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FEDERAL RESERVE BANK OF DALLAS

Mexico's Financial Vulnerability:

Then and Now

by Erwan Quintin and José Joaquín López

Mexico has taken important steps to reduce the likelihood of another financial collapse, and the country appears well positioned to maintain economic stability through the election year.

Financial turmoil dots Mexico's recent economic history. Between 1975 and 1995, the nation experienced recurrent currency, debt and banking crises with devastating effects on real economic activity.

In Mexico, election years often heighten the risk of financial instability.¹ Debt defaults or massive devaluations—or both—have accompanied three of the past five presidential elections. Given that history, it's not surprising that questions about Mexico's financial vulnerability have arisen with the approach of July's presidential election.

While the concerns may be understandable, Mexico has come a long way in recent years. The 2000 elections took place without financial repercussions, and this year the country isn't nearly as vulnerable as it was prior to the 1994 Tequila



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Crisis. Mexico is by no means immune to crises; recent history tells us that few nations are. But Mexico has taken important steps to reduce the likelihood of another financial collapse, and the country appears well positioned to maintain economic stability through the election year.

Mexico's Turbulent History

Two of the biggest financial blows to strike Mexico were the crises in 1982 and 1994. Both produced sharp contractions in per capita GDP (*Chart 1*). A brief review of Mexico's recent economic history will help us understand how the troubles began and spread.

High oil prices in the second half of the 1970s improved Mexico's standing in international markets and helped fuel massive increases in government spending.² The fiscal stimulus accompanied a surge in private spending facilitated by low, administered interest rates. The rise in domestic spending led to a deterioration in both

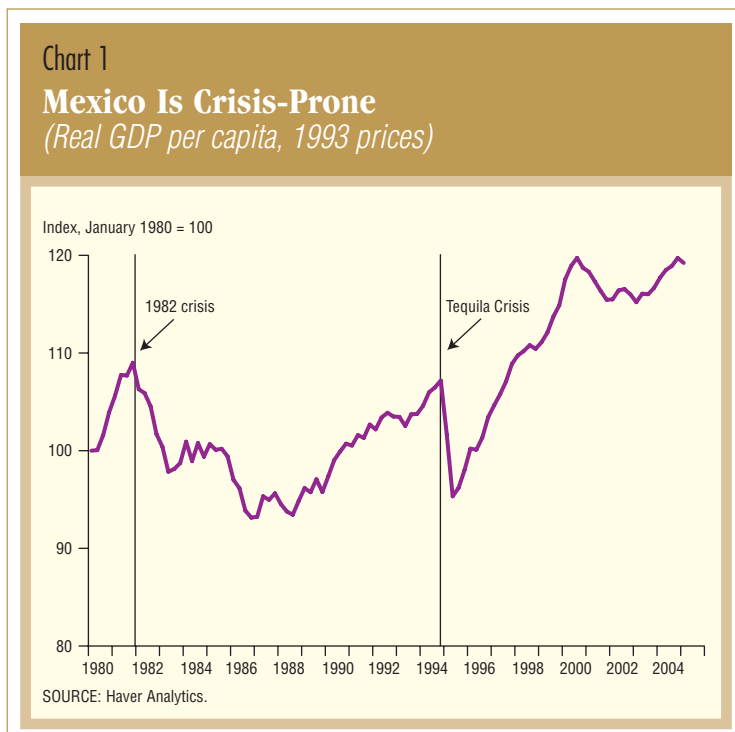
the trade balance and government budget deficit and a rapid rise in inflation, putting pressure on Mexico's fixed-exchange-rate regime.

Increasingly concerned investors responded in the early 1980s by reducing their positions in Mexico and converting a large fraction of their Mexican bank deposits to dollars. Faced with the 1982 presidential election, authorities did little to address the country's deteriorating financial situation and quickly found themselves unable to defend the country's currency. Mexico sharply devalued the peso in February 1982. In August, the country announced it could no longer meet its short-term, dollar-denominated obligations. December saw another sharp devaluation.

The 1982 crisis triggered Mexico's worst recession since the Great Depression and eventually prompted drastic policy reforms.³ During the 1980s, the country took steps to limit fiscal spending and raise tax revenues. At the same time, it lifted in stages restrictions on foreign investment and trade. In 1986, Mexico joined the General Agreement on Tariffs and Trade. Between 1985 and 1990, the country's maximum tariff fell from 100 percent to 20 percent. Most sectors opened to foreign investment in 1989, paving the way for a wave of privatizations. By 1994, 80 percent of state-owned firms had been sold off.

