More than one hundred years of Currency Crises in Argentina: A Generational Change?¹

With the crisis of 2001 slowly receding in the past, the time has come to look at Argentina’s experience with currency crises in a more systematic way. Argentina has had considerable experience with currency crises and defaults – de-facto or officially declared – during the past century. It could almost be claimed that Argentina “invented” the emerging market crisis in 1890-91 when the economic collapse at the Rio de la Plata almost brought down the venerable bank of Baring Brothers and Co. and the default on its foreign debt excluded Argentina from international financial markets for the better part of a decade. Ninety years later, Argentina was again a “trendsetter” when it arguably was the first country to fall into the “Debt Crisis”. Even though it was Mexico which first declared a moratorium on its foreign debt in 1982, the currency crisis in Argentina had already begun a year earlier in mid-1981. All three episodes share a surprising range of features. The Baring Crisis of 1891, the Peso Crisis of 1981 and the Tango Crisis of 2001 involved the abandoning of a pegged or at least a heavily managed floating exchange rate, a deep recession or depression, a debt default or a moratorium and a turbulent change of government.

After more than a century of currency crises, a closer inspection of these three crises seems warranted. This paper proposes to revisit each of the three crises using the framework of the three generations of currency crisis models. It addresses the following questions: Has the nature of the crises changed significantly over this period of time? If so, what are the main differences between crises in the late 19th and the late 20th centuries? And finally, have authorities learned any lessons from past mistakes?


At first sight, the exchange rate arrangements, which Argentina entertained in 1891, 1981 and 2001, appear quite distinct. In 1891, Argentina had neither a fixed exchange rate nor an obviously overvalued one. During the early 1880s, Argentina briefly flirted with the

¹ This paper is part of a larger research project “Bridging the generational divide - currency crisis in theory and history” coauthored with Conor Healy from Princeton University. His helpful comments on this version of the paper are gratefully acknowledged.
Gold Standard. The Monetary reform of 1881 officially created a “gold peso” which was supposed to replace the previously unstable paper currency. Argentine formally joined the gold standard two years later in 1883 when these reforms came into full effect. However, already in 1885 a small gold premium appeared despite efforts by Argentine banks to maintain full convertibility. The convertibility of paper into gold at par was suspended in 1885 and the Argentine government followed an exchange rate strategy which could be described as “dirty float” where the paper peso depreciated against gold but the government kept intervening in the exchange rate.² By contrast, Argentina in 1981 had lived through three years of an exchange rate mechanism, called the tablita, which consisted of a set of preannounced devaluations of the peso against the dollar. Finally, Argentina in 2001 had experienced a decade of a truly fixed exchange rate regime, called Convertibility, which relied on the nominal parity of peso and dollar.

Why did governments and monetary authorities intervene so heavily in the exchange market in all three cases? There are two reasons which run through all three episodes. For one, Argentina has had a consistently bad record maintaining monetary stability when it was not constrained by external commitments. Inflation was a large problem throughout the 19th century. In the second half of the 20th century inflation was equally high and persistent and rarely fell below 100 percent per year. Exchange rate “anchors” were intended to tie the hands of monetary authorities thus insuring monetary stability. The other reason was that Argentina had always been a victim of what Ricardo Hausmann has termed the “original sin”, namely the inability of countries at the periphery to borrow in their own currencies thus exposing them to an exchange risk.³ The governments were afraid that with the currency mismatch of outstanding debt, which was largely denominated in foreign exchange or gold, and tax receipts, which were largely in pesos, a sharp real devaluation would make repayment of outstanding obligations impossible.⁴ Indeed, the subsequent crisis in each case apparently vindicated

² Roberto Cortes Conde, Dinero, Deuda y Crisis: Evolucion fiscal y monetaria en la Argenina 1862-1890, 1989
⁴ See e.g. della Paolera, Gerardo and Alan M. Taylor, Straining at the anchor: the Argentine Currency Board and the search for macroeconomic stability, 1880-1935, University of Chicago Press, 2001
the initial “fear of floating” as the devaluation bankrupted the financial system overnight and left the government with a mounting burden of foreign debt.  

**More than one hundred of Currency Crises in the Mirror of the First Generation Currency Crisis Model**

First generation currency crises models were first developed in the 1970s when economists explained the wave of currency collapses in the wake of the breakdown of the Bretton Woods System with the help of theories focusing on inconsistent fiscal or monetary policies in the face of pegged exchange rates.\(^6\) These policies lead to an overvaluation of the exchange rate, current account deficits and a subsequent drain on international reserves to defend the exchange rate. However, since the reserves are finite, current account deficits cannot be financed by central bank reserves indefinitely. Rational investors recognize the inconsistency and will anticipate the exhaustion of reserves and the inevitable devaluation with an attack on the pegged exchange rate.

There are four main insights of the first generation approach – it helps identify the relevant fundamentals predicting crisis, namely expansionary monetary and fiscal policies, persistent current account deficits and falling international reserves. It demonstrates how crisis erupts before reserves hit zero; it establishes the idea that central banks need adequate reserves. Finally, it establishes that authorities have little chance of fending off the attack as long as their policies remain inconsistent with the fixed exchange rate regime.

Under conditions of capital mobility policymakers thus face a stark choice, known as the “impossible trinity” or the open-economy *trilemma*. They can either control the exchange rate and adjust the monetary policy solely for the purpose of supporting the former policy or they can use the monetary policy as an active instrument but let the exchange rate adjust freely.\(^7\) Conversely, conventional wisdom predicts that a fixed or

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controlled exchange rate is only sustainable if the government abstains from using monetary policy for any other purpose, especially for financing a fiscal deficit.

In all three episodes, Argentine governments violated the *trilemma* primarily because they used monetary policy to compensate for fiscal irresponsibility (see chart 1). The government of President Juarez Celman in the 1880s was by far the worst offender with receipts at times covering as little as 55 percent of the expenditures.\(^8\) This deficit was largely financed through borrowing on international financial market – especially in London – and domestic monetary expansion.\(^9\) A close analysis reveals that the supply of narrow “high-powered” money M0 was relatively stable during the years immediately preceding the crisis only jumping in 1890-91. More important was the rapid expansion of the broad money M3, which almost tripled during the period 1885-90 reflecting a large expansion of bank lending encouraged by the *Law of National Guaranteed Bank*.\(^10\)

**Chart 1: Fiscal Deficit as Percentage of Total Expenditure**


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\(^9\) Roberto Cortes Conde, 1989

