certain types of financial crises—like the crises that have affected many Latin American and Asian countries in recent years—are problems of sovereign balance sheet mismanagement and not economic mismanagement.


First, emerging market borrowers and investors have consistently underestimated the source and magnitude of volatility in emerging financial markets. Second, perhaps as a consequence, borrowers and investors have permitted and even encouraged sovereigns to put into place capital structures that systematically exacerbate this volatility.


But countries and even regions are subject to market-related risks and shocks that can disrupt their behavior, just as companies are, and these risks are transmitted in the same way: through their capital structures. In fact any economic entity’s capital structure can be seen as a sort of volatility machine, Michael Pettis, The Volatility Machine: Emerging Economics and the Threat of Financial Collapse [Kindle Edition]. loc. 81.

How does this get converted into social & geopolitical volatility?

This volatility machine converts the price swings of the market into greater or lesser volatility inside the economic entity by linking up revenues and costs in a more-or-less predictable way.

This usually means that well-managed companies attempt to design their capital structures in such a way that the sum of financing costs is indexed so that the impact of external shocks on revenues and asset values is offset by the impact of these same shocks on financing costs.

The easiest way to hedge this exposure is to issue debt in euros. If the euro weakens, the car manufacturer’s sales may suffer, but its debt servicing cost, denominated in euros, declines at the same time, so that the impact of the weakening euro is mitigated.

Applicable to portfolio management? Analogous at all to risk parity?

Corporate finance is, in effect, the study of volatility and how volatility impacts value.

There are types of assets whose values increase with increases in volatility and other assets whose values increase with reductions in volatility. These changes in value do not occur simply because of preferences investors may have for volatility. They occur because changes in volatility change economic behavior.

Richard Koo - profit maximization to debt minimization / yin & yang

They can force managers in search of profit to redirect their attention from strategic issues to financial issues, thereby reducing the output of the whole system.

reflxivity, Soros/Druckenmiller, multiple equilibrium

Most important, they can change default probabilities, so forcing a whole series of stakeholders to behave in ways that increase or reduce the economic output of an entity.

pendulum effect + misattribution/ex post rationalization

Because it is often difficult to distinguish between economic mismanagement and bad markets, one result of the recent financial crises has been to delegitimize the various economic policies that preceded the market collapses, much in the same way that the LDC (less developed country) debt crisis of the 1980s delegitimized the import-substitution policies popular in Latin America in the 1970s.

Simple corporate finance theory would predict that because a lender has many of the characteristics of a short seller of put options, debt costs would be higher for borrowers with more volatile export earnings.

The capital structure approach also created in me a great deal of skepticism about the success of the neoliberal model of economic development and an equal reluctance to believe that the Asian crisis “proved” in any way the failure of the Asian development model.

there is no obvious conclusion to be drawn about the correlation between, on the one hand, liberal economic policies and sustainable economic growth, and, on the other hand, industrial policies and economic stagnation.
During periods of ample global liquidity, most economic policies seem to “work” because of foreign capital inflows, while they all “fail” when liquidity dries up.


former emerging market countries like the United States, Germany, France, Japan, Taiwan, and Korea have all followed to varying degrees policies of export encouragement, import substitution, protectionism, industrial targeting, and credit manipulation.


option theory is the best framework within which to evaluate and analyze economic and financial information


the investment decision is mostly affected by liquidity conditions in the rich country financial centers, rather than the more conventional models that look at domestic factors within the less developed country to explain capital inflow.


I define a capital structure trap as the position in which a borrower finds itself such that an external shock can force both the borrower’s revenue and its debt servicing expense to move sharply in an adverse direction.


discuss this.


sovereign liability management function


Should that be the case, a major, long-lasting emerging market slump, like the ones we experienced in the 1930s and the 1980s, becomes very likely.


Note the shared similarities (especially temporally and in regards to cycle and sequence)


In each case the local currency collapsed, stock and bond markets plunged, the national banking system was overwhelmed by bad debt, and foreign investors fled the region. The afflicted countries all saw imports drop to very low levels as expanding debt, higher import costs, and a breakdown in manufacturing abroad led to a vast reduction in imports.


The market collapse in Mexico began on December 20, 1994, when the government of Mexico suddenly announced a 13 percent devaluation of the currency band within which the peso was permitted to trade.


Two days later, as dollars continued to flee the country, the central bank gave up any pretense of defending the peso peg and permitted the currency to float freely. With that the Banco de Mexico set off the first crisis of the new emerging markets.