The country's growing commitment to policy restraint and macroeconomic reforms began to pay off in the late 1980s with lower interest rates, lower inflation and declining debt-to-GDP ratios. In 1989, after the Brady Plan marked the completion of the debt-renegotiation process, Mexico finally regained access to international financial markets.⁴ In fact, foreign capital started flowing into the country at unprecedented rates.

By the end of 1994, another presidential election year, Mexico found itself once again mired in financial crisis. Unrest in Chiapas, along with the





assassinations of the leading presidential candidate and the ruling party's leader, fed uncertainty and increased the risk of speculative attacks on the peso. Concerns about an overvalued peso began to surface as progress in fighting inflation ended, forcing the government to rely increasingly on short-term, dollar-denominated debt. The ratio of short-term debt to reserves rose sharply. In December, Mexican authorities announced another massive devaluation of the peso, which triggered a deep crisis in the recently privatized banking sector.

Recurrent episodes of financial instability have contributed to Mexico's inability to achieve sustained economic gains. In the year after the 1982 crisis, real GDP per capita fell by more than 6 percent. Between 1982 and 1994, Mexico experienced no overall growth. During the Tequila Crisis, GDP per capita fell by almost 10 percent. Even with the past decade's relative stability, GDP per capita has grown by an average of less than 1 percent a year since 1980 (see *Chart 1*).

Mexico's travails loom larger because financial turmoil tends to be contagious. When Mexico defaulted on its external debt in 1982, foreign banks and lenders withdrew from most emerging markets, forcing many other Latin American countries to default on their obligations. The Tequila Crisis had narrower spillover effects, but it did cause Argentina and Brazil to suffer massive bank runs, capital flight and sharp recessions.

Vulnerability to Crises

Because of their devastating effects, financial crises have been the subject of extensive economic research. Economists have documented a number of salient features among nations enduring financial collapses.⁵

To start with, large capital inflows often precede the crises. Much of the debt accumulated in the process is short-term and foreign currency-denominated. In many cases, the capi-

tal inflow triggers a credit boom and leads to a deterioration of banks' balance sheets. An inherent problem exists in the mismatch between short-term maturities of debt denominated in foreign currencies and longer term domestic loans. Lax bank supervision often worsens the situation. In Mexico, for example, the eagerness to lend was particularly strong in the early 1990s, when banks had only recently become privatized and deregulated.

Heavy reliance on short-term foreign financing creates a situation where capital flows can quickly and massively reverse in response to unsettling developments. A vulnerable banking system, with mismatched assets and liabilities, can't maintain its solvency, causing the financial system to collapse. Trade and investment credit play key roles in modern economies, and the higher cost and declining availability of finance have a crippling impact on economic activity.⁶

In general, we now have a good idea of what makes a nation financially vulnerable; thus, in hindsight, it's perhaps no surprise that financial turmoil beset Mexico in the early 1980s and mid-1990s.

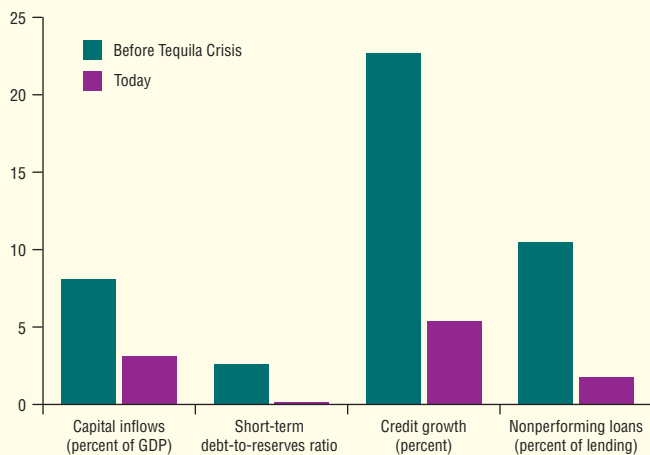
That's not to say that crises have become fully anticipated events. Looking at the Tequila episode, for example, Mexico's fiscal behavior was "on the whole, responsible" immediately prior to the crisis and the country's debt-to-GDP ratio was below that of a number of other nations that didn't run into trouble in the mid-'90s.⁷ Crises are somewhat arbitrary events in the sense that nations with similar economic fundamentals wind up with different outcomes.

Even so, nations can take actions to reduce their financial vulnerability. For one, nations can lower the likelihood of a crisis by lengthening the maturity of their debt. More effective supervision can also reduce the possibility of a banking crisis. Other actions can also help, but the crux of each is the same—fundamentals of sound financial management do matter.