\(^10\) della Paolera, Gerardo and Alan M. Taylor, 2001
The tenure of José Martinez de Hoz as Minister of Economics also showed the impossibility of maintaining a stable exchange rate without bringing the fiscal deficit under effective control. During first year under military authority, Argentina achieved an successful stabilization following the chaotic economic policies under Isabel Martinez de Perón. The fiscal deficit was reduced sharply mainly because of increased fiscal revenues through a reduction of the inflation rate as well as the introduction of additional short-term taxes. As international confidence in the economic policy of the de-facto government improved, investors started to return to Buenos Aires, replenishing the foreign reserves of the Argentine Central Bank. In August of 1976, the IMF Board of Executive Directors, commended Martinez de Hoz for his “comprehensive and consistent measures […]” and called Argentina’s progress “impressive” in liberalizing the economy, removing foreign exchange restrictions, lowering inflation, cutting government expenditure and turning around the balance of payments, especially when seen in the light of recent economic turmoil.11

However, already in 1977-78, fiscal discipline started to slip. The growing deficit should partly be attributed to pressure from the military junta to expand military outlays and weapons procurement in a period of high tensions with neighboring Chile. The other main problem was the growing quasi-fiscal deficit of public enterprises. This growing fiscal deficit undermined the credibility of the exchange rate based stabilization program launched in December 1978, commonly known as the tablita. Large fiscal deficits had traditionally been financed with the “inflation tax” in Argentina. Under an exchange rate based stabilization program, the government’s ability to levy this tax through monetary emission was quite limited. The fiscal deficit therefore needed to be financed through foreign finance. However, it seemed implausible that Argentina would be able to continue borrowing indefinitely for this purpose.12 The lack of confidence in the sustainability of the program created a vicious cycle whereby nervous investors mistrusting the tablita demanded higher interest rates to compensate them for the

11 Executive Board Meeting EBM 76/124-8/7/76, August 7, 1976, Source: IMF Archives, Washington, D.C.
expected devaluation while these higher interest rates weakened the domestic economy and banking sector thus increasing pressure to abandon the policy.

The fiscal policy during the 1990s showed similar patterns to the experience in the run-up to earlier crises. During the early 1990s, the budget had looked healthy. The central government budget even recorded a small surplus in 1993. Even though part of the success had to be attributed to non-recurring events such as privatizations or proceeds from the Brady Bond restructuring, many observers believed that Argentina had finally broken with its fiscally irresponsible past. However, following the Tequila Crisis in 1994-95, Argentina never returned to a balanced budget. This was partly caused by President Carlos Menem’s profligate spending during his second term in office and partly by falling fiscal revenues and increasing outlays as a consequence of rising unemployment and economic downturn. An even more important component of the fiscal imbalance during the 1990s was caused by irresponsible spending on the part of provincial governments, which assumed debt expecting – as it turned out correctly – to be bailed out by the central government. Consequently, during the period 1993-98, the debt to GDP ratio of the Argentine government rose from 29.2 to 41.4 percent, the most rapid growth since 1980. This debt to GDP might not appear particularly high in international comparison and Argentina would have met the Maastricht criteria if it were in the European Union. However, the foreign debt was more burdensome than these numbers indicate. For one, tax revenues in Argentina are significantly smaller than in industrial countries reaching only twenty percent of GDP as compared to almost fifty percent in several European countries. The other important factor is the exchange rate risk associated with borrowing in foreign currencies. Since the peso was significantly overvalued in 2001, the share of debt to GDP underestimated the real costs of repayment.13

Fernando de la Rúa already inherited a country in a fiscally precarious situation. The rising level of foreign debt also made fiscal adjustment increasingly difficult as debt service payments made up an ever increasing share of the budget outlays. During the late 1990s and in 2000, the primary balance (before interest payments) of public sector

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operation oscillated between a small deficit and a small surplus. Large interest payments dragged the government finances deep into the red. The Argentine government under President Fernando de la Rúa repeatedly tried to cut spending and reduce the fiscal outlays most famously through the “zero deficit law” of 2001. These efforts remained largely fruitless because the recession reduced fiscal revenues sharply during the same period and provinces, which were largely dominated by the opposition Peronists refused to cooperate in the fiscal consolidation.

If the first generation crisis theories were correct, inconsistent policies should lead to a significant overvaluation of the exchange rate and an increasing current account deficit. For the case of the Baring Crisis, available data is somewhat contradictory. Looking at the differential rate of inflation and the devaluation of the paper peso against gold, it appears in fact that the peso was undervalued by as much as twenty percent in 1890 compared to its level of 1885 (see chart 2). Between 1885 and 1888, devaluations of the peso had been larger than the rate of inflation and the only year where rate of inflation significantly outpaced the devaluation was the year 1889. At the same time, Argentina’s large and persistent trade deficit points to a significant disequilibrium in their external accounts and a potential overvaluation of the paper peso (see chart 3).

Chart 2: Real Exchange Rate, Index -5 = 100

Note: Index larger than 100 indicates relative undervaluation of the peso while value smaller than 100 indicates overvaluation.

Today, there is almost unanimous agreement today that the peso was significantly overvalued in 1981.\(^{14}\) Even though the exchange rate based stabilization program which had set out to break the cycle of inflationary inertia had shown a certain degree of success as inflation fell to only 40 percent annually in late 1980 and early 1981. Yet, during the three years, the program had led to significant overvaluation of the peso by as much as 40 percent using the most simplistic calculations. Already in 1979, the balance of trade and current account surplus of the first years of stabilization had vanished and in 1980, the current account deficit exceeded six percent of GDP.\(^{15}\) It is however interesting to note that the devaluations in 1981 failed to adjust the currency account in the same way as after the crises of 1891 and 2001. Indeed, the current account remained stubbornly in deficit throughout the subsequent years (see chart 3).

By most accounts, the Argentine peso had been widely overvalued in trade-weighted terms in 2001.\(^{16}\) Chart 2 in fact underestimates the degree of overvaluation of the peso because the largest part of it was accumulated during the early 1990s when Minister of Economics Domingo Cavallo stabilized the economy following the twin hyperinflations of 1989-90. In the mid-1990s, the Argentine economy started to go through a deflationary adjustment, which together with the weakness of the dollar (to which the peso was pegged) reduced the overvaluation considerably. The resurgent overvaluation in the late 1990s has to be attributed to the relative strength of the dollar since Argentina continued to experience deflation during this period.\(^{17}\) The overvaluation led to a ballooning current account deficit which reached almost five percent of GDP in 1998 to fall subsequently due to slumping demand for imports.

\(^{14}\) However, during the years of the tablita there was a lively discussion about the existence of the “atraso cambiario.” See e.g. Carlos Rodriguez “El Atraso Cambiario”, El Cronista Comercial, Abril 19, 1979 who argued that there was no overvaluation at all.

\(^{15}\) Dornbusch, Rudiger, “Stabilization Policies in Developing Countries: What Have We Learned?”, World Development 10(9), 1982, p. 701-708.

\(^{16}\) Indeed the only group of economists consistently denying an overvaluation was in the Cato Institute around Steven Hanke and Kurt Schuler who favored dollarization instead of devaluation. See e.g. Steve Hanke and Kurt Schuler, “A Dollarization Blueprint for Argentina”, Cato Foreign Policy Briefing No. 52 March 12, 1999; Kurt Schuler, “Fixing Argentina”, Cato Institute Working Paper, April 26, 2002.

