Jeffry Frieden

January 2016

Financial futures: From the Great Moderation to ZIRP and beyond

Financial crises have convulsed the world economy continually over the course of the past 25 years. From Mexico 1994 and East Asia 1997-1998 through Argentina, Turkey, and Russia, to the Great Recession that began in 2007, recurrent banking and currency catastrophes have shaken national, regional, and global economies. They appear to be an enduring feature of the contemporary international economic environment.

In what follows, I situate the causes of these rounds of monetary and financial distress in the global macroeconomic environment that emerged in the early 1990s. I then describe the course of several of these crises, and the serious economic and political problems they cause for affected countries. I end with some thoughts about how the world might effectively confront the threat financial instability poses to global economic growth and prosperity.

Capital flows: From the Great Moderation to ZIRP

International capital movements are a good thing. We want to see capital flow from where it is abundant to where it is scarce and productive. There are massive investment needs around the world, especially in developing countries, and there are countries with more savings than they want to spend. Nonetheless, international financial flows come with risks, and those risks include the possibility that they contribute to conditions for a financial crisis. In fact, we have now experienced repeated instances of capital-flow cycles that ended in crises. This suggests that there are fundamental, systematic, and structural features of the contemporary international macroeconomic and financial environment that are worth considering as potential causes of financial distress. Indeed, there has been a wide variety of experiences with a common theme.[1]

Contemporary international economic reality includes several crucial features. The first is an extremely high level of financial integration, reaching extraordinary proportions by the early 1990s. This allows capital to move from place to place with great speed and efficiency, even in response to relatively small differences in rates of return.

[1] The points made here are related to the more specific arguments made by Hélène Rey and co-authors about the global financial cycle, as for example in Miranda-Agrippino and Rey 2015.

The second feature is what has come to be known as the Great Moderation. Since the late 1980s, the advanced industrial countries – and, to a certain extent and eventually, much of the world – has experienced great macroeconomic stability. Inflation has been extremely low in all of the rich countries, and most of the emerging markets have had inflation rates that are also very low by historical and comparative standards. This had created strong expectations of a continuation of stable monetary conditions, and the virtual elimination of substantial inflationary expectations conduces to a reduction in nominal interest rates.

The final factor is the monetary-policy response to the Great Recession that began at the end of 2007. The major central banks of the G-7 all eventually drove target rates down to or near zero. The Great Moderation had already reduced nominal interest rates substantially – the Fed Funds rate was below two percent from late 2001 through late 2004. When the crisis hit, policy rates rapidly dropped virtually everywhere. Other rates followed, and even after recovery began rates of return on financial assets in the developed world remained extraordinarily low. The world had entered into a period of Zero Interest Rate Policy (ZIRP). The incentive effects were two-fold: first, investors in rich countries were eager to identify yields above those available at home; second, economic agents in emerging markets were eager to borrow at these historically low interest rates. The ZIRP-driven search for yield, and the search for loanable funds, brought supply and demand together, driving funds towards the emerging markets.

Financial integration and very low interest rates make it possible for relatively small differences in macroeconomic conditions to lead to large-scale capital movements. These financial trends can magnify the initial differences, as capital inflows stimulate economic activity and raise asset prices. This in turn encourages further financial flows, so that the process can be self-reinforcing. Eventually, especially if unchecked by macroeconomic or regulatory intervention, expansion leads to a boom, which turns into a bubble, which eventually – and inexorably – bursts.

Boom-bust credit cycles fueled by capital flows are certainly nothing new to the developing countries: the problem of pro-cyclical borrowing is of long standing. What is new that the developed countries now seem equally susceptible to the cycle. To a large extent, this is indeed a function of the factors mentioned: high levels of financial integration along with very low interest rates. Financial integration makes enormous, rapid capital flows easy; very low interest rates lead investors (including fund managers with defined return obligations) to scour the world in search of yield. The result has been a continuing series of capital flow cycles: large-scale financial inflows creating booms and bubbles, which eventually burst, leaving behind a debt overhang that causes economic and political distress.

From the US to Europe to the Emerging Markets

Several vignettes illustrate the pattern. The first is the global experience in the decade after 2000, headlined by the United States but accompanied by a score of other countries. This was an extraordinary time in the organization of world economic activity. The broad outline was that the world divided into capital-importing (deficit) countries and capital-exporting (surplus) countries. Generally speaking, capital flowed in enormous quantities from relatively slow-growing surplus countries, such as Germany and Japan, to more rapidly growing deficit countries, such as the United States and the European periphery. (The role of China is something of a special case, related to the country's export-driven exchange rate policy.)

The borrowing countries, led by the United States, grew on the basis of debt-financed consumption. The more Americans borrowed, the higher went the price of American assets, especially real estate; the higher asset prices and collateral values went, the greater were the incentives to borrow, and to lend; and so on until 2007. At that point, the merry-go-round stopped and the American housing market brought the borrowing cycle down with a crash, taking the world with it.

