

FRBSF ECONOMIC LETTER

Number 2002-31, October 18, 2002

Learning from Argentina's Crisis

Since December 2001, Argentina has suspended payments on its external debt, restricted bank deposit withdrawals, and abandoned a currency board arrangement that had pegged the peso to the U.S. dollar since 1991. Argentina faces inflation of over 70% this year and an economic contraction that rivals the U.S.'s Great Depression. These developments have surprised many observers because for most of the 1990s Argentina was considered a model of successful economic policy. Indeed, many thought that the instability that had characterized the Argentine economy for much of its history was a thing of the past.

Could Argentina's crisis have been anticipated and avoided? This *Economic Letter* observes that the recent events in Argentina were not entirely unpredictable, as they were associated with rapid increases in public and external debt that cast doubt on the sustainability of borrowing. Conditions that accentuated vulnerability to crises are also highlighted.

Prelude

For most of the 1990s, Argentina was seen as a model of successful policymaking. By pegging its exchange rate to the dollar under a currency board type arrangement in 1991, Argentina ended hyperinflation, reducing inflation rates to single-digit levels. The banking sector in Argentina, traditionally weak, was strengthened considerably, in part because of an increase in foreign bank entry. A 1998 World Bank financial sector review rated Argentina second only to Singapore among emerging markets in the quality of its bank supervision (Perry and Servén 2002). Greater economic stability attracted foreign investment inflows, contributing to an acceleration in economic growth; indeed, even as lenders withdrew their financing in East Asia in 1997, capital inflows continued to Argentina.

Things began to turn sour in 1999. The collapse of the Brazilian currency led to sharp declines in export revenues, and economic growth was negative for three years in a row. Nevertheless, with some brief exceptions, financial markets remained relatively undisturbed until 2001, when uncertainty about the growing public debt and the persistent

economic contraction led to very sharp increases in the yields investors demanded to hold Argentine government bonds. Uncertainty extended to the durability of the currency peg and the ability of the financial system to make good on dollar liabilities that were backed to a significant extent by peso assets, including government debt. The result was massive deposit withdrawals from the banking system.

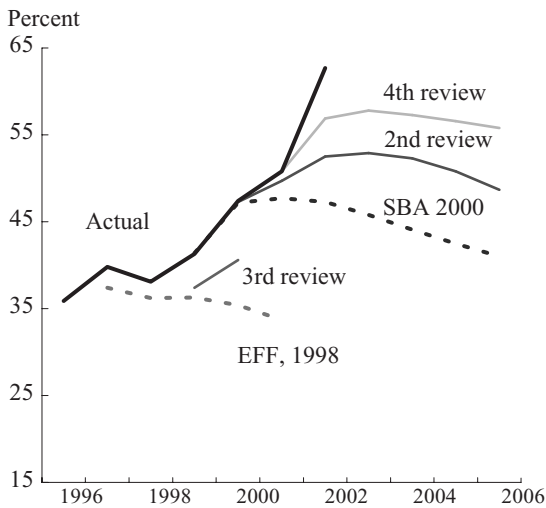
In response to these developments, in December 2001, Argentina suspended payments on its external debt and restricted deposit withdrawals (the "*corralito*"). In January 2002, it abandoned its peg to the U.S. dollar. Reflecting continuing uncertainty about financial conditions, interest rates have continued to rise and the currency has depreciated 356% against the U.S. dollar in the year to September 20. The impact of the Argentine crisis has been severe. Output is forecast to decline 15% and inflation to rise to 72% in 2002 (*Latin America Consensus Forecasts*, September 16, 2002).

What caused Argentina's crisis?

Many observers have explained the crisis in terms of the deficiencies of Argentina's peg to the U.S. dollar under a type of currency board arrangement. While the currency board did play a role, it also can be argued that the main cause of the crisis was Argentina's persistent inability to reduce its high public and external debts. These made the economy vulnerable to adverse economic shocks and shifts in market sentiment.

Figure 1 illustrates the trend in the public debt/GDP ratio in Argentina since 1995, as reported by the International Monetary Fund (IMF) (2002a, p. 19). This ratio measures the total amount of public debt relative to the ability of the economy to produce (taxable) income to service it. In the figures, the thick solid line shows the actual path while the thinner solid lines and dashed lines represent alternative scenarios anticipated by the IMF first under a 1998 Extended Fund Facility (EFF) program and then under a 2000 Stand-by Arrangement (SBA). (For descriptions of these financing arrangements, see IMF 2002b.) The figure reveals

Figure 1
Argentina: Public debt to GDP



Source: IMF.

that Argentina's public debt/GDP ratio rose rapidly, from 35% in 1995 to nearly 65% in 2001. It is also apparent that under IMF consultations, it was consistently anticipated that Argentina's public debt/GDP ratio would stabilize or fall, but this did not happen. The actual path of the public debt/GDP ratio far exceeded the IMF projections in five different reviews between 1998 and 2000.