\(^{17}\) Source: DataFIEL
According to the theory, overvaluation and current account deficits should lead to a steady drain of international reserves until a critical point is reached when investors rush to buy up the remaining foreign exchange in anticipation of an imminent devaluation. Was this what actually succeeded during the three episodes? Chart 4 shows that all three cases were in fact characterized by an initial rapid buildup of reserves followed by an equally rapid decline in the run-up to the crisis. The build-up of reserves was most extreme during the late 1970s where reserves grew six fold between 1976 and 1979. In the run-up to the Baring Crisis they more than doubled and they still grew by a quarter in the late 1990s. This cycle of buildup and loss of shows a shortcoming of the Krugman first generation model since international reserves did not immediately fall with a misaligned exchange rate. Instead, the current account deficit was initially overcompensated by a positive capital account which led to rapidly growing foreign debt.
Except for the Baring Crisis, governments also did not wait with the devaluation until all the reserves had been exhausted but rather gave up the defense of the exchange rate much earlier. This effect might have been caused by two developments. For one, there might have been a learning process on the part of governments so that they recognized earlier when the defense of a fixed exchange rate had become hopeless and gave up the fight rather than spending all the reserves. There might also have been another, more powerful learning process at play which dated back to the Great Depression. One of the lessons drawn from the events of the 1930s was that breaking the “gold fetters” was a to be rejoiced as a precondition to a solid recovery from the crisis as John Maynard Keynes famously expressed. Politicians were therefore more likely to see a certain benefit from a devaluation diminishing their resolve to defend the exchange rate peg.

As can be seen in summary table 1, all three crisis episodes show important features consistent with a first generation currency crisis. In each case, the government and the monetary authorities violated the trilemma because they sought to manipulate the

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exchange rate without giving up on an independent monetary policy while capital flows remained unrestricted.

Did governments learn from past mistakes? The answer has to be a qualified affirmative. Neither in the run-up to the crisis of 1981 nor before 2001 did Argentina experience imbalances of a size comparable to those in the 1880s. Government spending might have been reckless but it was nevertheless much more prudent than during the Presidency of Juarez Celman. External imbalances were important in each case and money supply rose rapidly during the 3 to 4 year period previous to the outbreak of the crisis, however not even during the frenzy of the late 1970s was the lending boom as wild as the one following the National Guaranteed Banking Law in the 1880s. It also appears that investors and governments learned to recognize faster when the defense of the exchange rate was hopeless and adapted their actions to these expectations. While it took three years between the peak and the trough of the reserve holdings during the run-up to the Baring Crisis and almost all reserves were exhausted before the defense was abandoned, the same process took only two years between 1979 and 1981 and less than one year in 2001 and in both cases, the monetary authorities were left with substantial holdings of foreign exchange, almost five billion dollars in 1981-82 and just under ten billion dollars in 2001-02

**Summary Table First Generation Crisis**

<table>
<thead>
<tr>
<th>Type of Policy</th>
<th>Description of Policy</th>
<th>Relevance for the Crisis Argentina 1891</th>
<th>Argentina 1981</th>
<th>Argentina 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monetary Policy</td>
<td>Expansionary monetary policy, not consistent with fixed exchange rate</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Fiscal Policy</td>
<td>Large fiscal deficit</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>External Accounts</td>
<td>Large external imbalance</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Reserves</td>
<td>Dependence on continued inflow of capital, current account deficit</td>
<td>High</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Fall constantly towards critical level</td>
<td>Medium</td>
<td>High</td>
<td>Medium</td>
<td></td>
</tr>
</tbody>
</table>

**More than a Hundred Years of Currency Crises in the Mirror of the Second Generation Currency Crisis Model**

While first generation crisis theories held that crises were inevitable if monetary and fiscal policies were inconsistent with the exchange rate regime, second generation crisis
models shifted the focus of research towards self-fulfilling prophecies where inherently sustainable exchange rate regimes became unsustainable in the face of shifting perceptions of countries’ willingness to defend the peg. These models were given substantial credibility by the collapse of the European Monetary System in 1993. The main innovation of the second generation models was to endogenize the economic fundamentals and the costs to a government of defending the currency. The common thread to second generation models is thus that multiple equilibriums exist. In the positive equilibrium, no attack occurs and the peg can be maintained indefinitely. In the negative equilibrium, a speculative attack occurs followed by a change in fundamentals which validates ex post the exchange rate change expected.

Such a self-fulfilling crisis can take the form of a Diamond and Dybvig (1983) style bank run. In a situation with no deposit insurance (or incomplete deposit insurance, or uncertainty about deposit insurance) where depositors believe that a bank is insolvent they will withdraw their money. As depositors see other depositors flocking to withdraw their money, they do likewise in an attempt to salvage their deposits. The result is equilibrium where all depositors demand their deposits and the bank is forced to default. This result is Pareto inferior to a situation where depositors leave their money in the bank.

Another important possibility is a politically induced self-fulfilling crisis. A sudden attack on a fixed exchange rate requires governments to mount a costly defense, which includes higher interest rates, cuts in expenditures and as a consequence a severe economic downturn. The immediate political costs of such a defense should be higher in a democratic environment with popular participation than during restricted suffrage or a military dictatorship. At the same time, the political costs of a defense would increase when the country already suffers under high unemployment or social conflicts or during an election year. Investors might start a speculative attack if they believe that these costs

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exceed what the authorities are willing or able to bear – thus making the fixed exchange rate *politically* unsustainable even though the exchange rate would have been sustainable if no attack had occurred.\(^{21}\)

Were the crisis of 1891, 1981 and 2001 caused by self-fulfilling speculative attacks? To answer this question, it would be useful to investigate each of the two forms of self-fulfilling crises – (1) capital account or banking panic and (2) political crisis – separately.

There exists a long tradition holding that the Baring Crisis was not caused by an unsustainable economic policy but was rather caused by an investors’ run on Argentine assets, which interrupted an otherwise healthy economic growth. Already in 1956, A.G. Ford argued that a large part of the Argentine problem had to do with maturity mismatches. The Argentine government as well as private enterprises took out fixed interest loans in gold which were used to finance long-term investment in infrastructure or land improvement. This exposed Argentina to risk of a run by its creditors because benefits from these investments would only accrue in the long run while international investors could stop financing Argentina at a moments’ notice.\(^{22}\)

Is there any evidence indicating that financial panic was the most important cause of the Baring Crisis? Prima facie evidence seems to support this view. The investment boom during the 1880s initially increased output only slowly. Only during the second half of the 1890s did exports of agricultural products more than triple as compared to the late 1880s.\(^{23}\) However, export values failed to rise significantly until the late 1890s mainly due to falling agricultural prices. This suggests that even if foreign lenders had continued to lend to Argentina until the already existing investment projects had borne fruit, repayment of the outstanding loans would have been difficult without a substantial reduction of imports – exactly the result of the Baring Crisis.