Because of its close links with Mexico and the implied support of President Bill Clinton and the U.S. government, even the U.S. dollar weakened in international trading. The peso devaluation had set off the beginning of what was known afterward as the Tequila Crisis.


The government insisted that it would never consider permitting the currency to trade outside this band, and it was made the cornerstone of the Pacto, the agreement between the government, labor, and industry that underpinned a series of reforms begun in the mid-1980s.


After all, a little more than a year earlier, the U.S. Congress had passed the North American Free Trade Agreement (NAFTA), and in the excitement about the possibilities of a single North American market of over 400 million people, an outpouring of optimism had overwhelmed Mexican markets.


At the same time, and perhaps more important, Japanese long-term capital, which for years had flowed copiously into the United States, went into a reversal during the last quarter of 1993 and the first quarter of 1994, significantly reducing U.S. appetite for risk assets.


DM monetary policy impacts EM credit growth through capital flows


When the Federal Reserve Board unexpectedly began raising interest rates early in the year, Mexico saw a tremendous reduction in foreign capital inflows, but with no commensurate reduction in the current account deficit. Central bank reserves began to drop, slowly at first, but more quickly as wealthy Mexicans became increasingly alarmed by the unfinanced trade deficit.


The government could have also raised more dollars by increasing the interest it would pay on long-term U.S. dollar external bonds, but finance ministry officials were convinced the investor nervousness was temporary and misguided, and they refused to lock in what they thought were excessively high interest rates.


The authorities also thought that Tesobonos were an important signaling device to investors, since the more Tesobonos were outstanding, the more costly a devaluation would be to the government. In a classic central bank strategy, Mexican authorities imagined that by increasing the cost to themselves of a damaging policy shift, they could shore up credibility and convince investors that the policy shift would not occur.
Right up to the end most analysts believed that the country could and would do whatever was necessary to maintain the currency peg, and in spite of the warning signals, most investors did not believe that the devaluation would really happen.


Massive selling, redemptions in funds, forced liquidation with price collapse chasing yet further redemptions has been the scene of the past two weeks. The financial chaos, the sheer lack of a market, the inability to raise even a few hundred millions of dollars in new credits conjure up the image of a gigantic fraud—Mexico had never reformed, there was no substance, the other shoe (whichever that might be) was about to fall.9


Investors refused to continue rolling over dollar or peso debt, and investors who had purchased Tesobonos on the assumption that they were almost as good as dollars now realized that they had simply exchanged currency risk for another equivalent risk—convertibility risk.


In the end the defensive actions of each of the various sectors of the Mexican economy simply added to the burden of other sectors of the economy, and Mexico’s markets were consumed in a huge, self-reinforcing loop of disaster.


On January 31 President Clinton announced a planned $50 billion rescue package to help


Mexico with its short-term liquidity needs, but the desperate surge in optimism that followed did not last long.


As the Mexican delegation met with various U.S. congresspeople to explain their position and ask for their support, these congresspeople used the crisis to open up a whole series of concerns—from immigration to abortion to Mexico’s relations with Cuba—that were either impractical or that threatened to bog the process down in partisan politics and narrow interests.12 While the president and the U.S. Congress argued over the funds that would be used to resolve Mexico’s liquidity needs, the world held its breath, hoping that the crisis would not destroy all the expectations that had been built up during the decade over Latin America’s new prospects.


decline of Mexican stock market in peso terms


The most vicious stage of the Mexican market collapse did not end until March when, over the objections of many members of Congress, the United States contributed $20 billion to a $50 billion rescue package supplied by the IMF and various other donor countries.


In a few years similar crises hit other emerging market countries. In July 1997, the Thai currency, the baht, was forced to devalue, initiating a startling series of Mexico-like crises that over the next few months engulfed the economies of Thailand, Indonesia, Malaysia, and the mighty South Korea. For a while it looked like even Hong Kong, Taiwan, and China would be swept away by the Asian tidal wave and that U.S. and European markets would be buffeted by the storm. On October 27 the Dow Jones Industrial Average (DJIA) lost 554 points in one day, in the biggest point loss in its history. The New York Stock Exchange was forced to suspend trading that day. In early November, Sanyo Securities, a large Japanese broker, went bust—the first time a Japanese securities house had gone under since the Second World War. Within two weeks Hokkaido Takushoku, one of Japan’s top ten banks, also collapsed. In January South Korea was forced to restructure $24 billion of international bank loa
In the words of the authors of the study, “The currency falls represented by these countries represent shifts in long-run mean value unrelated to underlying fundamentals.”

