the regional shock by reallocating assets or liquid funds to or from world headquarters. However, this assumes that the branches in a particular region, say Argentina, are treated *pari passu* like any other branch within the country of origin (or in the global network) of the bank in question.

However, our study suggests that in spite of a dramatic internationalization of banking in Argentina, especially between 1895 and 1913, foreign-owned banks still heavily weighed country-specific risk factors in their conduct of banking business in their theoretically multinational enterprise. In practice, we think this meant that there was an in-house segmentation of branches or country networks. If that was (and is) the way banking businesses operate then one might ask if the welfare enhancing effects of the internationalization of banking are truly realized. This is a serious and very open question for countries currently pursuing openness and financial liberalization, and raises the question as to what steps should be taken under a fixed exchange-rate regime to minimize the fugacity of foreign exchange.

A final question regarding financial structure also emerges from the Argentine macroeconomic experience. In particular, we are intrigued by the very different asset structures of foreign banks (a high proportion of very short maturity assets)



and domestic private banks (a high proportion of long-maturity assets). What does this mean for the nexus of the financial system and the supply of capital for domestic investment?

Our empirical evidence suggests that the “overreacting” behavior of foreign banks and the “underreacting” behavior of domestic banks were a result of their asset structures. Typically, in bad financial times banks try to call up loans to increase their liquidity cushion. However, not all loans are equally liquid. Foreign banks specialized in commercial short-term and trade finance while domestic banks invested in industrial, venture, and real-estate finance. Domestic banks built a comparative advantage in longer-term lending and local monitoring but they were subject to huge capital crunches in the event of a negative shock because they were doing precisely what a bank is supposed to do, engaging in the transformation of the maturity of assets.

### **The Dilemma: Internal versus External Convertibility**

We saw that domestic banks could not attain high leverage so as to advance large quantities of credit for long-term endeavors. This suggests a clue to understanding the financial fragility (and suboptimality) of small open economies in search of monetary stability. Part of the broader trilemma, we call this the dilemma of internal versus external convertibility, referring to the tension between inside versus outside money.

In the last part of the book we addressed in more detail the role of the financial sector as a possible source of monetary-regime inconsistency. Again, if the money supply is a multiple of the monetary base, we should care about the behavior of the money multiplier. The banking sector creates secondary money by means of the deposits they hold. However, under a fixed exchange-rate regime the monetary authority, the Conversion Office, assumed only a macroeconomic responsibility for preserving the external value of money. It had no instruments to assume the microeconomic responsibility of guaranteeing the stability of the financial system.

This monetary “separation of powers” was the intent, at least; but we showed how, in practice, the banking system did not function without constant bailouts from the state bank and, when that was left insolvent, from the Conversion Office itself. While such an eventual conflict of interest might be held as an institutional failure in the Argentine case, it is a very common confusion. For example, it reveals no more or less inconsistency than was seen the founding charter of the U.S. Federal Reserve Board. The Fed was there authorized to preserve the value of money and also act as a Lender of Last Resort, two fundamentally incompatible goals given a single instrument.<sup>5</sup>

5. This conflict in the U.S. Federal Reserve’s charter was highlighted by Sargent (1993).

We can see some quite clear parallels with recent experience here too in many emerging economies, but most clearly so in Argentina. Consider the 1995 shocks following the December 1994 Tequila Crisis in Mexico. The currency board had to sit tight while a run on fractional reserve deposits hit the banking system. An 18 percent fall in deposits in 4 months made for some painful choices. Afterward, the government negotiated alternative fiscal sources for Lender of Last Resort provision, specifically a contingent credit line with various major banks, but at the time it had little power to respond.

Heuristically, we can see the multiple equilibrium possibilities immediately. If you have a bad banking system you can have macroeconomic consistency threatened by a run from deposits to cash to the reserve currency, the “bad equilibrium” where the interest rate defense fails. A “good” equilibrium with strong banks is possible, but here leverage may be very low (because reserves are high), implying less intermediation and weak financial depth.

Steering a course here proved hard for Argentina in the 1920s, just as it has for many emerging markets today seeking to blend private and state-led financing of growth. Argentina’s problem was a defective intermediary, a weak link in the chain, the Banco de la Nación. This “too big to fail” state bank unilaterally took on board Lender-of-Last-Resort prerogatives. But even as it did so it completely failed to adhere to sound Lender-of-Last-Resort practices. Instead of offering plentiful liquidity at a penalty rate with good collateral à la Bagehot, the bank offered crony loans at a rate even below the deposit rate, and took on board dubious “lemon loan” paper via rediscounting.<sup>6</sup> These were not principles by which a well-structured banking system could survive, but this lesson is still being rediscovered in the Asian economies after the crises of 1997.