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\(^{23}\) A.G. Ford, 1956
However, banking panics can also lead to real losses of output because investments are liquidated before they ever reach maturity and might therefore never reach the economic utility they would have had, had they been finished. Bank panics were indeed an important feature of the Baring Crisis. They occurred in several waves the last of which was the most devastating one because the new President Carlos Pellegrini decided not to intervene to save the banks. This came as a consequence of conditions attached to an emergency loan from the Bank of England, which demanded the Argentine government not to increase the money supply any further.\textsuperscript{24}

Were the banks insolvent or only illiquid? In other words, could they have repaid the deposits if they had been given more time to liquidate their assets? Della Paolera and Taylor answer the question computing an exemplary “solvency level” and “liquidity level” for one of the large public banks, which failed during the crisis, the Banco de la Provincia. They show that both solvency and liquidity deteriorated sharply in 1890-91 and in 1891 the Banco de la Provincia was technically insolvent as well as illiquid. However, the insolvency depends exclusively on the depressed value of rural land which served as collateral for many loans. Does this fact imply that the crisis was purely self-fulfilling and banks would have stayed solvent in the absent of a run? The land prices had clearly gone through a boom-bust cycle increasing in value almost four times in the two years between 1886 and 1888 and falling just below the initial value during the subsequent three years. The breakdown of the bank therefore does not appear to have been caused by “random withdrawing” but rather by recklessly lending during the boom years accepting overvalued land as collateral – a familiar story which was repeated many times during the 19\textsuperscript{th} and 20\textsuperscript{th} centuries.

The main difference between the Baring Crisis and the subsequent crises in 1981 and 2001 with respect to banking panics was the absence of an effective lender of last resort during the 19\textsuperscript{th} century. The Banco Central de la República Argentina (BCRA) was recently founded in 1935 after the traumatic experience of bank failures during the Great

\textsuperscript{24} della Paolera, Gerardo and Alan M. Taylor, 2001, p. 73-74
Depression. During the crisis of 1981 as well as 2001, bank deposits were protected by a deposit insurance thus limiting the risk of a run on the banks as long as confidence in the ability of the Central Bank to honor their obligations remained unshaken.

The bank failures preceded the Peso Crisis of 1981 by almost a year. There is no clear evidence of a Diamond-Dybvig style bank panic either, which would have brought down essentially healthy banks. Instead, the breakdown of the large Banco de Intercambio Regional (BIR) as well as other smaller institutions during 1980 can be entirely attributed to mismanagement of the banks and lack of proper supervision by the central bank. The deposit insurance effectively eliminated the threat of an uncontrollable spread of the crisis to healthier institutions. By the end of the crisis, depositors had recovered their deposits and the central bank had taken over large assets of the bankrupt banks. However, the absence of a large banking panic does not eliminate the endogeneity of the crisis that followed. Indeed, the monetary expansion caused by the rescue operations of the BCRA contributed to a sharp rise in inflation – from 3 percent per month in June to more than 7 percent in September of 1980. This increased the overvaluation of the exchange rate and undermined the credibility of the commitment to adhere to the tablita.

Compared with 1981, the Argentine banking system was in exceptionally good shape in the late 1990s and even in 2000. Banking supervision was above average by international standards and banks had apparently ample reserves. Even towards the end of the 1990s, the World Bank and the IMF gave Argentina high grades. As late as 1998, the World Bank Camelot rating system ranked the Argentine financial system second behind Singapore but ahead of Hong Kong and Chile. However, investors were not protected against the systemic risk of a sharp devaluation of the peso and the default of the Argentine government on its obligations. What distinguishes the crisis of 2001 from

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26 Vittorio Corbo, Jaime de Melo, James Tybout, “What Went Wrong with the Recent Reforms in the Southern Cone”, Economic Development and Cultural Change, Volume 34, Nr. 3, April 1984
28 Perry, Guillermo, Luis Servén, “The Anatomy of a Multiple Crisis: Why was Argentina special and what can we learn from it?” mimeo, World Bank, May 10, 2002.
the crisis of 1981 is that deposits in the Argentine banking system had become increasingly dollarized during the previous decade so that the BCRA was unable to simply print money in order to fulfill its obligations under the deposit insurance. Furthermore, as the public external debt had reached unprecedented heights, it became evident that the government would be unable to all the dollar-denominated debt in the same way it had done it twenty years earlier. The run on banks in late 2001 should therefore be understood as a run on the dollar reserves of the Central Bank.

The solvency of the Argentine banking system was further endangered by the increasing share of bank assets being held in the form of government bonds. In the case of bank runs and a devaluation of the peso, not only would the central bank be unable to fulfill its obligations as lender of last resort for a highly dollarized banking system. A default of the government on its obligations might also wipe out a substantial part of banks’ liquid assets leaving them technically insolvent.29

The Baring Crisis can also been interpreted as a second generation political crisis apparently contradicting the notion advanced by Barry Eichengreen that the classical gold standard worked well because of a lack of popular participation in politics during the 19th century.30 Investors’ sentiments in 1889-90 might have been strongly influenced by the perception that the Argentine government of President Miguel Juarez Celman was unable to introduce new taxes or to cut spending in order to balance the budget because powerful interest groups opposed any move in this direction. If he failed to balance the budget, however, continued inflationary finance seemed inevitable. This in turn might trap Argentina in a devaluation-debt spiral because with an expanding money supply a defense of the peso would be impossible. This perception of pending political crisis might arguably have led to a reversal of capital flows and a sharp economic downturn and the economic crisis might have further increased the costs of defending the exchange rate thus creating a self-fulfilling second generation political crisis.

29 Perry, Guillermo, Luis Servén, “The Anatomy of a Multiple Crisis: Why was Argentina special and what can we learn from it?” mimeo, World Bank, May 10, 2002.
30 Eichengreen, Barry Globalizing Capital: a history of the international monetary system, Princeton 1996.
Is this a plausible explanation for the events of 1890-91? Given President Miguel Juarez Celman political trajectory, this interpretation seems less than convincing. Contemporary observers perceived Juarez Celman as a corrupt a profligate politician who had no interest in economic austerity. Instead of offering a potential solution to the crisis, Juarez Celman was at the very heart of the problem of “crony capitalism” in Argentina. When Juarez Celman resigned in August of 1890, he had failed to press through Congress a heterodox plan to save the banking system with inflationary spending. His vice President, Carlos Pellegrini, who took over the Presidency, by contrast, pursued a more orthodox stabilization policy and starting negotiations with creditor banks and the Bank of England for emergency financing.31 So it could be argued that political pressure during the 19th century was an important factor but worked in the opposite direction than in the 20th century favoring orthodox policies.