Market players, in other words, can be forced by the market itself to behave in such a way that asset prices respond to mechanical factors, not to valuation. It is the structure and behavior of market players that systematically undermines the market, not changes in fundamentals. These only set off the crisis.

Much earlier, Rome suffered a liquidity crisis as early as 33 A.D. that seems remarkably similar to modern market crises. In what was to become a very familiar sequence, the Roman crisis of 33 A.D. was linked to changes in underlying liquidity conditions caused by shifts in market structure—in this case, real estate lending.

The reasons for the market collapses were largely problems associated with an unstable capital structure, of which admittedly banks form an important component.

The problem is not the actual shock or its causes but rather the way the shock is transmitted into the real economy.

A company's capital structure is the way the company funds itself and indexes its operations to market risks.

Above all, the capital structure must be one in which the government is able credibly to implement its reform policies and to raise the financing it needs to fund these policies.

Alternatively if the borrower’s capital structure is misaligned such that there is a feedback process in which the liquidity crisis causes debt servicing costs to increase automatically, the liquidity crisis can quickly spin out of control. This occurs, for example, when a country with short-term dollar debt is faced with a "bank run" that puts pressure on its currency.

How is this similar to Fisherian debt deflation?
As the currency weakens, the value of the debt increases in real terms, which causes even more pressure on the currency.


The high interest rates needed to stabilize currency and bond markets redistribute income away from small companies and low-wage employees, who are usually among the first to be fired as companies cut back spending.


As social and private spending dries up, health and education, the two variables most highly correlated with long-term growth, suffer.


Since the benefits of asset inflation-led booms accrue primarily to the wealthy, the asymmetric distribution of the costs and benefits of the cycle can have the secondary impact of reducing the legitimacy and stability of the regime and, possibly, weakening the mandate for reform.


This section argues that the vulnerability of LDC financial markets is due primarily to external factors, of which the most important is shifts in liquidity among major financial centers such as New York, London, or Tokyo.


Naomi Klein

According to this view, money will flow to and stay in LDCs if domestic authorities eliminate distortions that reduce a country’s economic prospects, engage in policies that prepare the country for rapid growth, or structure the economy to reduce expected volatility.


It posits that when investors have excess liquidity—more than can be invested in traditional low-risk markets at home—they look elsewhere for investment opportunities.


For example, macroeconomic reforms in the early 1990s in Latin America led to soaring private capital flows, according to a senior US Treasury official.


The liquidity model, which in its purest form can be associated with the works of Charles Kindleberger and with Hyman Minsky’s “financial instability hypothesis,” begins with the assumption of a liquidity expansion in the global financial centers, what Minsky calls a “displacement.”


because of changes in the regulatory framework, in the operations of financial authorities, or even because of profit-making activities of financial players.


Risky structures are usually built up by risky financial practices during periods of financial tranquility—this concept is sometimes summarized as “stability is destabilizing.”


“A demand for money in ordinary times, and a demand for it in periods of panic, are diametrically different. The one demand is for money to put into circulation; the other for money to be taken out of it.”


the insights about the relationship between monetary shifts and booms and busts in the United States or Europe are even more appropriate in describing the LDC loan market. One consequence of these boom periods is a sharp reduction in risk aversion and risk premiums, so that riskier, high-beta assets tend to perform best, and LDC securities are an extreme example of high-beta securities. During liquidity or credit boom periods, LDC assets are the ones most likely to benefit. Of course during the reversal, these are the assets most likely to suffer.


As I will show in chapter 4, many of the nineteenth-century LDC lending booms were preceded by an explosion in the creation of joint-stock banks.


It is not coincidental that both of these periods—the early 1830s to 1837 and the late 1860s and early 1870s to 1873—were characterized by major lending booms to LDCs.


Another less obvious but nonetheless common Minsky-type displacement involves sharp increases in the turnover of some liquid asset. The first United States secretary of the treasury, Alexander Hamilton, understood this when he argued in the late 1780s for the creation of a unified national debt to replace the fragmented, illiquid, and confusing mixture of obligations generated by the thirteen colonies in the war against Great Britain. “It is a well-known fact,” he argued, “that, in countries in which the national debt is properly funded, and an object of established confidence, it answers most of the purposes of money.”

bonds. These new “Hamilton 6s”—so called because of the 6% coupon—began trading at 70% and within a few months had reached 93% of face value.