Argentina's experience stands in contrast to South Korea's, where a financial crisis in 1997–1998 forced the government to intervene to rescue failing banks and led to a rescheduling of its external debt. In South Korea, the public debt/GDP ratio rose sharply, from over 10% in 1997 to over 30% in 2000, but then declined (IMF 2002a, p. 18). However, even at its peak, South Korea's public debt/GDP ratio was less than half Argentina's, and the path of the debt remained below that projected by the IMF in three separate reviews.

There is no unambiguous threshold at which public debt becomes unsustainable, and Argentina's public debt/GDP ratio of 65% in 2001 was still lower than that observed in some European countries. However, given the history of defaults and macroeconomic instability in emerging markets like Argentina, their threshold sustainable public debt may be much lower than in advanced economies. Furthermore, limitations on tax collection capability imply that a higher public debt/GDP ratio makes emerging markets more vulnerable to adverse shifts in market sentiment that raise the cost

of funds. In line with this, large spikes in the yield on public debt occur in emerging markets that are rarely seen in advanced economies.

For example, between January and November 2001, investor uncertainty raised the yield on an Argentine 10-year government bond (denominated in U.S. dollars) about 20 percentage points, to around 35%, signaling the growing unwillingness of investors to hold Argentine debt. (There were also brief spikes in yields on Argentine debt in 1996 and in late 1998 to early 1999. See Mussa 2002, Figure 3.1, which uses a different but related measure.) Such a sharp rise in the interest rate, as well as a default and (self-fulfilling) crisis, is more likely if the public debt/GDP ratio is 65% (as in Argentina) than if it is around 30% (as in South Korea).

Argentina also was vulnerable because its capital account was open and there was a large amount of borrowing in foreign currency from abroad. A large external debt made Argentina vulnerable to default not only in the event that interest rates rose, but also in the event that the currency depreciated sharply, as this increased the repayment burden in domestic currency.

Argentina's external debt profile in 1990 and 2000 may be assessed using two alternative measures, the external debt/GDP and the external debt/export ratios. As external debt typically has to be serviced in foreign currency, the external debt/GDP ratio is a more informative measure of the size of the debt relative to payment capacity if output can easily be shifted to earn more exports. Otherwise, the debt/export ratio provides a better indicator. By either measure, Argentina's debt rose significantly between 1990 and 2000: the external debt/GDP ratio rose from 44% to 51%, and the external debt/exports rose from 421% to 471%.

To put some perspective on the vulnerability implied by these numbers, consider the IMF's report (2002a), which finds that the probability of a debt crisis (involving payment arrears or debt rescheduling) rises to about 15%–20% for countries with external debt/GDP ratios above 40% (from around 2%–5% when debt is below the threshold). The likelihood of a crisis also rises when the external debt/export ratio is high. Argentina's exports of goods and services are quite low, about 10% of GDP, implying very high external debt/export ratios that accentuate its vulnerability to external debt crises. Once again, the contrast with South Korea is informative. From 1990 to 2000, South

Korea's external debt/export ratio rose from 48% to 78%, but it still remained orders of magnitudes below Argentina's ratio.

Why did Argentina's debt ratios rise?

Argentina's debt ratios rose for at least two reasons. First, primary fiscal surpluses (government revenues minus expenditures exclusive of interest payments on the debt) were not large enough to cover interest payments and also retire some of the outstanding public debt. Between 1991 and 2000, Argentina's primary surpluses averaged 0.14% of GDP. These surpluses were remarkable achievements, given Argentina's past history, but they were still well below interest payments, which averaged 2.4% of GDP over this period. There were significant obstacles to reducing expenditures and raising revenues. On the expenditure side, the government was a large employer (Krueger 2002) and, for political reasons, found it hard to cut its wage bill. The central government also found it hard to control spending by provincial governments, whose liabilities it was eventually forced to assume. At the same time, revenues were adversely affected by difficulties in tax collection and, after 1999, by falling output and rising unemployment.

Second, export growth (and therefore economic growth) was not sufficiently robust to improve the country's ability to meet its debt obligations and lower debt/GDP ratios. In the 1990s, the dollar value of Argentina's exports of goods and services grew at 7.7% a year, less than the nearly 9% growth in its external debt and well below the rate of growth of exports in Asian economies such as South Korea or Malaysia (10%–11%). Export growth has been dampened by Argentina's trade barriers, which remain relatively high outside the Southern Cone common market area of *Mercosur*, of which Argentina is a member. These trade barriers have increased since the crisis broke out. Exports also suffered following the 1999 collapse of the Brazilian real because Argentina's rigid currency board arrangement produced an overvalued currency. Indeed, the focus on maintaining a rigid peg at all costs appears to have diverted attention away from the risks of not paying attention to real sector fundamentals.