Military dictatorships are often believed to be the form of government most shielded from popular pressure and influence by interest groups. The Peso Crisis of 1981 occurred shows that this was not necessarily the case and that the lack of democratic participation failed to make the commitment to the fixed exchange rate regime any more credible in the face of deeply divided armed forces and society as a whole.32

The year 1981 was a critical year for Argentina as it marked the end of a five-year term in office of de-facto President Videla. The Junta, which consisted of the heads of the three armed forces started to look for a successor as early as one year previous to the scheduled transition of power in April of 1981 and the orientation of economic policy was the most contested issue with a large faction favoring devaluation in order to ease the pressure on domestic import-competing industries. For three distinct reasons, the search for a successor came at an inappropriate time for proponents of economic orthodoxy. The second oil shock and the subsequent slump in demand hit Argentina hard leading to a sharp slowdown in economic activity. A series of banking crises, which swept through

Argentina in 1980, which made the economy seem increasingly vulnerable. Finally, rising interest rates in the United States following the assumption of Paul Volker as Chairman of the Federal Reserve Bank made it increasingly difficult to attract additional external financing and increasingly costly to service the existing debt.\footnote{de Pablo, Juan Carlos, Política económica argentina: materiales para el desarrollo del tema según el método de los casos, Buenos Aires, 1984.}

These factors strengthened the hand of the interventionist camp within the Junta, which finally designated Roberto Viola as new President and Lorenzo Sigaut, who was known to have closer ties to domestic industry, as his Minister of Economics. During the transition period, which lasted for more than half a year, speculation against the peso became a one-way bet because it seemed obvious that the new de-facto government would devalue the currency while the outgoing government was unable even to abandon the unsustainable policy for lack of political consensus thus spending most of the remaining international reserves in a futile effort to delay the inevitable. By the time, the new government assumed office in April of 1981, it found the international reserves depleted and felt vindicated by the apparent failure of the previous administration’s policy.

Members of the economic team of Martinez de Hoz as well as the Minister himself have repeatedly pointed out that the tablita could have survived if the new authorities had shown genuine commitment to its maintenance.\footnote{See for example: Martínez de Hoz, José A., Quince Años Después, Buenos Aires 1991} Their argument claims that the Peso Crisis of 1981 was essentially a pure second generation currency crisis. While the available evidence indicates that the failed transition did indeed undermine confidence in the exchange rate based stabilization program, the existence of important external imbalances suggest that the tablita was in fact unsustainable even under the best of all political circumstances. This view would also be supported by the eventual breakdown of the Chilean experiment with a similar program in the absence of any political transition.

The political crisis of 2001-02 was certainly the most severe in the past twenty-five years and was followed by a radical departure from the previous model of economic policy.
abandoning the *Convertibility* Law, devaluing the exchange rate sharply, defaulting on the foreign obligations and renationalizing some previously privatized companies. These facts suggest that the political dimension of the crisis might have been an important factor in the outbreak of the crisis. A second generation political crisis model would point out similarities between the crisis of 2001 and the previous one in 1981, where rational actors started to speculate against the maintenance of the peg because political forces increasingly favored a devaluation of the peso. This speculation in turn would make the maintenance of the peg ever more costly strengthening the position of those favoring the devaluation.

The political weakness of the government of President Fernando de la Rúa contributed to the breakdown of the fixed exchange rate system by undermining confidence in the government to enact the necessary adjustments. Especially during the years 2000 and 2001, they tried to reduce the fiscal deficit and push important economic reforms through Congress and sharply increased domestic interest rates in order to increase investors’ confidence and attract capital. However, his measures only worsened the domestic recession and the already high unemployment rate and increased public opposition to his government. Investors correctly perceived that an economic adjustment consistent with the maintenance of the pegged exchange rate was politically impossible given the high social costs and the pending Congressional elections in November of 2001. The lack of confidence in the government’s ability to deal with the crisis exacerbated the economic problems even further because investors demanded increasingly higher interest rates to leave their funds in Argentine securities, which was reflected in an increasing country risk index. At the same time, Argentine depositors started withdrawing funds from their bank accounts. The loss of deposits was particularly rapid in peso denominated accounts which lost more than ten billion dollar worth of deposits (more than a third of the total) during the second half of 2001. The domestic crisis of confidence in the government’s ability to defend the *Convertibility* was reinforced by calls for a devaluation of the peso in the international press and by important conservative economists such as Alan Meltzer and Ricardo Hausmann in the

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35 DataFIEL
Anne Krueger’s proposal to facilitate sovereign debt restructuring with the help of a bankruptcy-style process for sovereign borrowers might have furthered the impression that debt default was an acceptable strategy and given rise to false hopes that a default might actually be easier to bear than the tough adjustment program implemented by Fernando de la Rúa.37

The political crisis gained urgency in 2001 because it was an electoral year where half of the Argentine Congress as well as several provincial governors’ posts were at stake and even members of his own Radical Party, such as former President Raúl Alfonsín started abandoning the embattled president. After the loss of the elections of November 2001, enacting drastic measures became impossible and further weakened investors’ confidence.

Does the coincidence of a political crisis and an economic crisis indicate that the economic crisis was actually caused by the political one thus creating a potentially self-fulfilling crisis? There are strong indications that the causality might have run in the opposite direction and that economic problems compounded by policy mistakes increasingly reduced the room to maneuver of the de la Rúa administration. During the course of 2001, Cavallo took increasingly desperate steps to improve investors’ confidence, jump-start the economy and keep current on foreign obligations. Investors as well as political actors inside and outside of Argentina were probably correct when they perceived the necessary economic adjustments, especially wage cuts, to be politically impossible to implement.

All three episodes display a surprising degree of similarity when seen in the mirror of a second generation crisis. In all three cases, the crisis went along with a profound erosion of trust in the economic and political institutions of the country. Bank runs were an

36 See e.g. “Prominent economist urges Argentina to float currency”, Financial Times, London, October 30, 2001;
important feature precipitating the crises and causing additional strain on economic policymakers trying to defend the exchange rate regime because the defense of the banking system through large rediscounts collided with the necessity to increase interest rates and restrain monetary growth in order to stop capital flight. At the same time, the failure of the economic policy undermined the very legitimacy of the government which was replaced by one trying to implement the opposite set of policies.

However, the crisis of 1891 departs in significant ways from its 20th century heirs. In 1890, President Miguel Juarez Celman was replaced by the fiscally more conservative President Carlos Pelegrini. In 1981 and in 2001, by contrast, the political alternatives were economically heterodox or “progressive” forces which were known to be sharply critical of the exchange rate regime and made publicly clear that they would embrace the devaluations as a solution to the economy’s ailments. During the two crises episodes, expectations of a change in government and a radical shift in economic policy, helped erode the trust in the viability of the exchange rate system. However, as we have seen above, they were not the only factors causing the crisis.