Columbia University economics professor Robert Mundell makes this point when he argues that the addition of very large, highly traded securities can cause a market’s liquidity to increase just as if there had been an increase in the money supply.


As securities move up the liquidity scale, they begin to act more and more “money-like”—not that they cross the line from “nonmoney” to “money” but rather that “money-ness,” or liquidity, is a continuous quality, not a static condition.


All types of assets, even cash, can become more or less liquid, and increasing the liquidity of a security can have the same effect as increasing the money supply.


An example of this liquidity effect is the “monetization” of U.S. real estate that has occurred over the past fifteen years. During this period, the value of mortgage bonds relative to residential real estate value has increased sharply, effectively making U.S. savings significantly more liquid (real estate holdings are an important component of the typical U.S. savings portfolio). This may be at least part of the explanation for both the stock market and the emerging market booms of recent years.


Another, more interesting example of this liquidity effect was the European stock market boom that followed the French reparation payments of 5 billion francs to Prussia after the 1870 war.


reparation bonds, as these, because of their huge size, visibility, and liquidity, could partially take the place of the money that had been transferred to Germany.


It ended with the global crisis that began with the Viennese stock market collapse of May 1873, spread to Germany and the United States, and finally ended with massive sovereign and corporate defaults around the world.


in base money, changes in financial structure, explicit or implicit banking deregulation, increases in the “money-ness” of some asset.


Any of these expansions can affect the cost of capital and, by affecting the subsequent return on assets, can increase risk appetite and/or reduce required risk premiums. As this happens, and as asset prices rise and the expected returns on safe assets decline, investors begin to widen their horizons in search of higher returns—they become “yield hogs” in Wall Street lingo—and the horizon often expands to include foreign investment opportunities.


The pressure to find investment outlets builds, and investors begin systematically to underestimate risk or overestimate growth prospects in non traditional sectors.


boom. A consequence of the sudden growth in both asset values and GDP (gross domestic product) is a seemingly simultaneous move to change or reform the government policies that had “failed” in the past. These initial reforms are often targeted to encourage further capital inflows (by conforming to the dominant theories of development economics), and, because the inflows provide profits and benefits that allow the government to overcome the resistance of the local elite, the capital inflows permit an acceleration of the reforms. This quickly creates positive feedback as foreign investors use the reforms to justify continued capital inflows.


This can be private-sector led and occur in the form of a reduction in “financial repression” (Ronald McKinnon’s term)12 or it can be caused by an expansion of public sector development banks.


In the 1920s, the United States ran trade and capital surpluses with a war-torn Europe, one of whose results was, in the words of John Maynard Keynes, “the shipment to the United States of all the bullion in the world.”13 This surge of domestic gold reserves formed the basis of the rapidly expanding money supply.


These massive price increases caused income to shift from high-consuming oil importers to high-saving OPEC nations, and the money ended up in bloated Eurodollar accounts that were recycled willy-nilly into the LDC lending boom.14


One type, like the recent Mexican and Asian crises, consist of sudden exogenous shocks that combine with a collapse in financial margin and a flight to quality—in which investors sell risky assets and buy low-risk assets such as U.S. Treasuries—to cause a temporary capital outflow from LDCs.


Unfortunately, these two sources of volatility—commodity prices and shifts in global liquidity—have historically been highly correlated, probably because a liquidity boom often results in low real borrowing costs, asset price booms, and consumption booms, all of which can feed into higher commodity prices.

This has important investment implications because it suggests that diversification among different LDC countries and regions has a limited impact on reducing volatility during times of market stress, when it is most needed.


Including western foreign policy


For one, and in contrast to conventional theory, the liquidity approach deemphasizes the link between domestic policies and the investment decision of foreign creditors.


Charles Kindleberger argues very plausibly that the cycle may have actually started earlier, when Federal Reserve chairman Arthur Burns lowered U.S. rates to help Richard Nixon’s 1972 reelection campaign at a time when Germany was running a very tight, antinflation monetary policy. The inconsistency in monetary policy between the two countries led to a huge outflow of funds from the U.S. into the Eurodollar market, and Eurocurrency banks were forced to find a new loan outlets, including, most famously and disastrously, Third World borrowers. See Charles P. Kindleberger, “Financial Deregulation and Economic Performance: An Attempt to Relate European Financial History to Current LDC Issues,” Journal of Economic Development 27, nos. 1–2 (October 1987).