At much the same time, a microcosmic variant of this process was going on in the European Union. Again, the episode began with capital moving from slow-growing countries to more rapidly growing ones. In this case, finance flowed from Northern Europe to countries in Eastern, Central, and Southern Europe. [2]As elsewhere, capital

[2] As Blanchard and Giavazzi 2002 demonstrate, this implied that it was flowing "downhill," in its natural direction – from regions of lower productivity to regions of higher productivity.

flows began due to the initial difference in expected rates of return between Northern and peripheral Europe, and these flows then intensified the differences. Economies from Latvia to Spain heated up, asset prices rose, and the incentives to borrow (and lend) grew. The American collapse brought the cycle to an end, although it took a bit more time for the accumulated debt to realize its full impact. There were unique characteristics of this particular European instance of the boom-bust borrowing cycle, especially having to do with those countries inside the Eurozone. However, the broad outlines of the capital flow-driven boom-bust cycle were similar both inside and outside the Eurozone.[3]

A final instance is still playing itself out in the emerging markets. As interest rates plummeted toward ZIRP in the OECD, especially after 2008, investors scrambled even more aggressively for higher-yielding investments. They found such investments in the emerging markets, many of which continued to grow rapidly during the Great Recession. The result was, again, a flood of capital from the recession-ridden North to the rapidly growing emerging markets.[4] Much of the financing took the form of lending

---

[3] Both the American and European experiences have received enormous attention. For one early analysis see Chinn and Frieden 2011.

[4] The details of this trend is less well-known than the previous two. For further information see, for example, Arslanalp and Tsuda 2014, Du and Schreger 2015, McCauley et al. 2015, Sobrun and Turner 2015, and Turner 2014,

to national governments. In fact, in this period many emerging-market governments found themselves able to borrow from foreigners in their own currencies for the first time in their history.[5] Another large portion of the capital flow went to private financial and non-financial corporations in the emerging markets, most of which remained able only to borrow in foreign currencies. As before, the process fed on itself: the more money went into the borrowing countries, the stronger their currencies got, and the cheaper borrowing became. Eventually, however, it became clear that the era of very low and falling nominal interest rates in the North might be coming to an end, investor interest in the emerging markets faded, capital flows began to reverse, and by 2015 many of the formerly booming emerging markets found themselves headed toward the bust phase of the capital flow cycle.

These experiences are reminiscent of patterns much remarked upon in the interwar period, when financial flows were often said to make good times better and bad times worse. In the early 1950s Ragnar Nurkse reflected, in retrospect, that this led some “to compare foreign credit to an umbrella which a man is allowed to borrow as long as the weather is fine, but which he has to return the moment it starts raining” (Nurkse 2011). The role of international capital flows in domestic credit cycles, and

[5] This implied that these particular emerging markets had somehow atoned for their “original sins” which had made it impossible for them to borrow in their own currencies.

especially in contributing to volatile patterns of boom and bust, is likely to be a common thread running through contemporary economic experience.

After the deluge

The damage done by the downswing in the capital flow cycle is both economic and political, and the effects of such debt crises can last a very long time.[6] Economically, such financial crises leave the affected countries with a debt overhang that severely restricts recovery. The weight of problematic debts leaves both creditors and debtors constrained. Creditors need to restore their balance sheets, and have little incentive to engage in further lending, especially to riskier borrowers. Debtors need to find ways to service their existing debts, and have little incentive to take on further liabilities, which will only eat up the benefits of any recovery they might experience. The debt overhang impairs both lending and borrowing, exerts downward pressure on economic recovery, and dampens output growth.

Politically, debt crises typically degenerate into bitter battles over how the adjustment burden will be distributed.[7] Creditors work to get as many of their obligations recognized and serviced as they can; debtors fight for a restructuring of their debts. Each side has weapons: creditors can cut off future supply, while debtors

[6] A now-classic presentation of the data is in Reinhart and Rogoff 2009. See also Funke et al. 2015 and Mian et al. 2014.

[7] Frieden 2015b is one summary of the problem.

can default. The battles also often implicate powerful groups *within* creditor and debtor countries, further inflaming social and political controversy. In debtor nations, conflict revolves around who will bear the burden of the austerity measures necessary to service outstanding debts. In creditor nations, conflict implicates domestic financial institutions, investors, and taxpayers, as they jockey to limit the costs to themselves of whatever debt restructuring may take place.

Both the American and European episodes described above have given ample evidence of how pernicious and long-lasting the effects of a financial crisis can be. In Europe, in particular, economic recovery has lagged dramatically: economic activity in the Eurozone remains below its pre-crisis level, and political strife has ratcheted upward with every passing year of economic stagnation. The third episode, in the emerging markets, has similarly caused economic and political difficulties in the affected nations.