Summary Table Second Generation Crisis

<table>
<thead>
<tr>
<th>Type of Crisis</th>
<th>Description</th>
<th>Relevance for the Crisis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Argentina 1891</td>
</tr>
<tr>
<td>Financial Panic</td>
<td>Random withdrawals with illiquidity rather than solvency problem. “Contagion of fear” based on domestic or international sentiment</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Asymmetric information crisis with genuine solvency problems arising from inadequate banking structure and domestic policy failure or international contagion</td>
<td>Low</td>
</tr>
<tr>
<td>Political Crisis</td>
<td>Political uncertainty undermines confidence. Economic crisis contributes to worsening the political crisis</td>
<td>Low</td>
</tr>
</tbody>
</table>

One Century of Currency Crises in the Mirror of the Third Generation Currency Crisis Model

Third generation currency crisis models grew out of the experience with the 1997-98 Asian financial crisis. In contrast to the crises in Latin America during the 1980s, the Asian economies were performing strongly prior to the crisis. Especially growth rates
were high, unemployment and inflation rates were low and governments pursued responsible fiscal policies. Therefore, the usual suspects leading to a currency crisis were not in evidence. In response to these events, some economists developed a “third generation” of currency crisis model. These scholars focus on moral hazard faced by international and domestic lending institutions, the composition of external debt, the current account environment of financial deregulation and capital account liberalization in which both capital movements and domestic financial fragility are implicated.

Krugman’s (1998) analysis views the Asian crisis not as one brought on by fiscal deficits or by macroeconomic temptation (as in first and second generations), but as one brought on by financial excess – with currencies being only a symptom of a broader malady.\(^{38}\) Moral hazard was the real culprit here. Corsetti et al (1998) talk of an underlying presumption of public guarantees on corporate and financial investment, so that the return on domestic assets was perceived as implicitly insured against adverse circumstances.\(^{39}\) Weakly regulated private institutions therefore had a strong incentive to engage in excessively risky investment. Excessive lending of financial intermediaries led to an overpricing of assets sustained in a sort of circular process, in which the proliferation of risky lending drove up the prices of risky assets, making the financial condition of the intermediaries seem sounder than it actually was. The process further led to excessive external borrowing and current account deficits. To the extent that foreign creditors were willing to lend to domestic agents against future bail-out revenue from the government, unprofitable projects and cash shortfalls were refinanced through original borrowing. Also as a negative stock of profitability was not offset by a contemporaneous government transfer, in the aggregate elite agents covered their losses and cash shortfalls through the recourse to further foreign borrowing – a process referred to as “ever-greening”. Crisis was the reverse, with the falling of asset prices making the insolvency of the intermediaries visible, forcing them to cease operations and leading to further asset deflation. The reason why the traditional measures of vulnerability failed to


show up was because the underlying policy mistake was “off balance sheet” and not part of the governments’ visible liabilities until after the fact.

The process of financial liberalization is central to magnifying the adverse implication of moral hazard on macroeconomic stability. In contrast to the first generation models, private capital inflows always precede the crisis and are an integral part of the sequence that ends in an anticipated speculative attack against the government’s reserves. The linkage of financial and currency crises together as “twin crises” is a product therefore of financial liberalization. When financial systems are highly regulated (such as between 1945 and 1971) currency crises may not accompany banking crises. Indeed, a fixed exchange rate is not even a necessary part of the financial crisis. Fixed exchange rates encourage excessive borrowing in foreign exchange because they imply an exchange rate guarantee on dollar-denominated debt.\(^{40}\)

In Argentina, the crises of 1891, 1981 and 2001, all displayed elements of moral hazard-induced investment which would lend credence to a third generation explanation. For one, all three crises followed periods of relatively strong growth and optimism in future growth prospects of Argentina. The Baring Crisis followed a period of extraordinarily rapid economic growth during the 1880s. This was a decade where the Argentine state had finally been consolidated as a federal state after decades of civil war. The vast and fertile Pampas had been opened up to settlers after the indigenous population had been defeated. Finally, new transport technology, such as the railroads to the interior and the frigorific steam ships for the first time gave Argentina the opportunity to take full advantage of their abundant land by exporting their grain, hides and frozen sheep and cow meat to European markets\(^{41}\). The economic boom was fueled by massive capital inflows from European – especially British – investors who believed that Argentina could transform itself into an economic powerhouse, something akin to a “United States of South America.”

Argentine economic policy in the late 1970s had been widely perceived as a successful example of market-based reform. Minister of Economics, José A. Martinez de Hoz, enjoyed cordial contacts with the International Monetary Fund and leading financial institutions. Observers believed Argentina would finally break out of the inward-oriented model of state-guided growth – a legacy of the Perón administration of the late 1940s and early 1950s – and return to renewed vigorous growth akin to the belle époque. Consequently, capital from Europe, the United States and the Middle East flooded into Argentina at low interest rates and created a credit-financed boom.

Chart 5: Real GDP per Capita, Growth Rate in Percent

The period between 1991 and 1997 was the most prosperous time in Argentina in almost twenty years. During the 1990s, following the monetary stabilization after the hyperinflation in 1989-90, Argentina seemingly converted itself into a model country for economic reform following the “Washington Consensus.” The exchange rate fix at parity to the dollar with the famous Convertibility Law broke the inflationary cycle, which had dominated the Argentine during the past half century. Privatizations of important utility companies and public monopolies brought important innovations and seemingly reduced

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inefficiency and corruption. Also the financial system this time seemed to be better supervised than during previous episodes of currency collapse in Argentine history. Argentina also weathered reasonably well the fallout from the Mexican Tequila Crisis of 1994-95 as the economy rebounded strongly after a brief recession in 1995. After the “lost decade” of the 1980s, foreign capital returned the falling spread on Argentine bonds showed clearly that confidence for Argentina among global investors ran high.\(^{43}\) Despite of extensive evidence of corruption, a high public deficit and a growing external debt burden, the IMF still considered Argentina an exemplary country as late as October 1998 when the Argentine President, Carlos S. Menem had the honor to address the Annual Meeting of the IMF and World Bank in Washington.\(^{44}\)

**Chart 6: Net Resource Transfer as Percent of GDP**

![Chart 6: Net Resource Transfer as Percent of GDP](image)


However, the investment boom in Argentina was not only driven by internal “pull” factors but also by external “push” factors such as very low international interest rates. In the late 1880s, the low interest rates in financial centers were a consequence of the Goschen debt conversion during the 1880s, which lowered considerably the borrowing costs for the British Crown.\(^{45}\) Similarly, the late 1970s experienced a period of

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\(^{45}\) Barry Eichengreen, “Baring Crisis in the Mexican Mirror”, mimeo, 1997, p. 8
extraordinarily low real interest rates following the oil crisis of 1973, which had markedly increased the supply of funds, the so-called petro-dollars, while at the same time reducing demand due to the deep recession experienced by industrialized countries. In the early 1990s, this pattern was repeated following the Brady Plan, which successfully converted developing countries’ debt into tradable bonds and gave countries new access to international capital markets. This coincided with low international interest rates following the economic downturn in 1991-92 the U.S.

**Chart 7: International Real Interest Rates leading up to the Crisis**

At the same time, all three periods had a serious problem of governance and corruption charges running high. Another important element of the third generation crisis, namely moral hazard, also seems to have been present in all three cases as many loans and investments were either implicitly or explicitly backed by government guarantees.