Recurrent episodes of financial instability have contributed to Mexico's inability to achieve sustained economic gains.



Chart 2
Mexico Today



NOTE: Capital inflows: sum of net direct, portfolio and other investment for 1993 and 2003. Short-term debt-to-reserves ratio: November 1994 and average for 2004. Credit growth: average for 1992–94 and 2003–05. Nonperforming loans: December 1994 and December 2005.
 SOURCES: “Global Financial Instability: Framework, Events, Issues,” by Frederic S. Mishkin, *Journal of Economic Perspectives*, vol. 13, no. 4, Fall 1999; Comisión Nacional Bancaria y de Valores; International Monetary Fund, *International Financial Statistics*; World Bank.

Mexico’s Economy Today

What is Mexico’s current financial situation? How vulnerable is the country to yet another crisis?

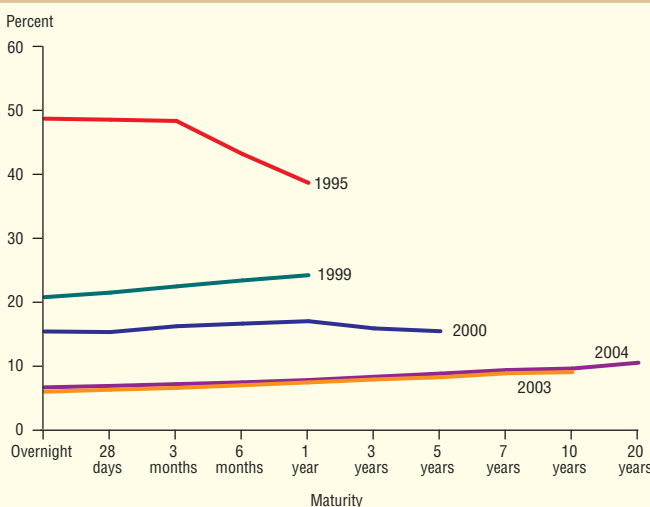
The evidence suggests Mexico is on more solid ground today than it was before the Tequila Crisis (*Chart 2*). First, the ratio of capital inflows to GDP is below what it was in the early 1990s. More important, Mexico doesn’t rely as much as it did a decade ago on short-term borrowing. Mexico’s current reserves are sufficient to meet the nation’s short-term obligations over the next two years. Credit growth has been subdued relative to the pre-Tequila period. Consumer loans and mortgages have been expanding rapidly for two years, but overall the increase in borrowing remains within reasonable limits. In addition, the banking sector is in better shape than it was in the early 1990s, largely because supervision has greatly improved. The ratio of bad loans to outstanding bank credit is a small fraction of what it was in the early 1990s.

Mexico’s financial improvement is most evident in the composition of public debt.⁸ The government ran into trouble a decade ago in part because most of its debt was in foreign hands, dollar-denominated and short-term. In 1994, 85 percent of Mexico’s public debt was held outside the country. Today, the ratio is 40 percent. Emblematic of the effort to rely more on domestic sources of finance is the fact that Mexico was able to retire all its Brady debt three years ago, becoming the first country to do so.

At the same time, Mexico now borrows longer term than it did 10 years ago. The average maturity of Mexico’s public debt is approximately three years, compared with barely nine months at the onset of the Tequila Crisis.

In 1995, Mexico didn’t even have a yield curve and couldn’t issue any debt with over one year to maturity (*Chart 3*). Little changed through 1999, although the nation’s economic stability allowed it to borrow at lower

Chart 3
Mexico Grows a Yield Curve



SOURCE: “Reducing Financial Vulnerability: The Development of the Domestic Government Bond Market in Mexico,” by Serge Jeanneau and Carlos Pérez Verdía, *BIS Quarterly Review*, December 2005.



interest rates. By 2000, Mexico could issue five-year bonds at even lower borrowing costs. It is now able to issue 20-year fixed-rate bonds.

What has enabled Mexico to so greatly improve the maturity composition of its debt? Macroeconomic discipline is a big part of the answer, and the country's progress in this area cannot be overstated.

Prices have become more stable than ever (*Chart 4*). People can invest in Mexico without worrying as much as they once did about inflation. An important ingredient in Mexico's success on this front was the establishment via constitutional amendment in 1994 of a fully independent central bank that makes price stability its main goal. With a clearly stated objective and constitutional protection, Banco de México has become a no-nonsense practitioner of inflation targeting. On the fiscal side, the government has kept budget deficits under 1 percent of GDP. The result has been a stable ratio of debt to GDP (*Chart 5*).