It is at this point worth asking: can countries avoid the dilemma of internal versus external convertibility altogether? We know that two very radical alternatives exist, one or both of which might be followed in the future. One way to avoid runs is via the adoption of a “narrow banking” system, that would make banking deposit insurance redundant, with the major class of retail banks only permitted to be “mutual funds” holding government bonds, thus allowing deposits to be “priced” and eliminating inside money entirely. The other option sidesteps the risk of a run via a unilateral currency union (read, dollarization), eliminating outside money entirely. The overall picture of a chaotic and misdirected evolution in monetary and banking institutions in the Argentine historical case lends considerable appeal to these alternative prescriptions for regime consistency in emerging markets.

Ultimately, unresolved tensions between internal and external convertibility inherent in a small open economy must bring about radical institutional changes, as we saw in the Argentine case. First, in 1931, came the de facto end of the

6. Bagehot (1873).

metallic monetary regime. Then, in 1935, came the creation of the central bank to relieve the still dismal private and public financial situation. Yet can we call these *proactive* institutional changes (in particular the creation of the central bank)? Or were they the *reactive* result of a dynamically inconsistent, ill-conceived monetary and financial structure?

Unsolved political-economy dilemmas (or trilemmas) are the dual of polluted economic institutions in a dynamic context. Thus, as we have said before, in a regime where you have incompatible goals in some bad states of nature, it is just a matter of time before well-conceived institutions fall apart under political or discretionary manipulation. In this case, it was the Great Depression that triggered a radical change. The upside of the post-1931 policies was a rapid macroeconomic recovery; the downside, an unpleasant little secret of the period, was the vast expenditure on bailing out a very large mess in the financial sector. These two events, side by side, show clearly the key dilemma.

### Macroeconomic Success: Recovery from the Great Depression

The work of economic historians has led to a new consensus as to the role of the gold standard in fostering deflation and depression in the 1920s and 1930s, and the critical impact of monetary policies as a tool for macroeconomic recovery.<sup>7</sup> Yet evidence is largely restricted, at a detailed level, to the study of the United States, Britain, France, Germany, and other countries in the core. Further research is now needed to see how the same approach can be applied to the World Depression at the periphery.

We argue that Argentine macroeconomic policies in the 1930s did successfully avert a major disaster by subverting, if only marginally, the prevailing orthodox *mentalité* inherited from earlier epochs. Like the core economies, Argentina found itself with little room for maneuver in fiscal matters, a constraint that was made even tighter by the need to service a large external debt. Fiscal orthodoxy was offset, however, by a bold change of monetary regime, from metallic to fiduciary, in an effort to dislodge deflationary expectations.

This plan was the brainchild of Raúl Prebisch, and was a testament to his creativity and brilliance as an economist and policymaker. The actions of the Conversion Office in the Spring of 1931 predated the British departure from gold by a good six months, and United States interventions by almost two years. Events in the history of thought and events in economic history were most clearly intertwined in the Argentine experience. Gesell's insight came in the economic crisis that followed an attempt to pursue rigid metallic rules in the 1890s as a prelude to resumption at the 1881 parity. Thirty-two years of gold standard orthodoxy by the Conversion Office could not diminish the relevance

7. See, *inter alia*, Eichengreen and Sachs (1985); Temin (1989); Eichengreen (1992a; 1992b); Romer (1992); and Eichengreen and Temin (1997).

of his ideas in a time of serious deflation. As the prospect of a repeat of the recessions of the 1890s and 1914–19 loomed, the penetrating ideas of Prebisch held sway as those of Gesell had a generation before.

In summing up, though, excessive optimism concerning the change of regime should not be read into our story. In the long run there was rather too much reliance on expansionary monetary policy in subsequent Argentine history, as elsewhere in Latin America. Hyperinflations in many countries brought the need for exactly the opposite kind of regime shift à la Sargent. That shift eventually came to Argentina in an all too familiar form. In 1991 a return to a currency-board rule was instigated with much popular support after all patience had been exhausted with the previous sixty years of floating exchange rates and persistent, often wild, inflations.