There is a long tradition explaining the Baring Crisis with a speculative boom-bust cycle based on government guaranteed railroad bonds and guaranteed provincial banks of emission. This led to a problem of moral hazard because the individual expected return of a given investment was higher than the expected return for society as a whole because investors could have kept most of the profits if projects were successful but could expect a government bailout if the project failed to become economically viable.
According to this explanation, the Baring Crisis represents the fallout from the burst of a speculative bubble which had partly been inflated through extraordinarily low interest rates in the financial center of London\textsuperscript{46}.

The young Argentine Republic suffered from insufficient banking supervision and a misguided banking reform and financial liberalization in 1887 and an uncontrolled fiscal deficit and intense formal and informal ties between the political elite and the business community – in short, a classic case of crony capitalism.\textsuperscript{47} As della Paolera and Taylor explain, foreign investors were all too aware of cronyism and corruption in Argentine financial circles, a practice they dubbed “Gaucho banking.”\textsuperscript{48} Yet lending to Argentine banks, railroad companies and the government boomed throughout the late 1880s and even in 1889 net foreign lending to Argentina was significantly higher than the average of the 1880s. By 1890, Argentina had built up a public external debt of almost 280 million gold pesos, almost nine times the amount of a decade earlier and more than twice as much as in 1885. At the same time, country risk as expressed as spread of Argentine bonds over British consols reached a historic low in 1889 only to jump sharply with the outbreak of the crisis.\textsuperscript{49} Lending to the government was complemented by massive foreign investments in private enterprises especially in the railroad sector reaching as much as 600 million gold pesos in the year 1890.\textsuperscript{50}

All three observations suggest that international investors were confident that their investments were indeed safe, much safer than investments in most other “emerging markets.” The perception that investment in Argentine banks and railroads was safe was largely based on implicit or explicit government guarantees. Not unlike many other countries during the late 19\textsuperscript{th} century, Argentina tried to encourage investment in infrastructure projects such as the construction of railroads by interest guarantees on railroad bonds. If the revenues generated by the railway were insufficient to service its debts, the government made up the difference. The railroad companies in turn had to negotiate their fares with the government authorities. These government guarantees

\textsuperscript{46} John H. Williams, \textit{Argentina International Trade under Inconvertible Paper Money 1880-1900}, 1920.
\textsuperscript{47} Eichengreen, Barry, 1997
\textsuperscript{48} Gerardo della Paolera and Alan M. Taylor, 2001, p. 16
\textsuperscript{49} Roberto Cortes Conde
\textsuperscript{50} John H. Williams, 1920, p. 93
created a strong moral hazard because investors could secure stable revenues from an investment in a railroad line even if the line was unprofitable. All they needed was the government’s concession.\textsuperscript{51} After the crash of 1890-91, the implicit obligations of the government became explicit adding an enormous 81 million gold pesos to the already bloated public external debt.

However, investors speculating to be bailed out by the Argentine government in case of an economic crisis did not envision the Argentine government itself becoming insolvent during such a crisis otherwise the spread on Argentine bonds would not have continued to fall in the run-up to the crash. An international bailout was neither to be expected nor was it eventually forthcoming. Argentina remained excluded from international capital markets for almost a decade and investors in Argentine bonds suffered important losses.

In the late 1970s as well as in the 1880s, a banking reform had helped open the flood gates of lending and sparked a short-lived economic boom. In fact, the banking reform of 1978 repeated many of the errors committed in 1887 by allowing banks to work under insufficient supervision, borrow funds in dollars on international markets and lend domestically at a large profit while the government promised a stable exchange rate under a system of preannounced devaluation while offering deposit insurance to the banks free of charge.\textsuperscript{52} The system of deposit insurance gave banks the possibility to engage in a profitable one-way gamble: head, I win – tail, the government loses. This was a classic case of moral hazard because banks and domestic borrowers knew that the government would have to assume the burden of external debt in case of devaluation and consequently invested in endeavors, which would have seemed too risky in the absence of such an implicit and explicit government guarantee. A consequence was large over-borrowing at high interest rates.\textsuperscript{53}

\textsuperscript{51} John H. Williams, 1920, p. 89
\textsuperscript{53} Calvo, Guillermo, “Fractured Liberalism: Argentina under Martinez de Hoz;” Economic Development and Cultural Change, April 1986, v. 34, pp. 511-33
During the years 1981-1983, subsequent military governments completely fulfilled investors’ expectations of a bailout as the inflated away domestic debt and assumed the burden of the external debt through various schemes of exchange rate guarantees.

The story of the 1990s differs from the experience of 1891 and 1981 as it did not follow a period of speculative frenzy even though the late 1990s repeated the pattern of credit-financed expansion followed by a crisis. Especially during the period following the Mexican Tequila Crisis in 1995 until the outbreak of the Brazilian Crisis in 1998, Argentina enjoyed a solid recovery, which was largely built on credit. Foreign debt rose at the fastest rate in a decade and bank lending increased by almost fifty percent during the same period. However, the end of the boom was not immediately followed by a bust but instead led to three agonizing years during which investors grew increasingly worried about Argentina’s creditworthiness. This is clearly reflected by the steady decline of the Merval Index of the Buenos Aires stock exchange. It shows especially clearly how widely anticipated the collapse of the Argentine economy was. What kept Argentina afloat when investors started to worry about the creditworthiness starting in 2000?

Critics of the IMF point out that continued lending to the distressed economy took place because of the implicit guarantee of the IMF for the survival of the exchange rate regime. Argentina was seen as too big to fail by many analysts. Especially as it had long been presented as a success story of IMF-led reform, investors might have assumed that any crisis in the Latin American country would be followed by a large Mexican-style bailout. This might have created a certain degree of moral hazard on the part of international investors who underestimated the real risks associated with lending to Argentina. Indeed, the IMF initially fulfilled investors’ expectations as large emergency loans were made available to Argentina in early and then again in late 2001. Yet despite the seemingly large amounts, the new IMF team under the leadership of Horst Köhler and Anne Krueger made clear that they favored an orderly workout of creditors and debtors instead of a bailout.
As this comparison has shown, all three episodes also display important features of third generation currency crises. The Baring Crisis and the Peso Crisis of 1981 have in common that they followed a period of credit-based expansion, which was aided by implicit or explicit government guarantees on the foreign debt and close contacts between government and business interests – i.e. “crony capitalism.” This was accompanied by an ill-implemented banking reform lacking supervision but exposing the government or its agencies to considerable contingent liabilities. These problems were less evident during the 1990s as the Argentine government had made considerable progress improving banking supervision and as privatization of inefficient state companies had considerably reduced the state-involvement in the economy. The economic pattern also did not follow a classical boom-bust cycle during the 1990s as already the second half of the decade showed a marked slowdown of growth in Argentina.