Another important policy change involves exchange rates. In the past, attempts to maintain a fixed currency value allowed financial pressures to build up until they reached a breaking point. Mexico's monetary authorities no longer try to defend a fixed value of the peso.⁹ The currency has essentially been floating freely for the past decade.

Election-Year Jitters?

Mexico's progress in economic policy makes investors more willing to trust the country with their money. Election years, however, can make investors wary—not only because of the historical correlation between presidential transitions and financial turmoil but also because a change in power presents an opportunity to reconsider past commitments.

So far, foreign investors don't seem particularly worried about the upcoming presidential transition. It may be because recent accounts of campaign positions indicate that

Chart 4

Inflation Is Tamed

(Annualized CPI inflation rate, monthly average)

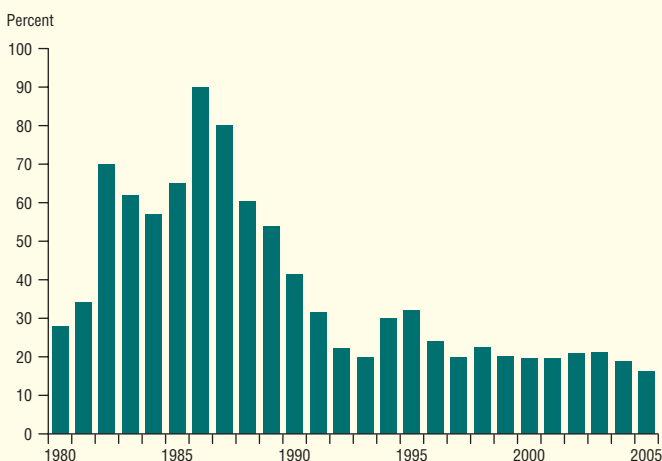


SOURCE: Haver Analytics.

Chart 5

Debt Burden Gets a Little Lighter

(Net public debt to GDP)



SOURCE: Haver Analytics.

Mexico:

A Quarter Century of Turmoil and Reforms

1976

• Mexico obtains rescue loan package from Federal Reserve and U.S. Treasury in April. • **José López Portillo elected president in July.** • Peso devalued in August for the first time in 22 years. • Large oil reserves discovered.

1982

• Peso devalued in February. • **Miguel de la Madrid Hurtado elected president in July.** • Mexico suspends debt payments in August. • Bank nationalization decreed in September. • Peso again devalued in December.

1983

• Some restrictions on foreign investment lifted.

1986

• Mexico joins the General Agreement on Tariffs and Trade. • Tariffs are slashed in most sectors.

1987

• Peso devalued in November. • President de la Madrid and representatives of labor, farming and business sectors sign Economic Solidarity Pact to ensure Mexico's commitment to monetary and fiscal discipline and trade liberalization.

1988

• **Carlos Salinas de Gortari elected president in July** amid accusations of election fraud.

1989

• Restrictions to foreign investment lifted in most sectors. • Brady Plan completes renegotiation of Mexico's debt, restoring access to international financial markets.

1990

• Constitution amended to permit the privatization of banks.

1992

• NAFTA negotiations completed in December.

1994

• NAFTA goes into effect. • Constitution amended to protect the independence of the central bank. • **Ernesto Zedillo Ponce de León elected president in July.** • Peso devalued in December; Tequila Crisis begins.

2000

• **Vicente Fox Quesada elected president in July.** • Mexico weathers its first political transition in 75 years without a crisis.

2004

• Mexico becomes first nation to pay off Brady Bonds.

2006

• **Presidential election in July.**

Mexico's presidential candidates all support the nation's commitment to macroeconomic discipline.

When investors expect financial trouble, they demand a higher premium over U.S. debt of comparable maturities. Brazil's recent history illustrates what can happen when political uncertainty worries investors. The country's risk premium spiked in 2002, when Luiz Inácio Lula da Silva took the lead in the polls (*Chart 6*). Investors believed a Lula government would run a loose fiscal policy.¹⁰ When the fears proved unfounded after Lula's election, Brazil's premium quickly reverted to normal levels.

If investors felt the upcoming election threatened Mexico's economic stability, their concerns would quickly manifest themselves in the risk premium. With only weeks to go before July's elections, Mexico's premium remains near all-time lows, indicating little anxiety on the part of investors. The premium has risen a bit since mid-May, but the recent readings reflect a worldwide pattern seen in emerging markets, rather than concerns about Mexico's political transition.

Today, Mexico is stronger financially than it has been in a long time. This doesn't make an election-year crisis impossible, but it does suggest one is unlikely.