The current convertibility law puts Argentina on a dollar-standard rule very similar to, and in some ways stricter than, the gold-standard mechanism used at the Conversion Office from 1899 to 1931. Apart from one tough recession, economic performance has been impressive in the last few years. Though little else would be familiar, one might imagine that a visitor arriving from the 1880s, 1900s, or 1920s, would feel very much at home with today's dollar-peso rule. Yet knowing as they did the pitfalls of a metallic regime, and the crises of the 1890s, 1910s, and 1930s, one cannot be very sure that Silvio Gesell or Raúl Prebisch would so comfortably travel back to the future.

### **Microeconomic Costs: Institutional Cascades and a Bad Architecture**

The 1880–1935 period in Argentina provides a clear example of how economic crises—most of the time more than one!—can induce institutional changes in a cascade fashion. However, the cascade, or, as one might say, the “institutional learning by doing process,” ended up polluting the originally well-conceived institutions. Ultimately, a new institution, the central bank, had to be created to clean up the mess dynamically engendered by the polluted trio of the Conversion Office, the Banco de la Nación Argentina, and the private financial system.

The costs of this route were large and not limited solely to the state bank. As early as 1931, with the Conversion Office rediscounting to the Banco de la Nación, and the latter rediscounting to private banks in an exceptionally bad state, the “lemon loans” on state's balance sheet grew large. Moreover, in an idiosyncratic financial structure that coupled a quasi-Lender of Last Resort with no banking regulation, the risky ventures of at least four of the most important Argentine private banks were grossly exacerbated.

This state of affairs led to a clean-up task assigned in 1935 by Congress to a specially created institution, the Instituto Movilizador de Inversiones Bancarias (IMIB). We discuss the precise details of the IMIB bailout operation in Appendix 5, but for now it suffices to note that the costs of this operation were

very large by any standard. The main source of funds for the operation were the central bank's seigniorage profits arising from the decision to devalue the peso parity from 2.27 paper pesos per gold peso to 4.96 in 1935. Suddenly, a huge accounting profit of 701 million paper pesos accrued to the government. This was allocated to various uses as follows: to retire some federal floating debt, around 95 million; to augment banking reserves in the central bank, 216 million; and to fund the bailout operation by IMIB, 390 million pesos.

In short, IMIB received 55 percent of the proceeds of the gold revaluation, a sum that in itself represented a 58 percent increase in the quantity of outside money. How costly was this operation to Argentine households? Such a massive seigniorage tax amounted to about 7 percent of 1935 gross domestic product. It is important to note here that the assets bailed out, a total of 553 million pesos, amounted to 16 percent of the loans of the entire financial system (including Banco de la Nación), or 32 percent of the loans of the private banking system. That is, fully one third of the private financial system was rotten, a very large financial crisis by any standard. This upper-bound estimate of the social costs was equal to 5.5 percent of output. A lower-bound estimate of the social costs of the bailout would be the injection of cash to the financial system, amounting to 390 million pesos or 4 percent of output. And it need hardly be said that the main beneficiaries of this action were the principals and investors of the soon-to-fail banks concerned, so the transfer was effectively directing 4 to 5 percent of output to an already wealthy group in society.

Thus, this was a very large banking failure and bailout by any standard. We must, however, be careful with intertemporal comparisons. The costs relative to output hardly do full justice to the scale of the bailout operation because, given the low level of financial development in the early twentieth century, the banking sector was small relative to output.<sup>8</sup> Contemporary emerging market crises may have caused a greater loss of assets as a fraction of output, but rarely (if ever) have we seen the case of a country with as much as one third of its banking sector assets destroyed.<sup>9</sup> And, of course, this static real resource cost understates the long-run costs resulting from the destruction of a (once) clean and well-functioning set of institutions. Thus, we cannot be anything but pessimistic about the potential costs of poor institutional design in emerging market economies; but we can be optimistic to the extent that these illustrations from history can help prevent a repeat of the recent spate of crises.

8. See Goldsmith (1969).

9. "Contemporary conventional wisdom tells us that emerging-market crashes are more frequent and severe than ever before. But even a casual newspaper reader 15 years ago could have very well reached the same conclusion. The truth is, currency crises in emerging economies are nothing new. Judging by how much capital fled, Latin America saw worse crises in the 1980s than in the 1990s. In Asia, however, the late 1990s have brought far worse crises than anything experienced earlier. They have affected a greater share of global gross domestic product. They have also caused substantial recessions, though it seems that economic recovery is occurring more quickly than it did during the 1980s debt crisis" (Minton Beddoes 1999).



Cartoon 10.1. *Justo — Sírvase; están muy bien adobados. Pueblo — Precisamente, por eso les tengo miedo.* ([President] Justo — Help yourself; they are very well marinated. People — Precisely, that's why I am afraid of them.)