All three cases also show Argentine how external shocks exacerbated internal problems causing the “debt trap” to close. The crises of 1891 and 1981 have to be partly attributed to a rise in international interest rates which led to a drying up of capital flows from the center to the periphery. The crisis of 2001, by contrast, occurred during a period of extraordinarily low international interest rates following the economic slowdown in the United States. However, emerging market crises during the late 1990s and especially the devaluation of the Brazilian real in 1998 increased the risk premium attached to Argentine lending to unprecedented levels which effectively made new borrowing impossible starting in early 2001.

The external moral hazard hypothesis clearly does not apply to the crisis of 1891 since the Argentine government – in sharp contrast to the Barings Bank itself– was not bailed out by the international community. During the 19th century, debt defaults by sovereign borrowers in the periphery were not uncommon and investors were generally aware of the risk they assumed. The crisis of 1981 appeared entirely unprecedented for most observers in Argentina and the international financial community and the long-term consequences were completely misjudged at the moment because the world had not experienced anything comparable to the ensuing debt crisis since the Great Depression.
during the interwar years. It is therefore unlikely that investors expected a concerted international bailout of the indebted country. The crisis of 2001 followed a different pattern and international moral hazard might be blamed for at least the timing of the events. The crises of the 1990s – starting in Mexico and later in Asia, Brazil and Russia – had apparently shown that the international community was unwilling to let a large country fall into default and economic depression without offering multi-billion dollar rescue programs. This might have induced some investors during the late 1990s to underestimate the risks associated to lending to the Argentine government. The perception of the likelihood of an IMF-led bailout changed radically during the course of 2001 as Republicans in the White House and a new team at the IMF led by the German managing director Horst Köhler made it clear they would not repeat the bailout strategy of the 1990s. This change in perception might have been one of the triggers if the Tango Crisis.

What had governments learned from past mistakes in Argentine history? It seems clear that the economic team led by José Martínez de Hoz during the late 1970s did not consider the history of previous economic crisis to be a guiding post for their policy. The past seemed too remote to have lessons to teach and “common wisdom” had it that the world financial markets were efficient in handling the imbalances caused by the oil shock of 1973 and would continue to lend freely to developing countries.54 The debt crisis thus came as a genuine surprise. Not so for the Tango Crisis of 2001. Following the “lost decade” of the 1980s, Argentine policymakers tried to learn from past mistakes during the 1990s. They installed sounder bank supervision and reduced inefficiencies through large-scale privatizations of public enterprises. The fiscal deficit remained one of the unsolved problems partly because of the profligate spending during the second Menem government, partly due to lack of fiscal discipline in the provinces. The government of President Fernando de la Rúa clearly recognized the fiscal imbalance as well as the overvaluation of the peso as fundamental problems but was unable to solve them because of lack of political support.

### Summary Table Third Generation Crisis

<table>
<thead>
<tr>
<th>Type of Problem</th>
<th>Description</th>
<th>Relevance for the Crisis</th>
<th>Argentina 1891</th>
<th>Argentina 1981</th>
<th>Argentina 2001</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prudential regulation and financial structure</td>
<td>Lack of sufficient prudential regulation, crony relationship with governments involving implicit guarantees on investment decisions</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Bubble Collapse</td>
<td>Investment boom, which is not fueled by expectations of long-term growth but rather of short-term speculative gain</td>
<td>High</td>
<td>High</td>
<td>Low</td>
<td></td>
</tr>
<tr>
<td>Moral Hazard</td>
<td>Implicit or explicit government guarantees for banks or loans</td>
<td>High</td>
<td>High</td>
<td>High</td>
<td></td>
</tr>
<tr>
<td>Disorderly Workout</td>
<td>Implicit or explicit guarantees of the solvency of the government</td>
<td>Absent</td>
<td>Medium</td>
<td>Medium to high</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Coordination problems mean that a distressed company is “looted” even though it is worth more as a “going concern”</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
<td></td>
</tr>
</tbody>
</table>

**More than a Hundred Years of Currency Crisis: What have we learned?**

This brief review of more than a century of currency crisis in Argentina has made clear that countries face essentially the same constraints today as they did in the late 19th century. The trilemma clearly applied during the gold standard in the same way as it does today and inconsistent monetary and fiscal policies make the maintenance of a fixed exchange rate equally impossible today as a century ago. At the same time, countries are also susceptible to self-fulfilling panics which might come in the form of a banking crisis or a political crisis. Also moral hazard is not a new invention of the late 20th century but rather was an important factor of 19th century lending as well.

Does this imply that currency crises have not changed at all during the past century? Our case studies have shown that while the nature of the constraints that countries face has essentially stayed the same, technological change and fundamental political change have influenced nature and the consequences of the crisis. During our previous discussion we stressed five fundamental differences between the three crises:

**The size of the external, fiscal and monetary imbalances**
The imbalances which led to the outbreak of the crisis were significantly larger during the Baring Crisis than in 1981 or 2001. This might imply that governments have improved over time or that investors already run when they see a smaller imbalance.

**The time it took for a crisis to fully develop**

The time between the peak and trough of the reserve holding was longer in the case of the Baring Crisis than either in 1981 or in 2001. If we accept this measure as a proxy for the time it takes from the beginning of the crisis of confidence until the breakdown of the exchange rate, this would indicate learning on the part of investors to recognize that an exchange rate regime had become unsustainable and to bring the system down.

**The incidence of bank panics and banking supervision**

The existence of deposit insurance has practically eliminated the possibility of a classic bank run. Banking crises during the late 20th century have therefore taken on a new form. Since the central bank has the obligation to bail out depositors, it requires sophisticated supervision to avoid abuse. This supervision was clearly lacking during the late 1970s but improved markedly during the 1990s.

In a highly dollarized economy, the central bank cannot fulfill the role of a lender of last resort because it has only a finite supply of dollar bills. A systemic banking crisis then turns into a run on the international reserves of the central bank.

**Importance of popular pressure on economic policy-making**

The importance of popular pressure on economic policymaking changed fundamentally but was not directly linked to “democratization” but rather to a notion populist and interventionist notion of the role of the state in society. While the period of limited democracy during the late 19th century reacted to the crisis by choosing a more conservative and economically orthodox president, the entirely undemocratic military government during the early 1980s chose a heterodox and expansionary policy in the face of an economic downturn.

**The existence of implicit or explicit guarantees on a domestic and/or international level**
Implicit and explicit government guarantees for business ventures and banks are not a new development of the 20th century but rather were an important feature of 19th century “crony capitalism” as well. A domestic moral hazard was therefore present in all three cases.

International moral hazard, by contrast, is a more recent and more diffuse phenomenon. During the late 19th century no international organization existed with the purpose of helping countries balance of payment crises. The Bank of England bailed out the Bank of Baring Brothers and Co. but was not concerned about the crisis in Argentina. By contrast, Argentina during the 1980s as well as during the Tango Crisis could count on the international community for emergency financing. Whether this caused moral hazard on the part of international investors or Argentine policymakers is still open to debate.