In fact, the main concern about Mexico should no longer be vulnerability to financial shocks. Rather, it should be the absence of badly needed structural reforms. So far, Mexico has not been able to parlay the policy improvements made over the past two decades into sustained economic growth.

The reasons why are well known. Mexico's educational achievements remain disappointing. Furthermore, the country's institutions don't function as well as they should. In particular, property rights aren't well enforced, creating difficulties for lending and investing. Widespread tax evasion limits Mexico's ability to raise rev-

enue, a hurdle for needed investment in education and infrastructure. In the energy sector, for instance, production and distribution are under government control. Given Mexico's limited fiscal resources, oil-producing capacity is not keeping up with demand.

The list of needed reforms could go on. Now that Mexico has for the most part cleaned up its financial house, deeper structural reforms are among the country's most important challenges.

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Notes

The authors thank Genevieve R. Solomon for research assistance.

¹ For a discussion of this correlation, see "Can Mexico Weather Its Next Election Cycle?" by David Gould, Federal Reserve Bank of Dallas *Southwest Economy*, Issue 6, November/December 1999.

² For a description of the events leading up to the 1982 and 1994 crises, see "Currency Crises and Collapses," by Rudiger Dornbusch, Ilan Goldfajn and Rodrigo O. Valdes, *Brookings Papers on Economic Activity*, vol. 2, 1995, pp. 219–93.

³ *Economic Transformation the Mexican Way*, by Pedro Aspe, Cambridge, Mass.: MIT Press, 1993, describes the reform process in Mexico during the 1980s.

⁴ The Brady Plan is named after former U.S. Treasury Secretary Nicholas F. Brady and outlines broad principles for the restructuring of sovereign and private debt in emerging nations.

⁵ See, for instance, "Global Financial Instability: Framework, Events, Issues," by Frederic S. Mishkin, *Journal of Economic Perspectives*, vol. 13, no. 4, Fall 1999, pp. 3–20.

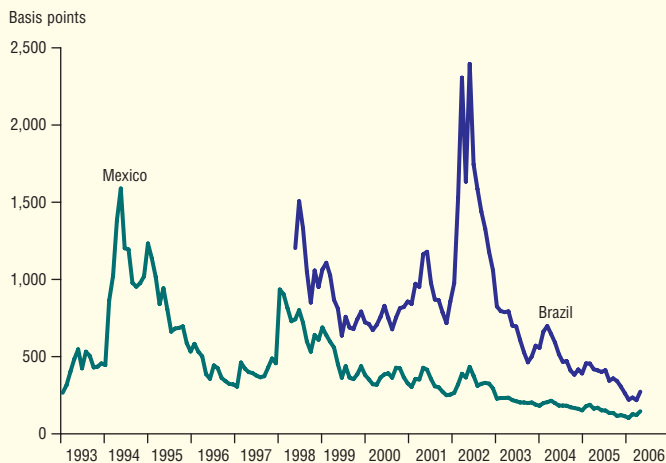
⁶ The real impact of financial crises continues to puzzle economists, however. During crises, output usually falls much more than the use of productive factors would lead one to expect. In the language of neoclassical economics, total factor productivity falls greatly during crises—much more than during any other period. Accounting for the magnitude of this productivity drop is an important area of current research. See "Financial Crises and Total Factor Productivity," by Felipe Meza and Erwan Quintin, Federal Reserve Bank of Dallas Center for Latin American Economics Working Paper no. 0105, March 22, 2005.

⁷ "A Self-Fulfilling Model of Mexico's 1994–95 Debt Crisis," by Harold L. Cole and Timothy J.

Chart 6

No Jitters Yet

(Country premium, monthly average)



SOURCES: JPMorgan Chase; Bloomberg.

Kehoe, *Journal of International Economics*, vol. 41, 1996, pp. 309–30.

⁸ For a detailed description of Mexico's debt management efforts over the past 10 years, see "Reducing Financial Vulnerability: The Development of the Domestic Government Bond Market in Mexico," by Serge Jeanneau and Carlos Pérez Verdía, *BIS Quarterly Review*, December 2005, pp. 95–107.

⁹ This does not mean that Banco de México ignores exchange-rate movements in its policy deliberations. But, at least in principle, these movements only matter for policy through their potential effects on inflation.

¹⁰ "The Politics of Brazil's Financial Troubles," by William C. Gruben and Erwan Quintin, Federal Reserve Bank of Dallas *Southwest Economy*, Issue 5, September/October 2002.

FALL CONFERENCE

October 6, 2006

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