*Notes:* The dishes are the central bank (a turkey), the new banking law (a chicken), and the Instituto Movilizador de Inversiones Bancarias (a pig). There is a double meaning in the word *adobado* (marinated): it can also mean that there is an unclear or nefarious arrangement. In this cartoon the public suspects that what has been cooked up isn't really so good. Moreover, if it had been so tasty, there would have been no need for the waiter, Justo, to insist so much.

*Source:* *Caras y caretas*, año 38, no. 1907, April 20, 1935.

### Argentina's Legacy: Lessons of History in the Final Balance Sheet

A concise way to sum up Argentina's experience would be to present it as a problem of bad design in the overall financial architecture. Certain elements looked reasonable and stable on their own, but put together the entire edifice could not hold up to the eventual strains.

This observation has some fairly clear implications for how we view recent calls for reform of the world's financial architecture. The Argentine experience shows that—to stretch the metaphor—a little repainting here and there, some new wallpaper, or a rearrangement of the furniture might not suffice to make a structure sound. Rather, what might be needed at the level of a specific country is a tear down, or at least full attention to the whole structure right down to the foundations. Partial reforms of money and banking regimes could be ineffective, and might even be damaging.

In the Argentine case it is clear where the architectural renovations paid off, and where neglect in the design stage came back to haunt everybody. A safe, quasi-narrow bank such as the Banco de la Nación, and a Conversion Office set up as a currency board to maintain a good reputation, were created to solve the 1890s crisis. It was hoped that, unlike their predecessors, they would never descend to soft-budget constraint activities. But external economic forces and internal political manipulations during the interwar period generated a set of challenges and temptations that disturbed the institutional design and pulled it ever so gradually off the rails until there was no possibility of return.

External discipline could not solve all the problems. The Conversion Office was internationally visible, easily monitored and verified; it was a clear and sound adoption of the rules of the game, a well-behaved and consistent institution in this small open economy. Much less visible (internationally and domestically) was the financial system and its workings. In the first phase of its existence (1891–1913) the new Argentine money and banking regime functioned smoothly, faced few shocks, and was little tampered with by policymakers. In its second phase (1913–34), a series of economic shocks polluted first the private banking system and then, despite a seemingly solid design to prevent bailouts and moral hazard, took down the Banco de la Nación and the Conversion Office as the illness spread.

The end result was the creation of an institution—the central bank—that could, with the help of opaque and dubious maneuvers by IMIB, cover up the mess and finally throw in the towel on the idea of external convertibility. Loosening the nominal anchor was to have adverse long-run implications for inflation performance. And having no compelling restraint on the bailouts used to protect internal convertibility, the central bank embraced a Lender-of-Last-Resort function with regard to the private banks that was to invite moral hazard and continuing real resource drains for decades to come.

With banks subject to neither supervision, nor banking laws, nor regulations, and with the mysterious ad hoc evolution of the Banco de la Nación, the system got itself on a path toward inconsistent policies. Instead of a classical Lender-of-Last-Resort system, a free insurance or bailout scheme was the end result. This need not have compromised the Conversion Office and Argentina's commitment to stable macroeconomic policies. But when the 1929 crisis hit, it was so big that the banking system's weakness threatened a disastrous collapse of intermediation absent a rescue, and further real costs. The price was to abolish the Conversion Office and revalue gold, once and for all losing the notion of parity that had endured since the 1899 resumption.

With the loss of a commitment to a stable external value of the currency and, in the longer run, to a stable price level, the genie—money printing—was yet again out of the bottle. We might consider how Sarmiento, Roca, or Pellegrini would have viewed these events. These former Presidents saw Argentina as having an internal tension between progressive sectors of society seeking to create modern institutions with clear rules of the game, and conservative forces seeking to maintain a *status quo* where outcomes usually depended on arbitrary forces and the manipulation of power and influence. Sarmiento's *magnum opus*, *Facundo [Civilizacion i barbarie]*, was devoted to exactly this issue.

The Conversion Office in some sense epitomized the economic attempt at *civilizacion*, by playing to clean rules and meeting externally verifiable standards and monitoring. The more clandestine relationship between private finance and the state, and the capacity of the private and provincial banks to obtain successive bailouts from the Banco de la Nación via political means, were more reminiscent of *barbarie*.

In the end, in the sphere of macroeconomic policy at least, the results seem clear. The Belle Époque was marked by prosperity in incomes, not in institutions. By accident or, we might say, by lack of design, *barbarie* triumphed.