Conclusions

In the view of some observers, Argentina's debt position would have been sustainable if only market

uncertainty had not triggered a crisis. While there is some truth to this view, it does not take into account the fact that Argentina could have reduced its vulnerability to potentially destabilizing shifts in market sentiment by aggressively reducing its public and external debts. This is illustrated by the contrasting experiences of Argentina and Asian economies like South Korea. With much lower debt levels, the latter is less likely to experience adverse shifts in market sentiment and is less vulnerable to them should they occur.

Cutting Argentina's public debt requires reductions in government spending, tax reforms designed to increase government revenues, and policies to stimulate export growth over the medium to long run. The successful adoption of such policies is the key challenge facing Argentina and a number of other emerging economies, and it is an important prerequisite for achieving stability in a globalized economy.

Ramon Moreno
Research Advisor

References

[URLs accessed October 2002.]

- International Monetary Fund. 2002a. "Assessing Sustainability." Manuscript (May 28). <http://www.imf.org/external/np/pdr/sus/2002/eng/052802.htm>
- International Monetary Fund. 2002b. "How Does the IMF Lend? A Factsheet." (August 20.) <http://www.imf.org/external/np/exr/facts/howlend.htm>
- Krueger, Anne. 2002. "Crisis Prevention and Resolution: Lessons from Argentina." Speech to National Bureau of Economic Research Conference on "The Argentina Crisis." Cambridge, MA (July 17). <http://www.imf.org/external/np/speeches/2002/071702.htm>
- Mussa, Michael. 2002. *Argentina and the Fund: From Triumph to Tragedy*. Policy Analyses in International Economics, No. 67 (July). Washington, DC: Institute for International Economics.
- Perry, Guillermo, and Luis Servén. 2002. "The Anatomy of a Multiple Crisis: Why Was Argentina Special and What Can We Learn from It?" Background paper for the NBER Project on Exchange Rate Crises in Emerging Markets: The Argentina Crisis. Manuscript (May 10).

ECONOMIC RESEARCH
FEDERAL RESERVE BANK
OF SAN FRANCISCO

PRESORTED
STANDARD MAIL
U.S. POSTAGE
PAID
PERMIT NO. 752
San Francisco, Calif.

P.O. Box 7702
San Francisco, CA 94120
Address Service Requested

Printed on recycled paper
with soybean inks



Index to Recent Issues of *FRBSF Economic Letter*

DATE	NUMBER	TITLE	AUTHOR
4/26	02-12	Is There a Credit Crunch?	Kwan
5/3	02-13	House Price Dynamics and the Business Cycle	Krainer
5/10	02-14	Deposit Insurance Reform—When Half a Loaf Is Better	Furlong/Kwan
5/17	02-15	Off-Site Monitoring of Bank Holding Companies	Krainer/Lopez
5/24	02-16	Searching for Value in the U.S. Stock Market	Lansing
5/31	02-17	Reforming China's Banking System	Moreno
6/14	02-18	Country Crises and Corporate Failures: Lessons for Prevention...	Glick
6/28	02-19	Towards a Sovereign Debt Restructuring Mechanism	Spiegel
7/5	02-20	Productivity in Heart Attack Treatments	Gowrisankaran
7/26	02-21	Trends in the Concentration of Bank Deposits: The Northwest	Laderman
8/2	02-22	Using Chain-Weighted NIPA Data	Jones
8/9	02-23	Technical Change and the Dispersion of Wages	Trehan
8/16	02-24	On the Move: California Employment Law and High-Tech Development	Valletta
8/23	02-25	Argentina's Currency Crisis: Lessons for Asia	Spiegel
9/06	02-26	The Role of Fiscal Policy	Walsh
9/20	02-27	Why Do Americans Still Write Checks?	Gowrisankaran
9/27	02-28	Japan Passes Again on Fundamental Financial Reform	Cargill
10/4	02-29	Can the Phillips Curve Help Forecast Inflation?	Lansing
10/11	02-30	Setting the Interest Rate	Marquis

Opinions expressed in the *Economic Letter* do not necessarily reflect the views of the management of the Federal Reserve Bank of San Francisco or of the Board of Governors of the Federal Reserve System. This publication is edited by Judith Goff, with the assistance of Anita Todd. Permission to reprint portions of articles or whole articles must be obtained in writing. Permission to photocopy is unrestricted. Please send editorial comments and requests for subscriptions, back copies, address changes, and reprint permission to: Public Information Department, Federal Reserve Bank of San Francisco, P.O. Box 7702, San Francisco, CA 94120, phone (415) 974-2163, fax (415) 974-3341, e-mail sf.pubs@sf.frb.org. **The *Economic Letter* and other publications and information are available on our website, <http://www.frbsf.org>.**