Capital flow cycles and currency politics

Capital-flow cycles of this sort also create dilemmas for national monetary, and especially exchange-rate, policy.[8] Many or most of these capital-flow cycles lead to substantial currency misalignments. As capital starts flowing in, the real exchange rate typically appreciates. This could be due to nominal appreciation as demand for assets in

[8] Frieden 2015a covers the general issue; chapters 4 and 6 deal in part with the European and Latin American experiences with financial crises.

the borrowing-country currency rises. It could also be a real appreciation, as economic expansion raises the price of non-tradable goods and services. In either case, the real exchange rate and asset prices usually bubble upward together, confronting the monetary authorities with a dilemma. They can try to counteract the real appreciation, inasmuch as a major misalignment – and its inevitable reversal – can be disruptive and costly. Or they can allow the process to take its course, resolving to try to clean up after the fact. Most of the evidence indicates that prevention is more effective than cure, and yet political-economy factors (of which more below) make it unusual for national macroeconomic policies to attempt to dampen a capital-flow cycle.

The reasons are largely political. Governments have trouble reining in economic expansion – taking away the punch bowl, in William McChesney Martin's memorable phrase, just at the party gets started. The average constituent has little or no way of knowing if the governments' warnings are accurate, and if the austerity measures imposed are necessary; and in any case *slowing* economic growth is never popular. There are also specific interest groups that can swing into action to resist measures to slow or unwind a capital inflow and real appreciation. In the recent European peripheral and emerging-market cases, these have prominently included economic agents with substantial foreign-currency liabilities.[9] Any depreciation of the currency raises the real debt burden of those with foreign-currency debts, and is resisted.[10]

Whatever the reason, the reality is that we can expect the contemporary international economy to be faced with successive rounds of these capital flow cycles and subsequent financial crises. This then raises the question of whether something can, or should, be done about the prospect of recurrent crises of this nature.

Financial globalization and global financial governance

A traditional view is that national macroeconomic distress is a purely national problem: bad government policies punish the country whose government pursues them, and nobody else. From this perspective, the costs of a financial crisis are fully borne by those who created it, creditors and debtors alike, and there is no need for anything other than national government attention to the problem.

The experience of the past 25 years would appear to contradict this view.[11] Contemporary levels of international financial integration mean that financial distress is

---

[9] This of course does not apply to those countries that had already adopted the euro, but as Walter 2013 makes clear, it was an important consideration for countries in Eastern and Central Europe that were not in the Eurozone at the time the crisis hit.

[10] Walter 2013 addresses these and related issues in detail, both theoretically and empirically.

[11] Frieden forthcoming summarizes the argument and experience.

transmitted rapidly, and often with devastating effect, from country to country and region to region. The extent of financial interdependence creates substantial scope for externalities and spillovers. Mexico's 1994 debt crisis, whose origins were almost entirely domestic, had broad regional and even international effects. And, of course, distress in the sub-prime portion of the American mortgage market ended up spurring the gravest financial and economic crisis since the 1930s – in part as it became clear how exposed European financial institutions were to risky investments in to the U.S. real estate market.

The potential contagion of financial crises is not the only way in which capital-flow cycles create externalities for countries other than those that are directly involved. To take just one example, a substantial currency appreciation in a country experiencing a major capital inflow often creates powerful domestic political pressures for trade protection.[12] This can in turn provoke counter-measures – including explicit retaliation – by trading partners, threatening to generate controversy over trade policy. Indeed, currency misalignments have arguably been a greater irritant to international trade over the past decade than explicit trade policy. In this sense, there are substantial international implications of national experiences with the macroeconomic consequences of capital flow cycles.[13]

---

[12] See, for example, Broz and Werfel 2014.

[13] Frieden et al. 2012 develops the argument and evidence in more detail.

Political leaders from many countries appear to recognize the broad global implications of these trends. Indeed, there have been substantial efforts to monitor the "global macroeconomic imbalances" associated with major international capital movements. These efforts have not been particularly successful, but the fact that the problem has been recognized at the highest levels of the world's major economic powers is at least a step toward addressing the issue.

Conclusions

Today's international economy is characterized by an extraordinarily high level of financial globalization. This is, generally speaking, a good thing, inasmuch as it allows capital to move from where it is less productive to where it is more productive. Certainly there are massive economic needs, and investment opportunities, in the developing world. If rich countries have more capital than they can productively invest at home, we should welcome an international financial system that allows these savings to be channeled to governments, firms, and households in countries that are starved for capital.

However, recent experience demonstrates that with the benefits of international financial integration come substantial potential costs. Foremost among these is the tendency for capital-flow cycles to contribute to credit booms and busts in borrowing nations, with costly effects for both borrowers and lenders. One of the more pressing challenges for the future of the world economy is to make it possible to take full advantage of today's broad and deep international capital markets while limiting the damage that financial crises can cause.

References

Arslanalp, Serkan and Takahiro Tsuda. 2014. Tracking Global Demand for Emerging Market Sovereign Debt. IMF Working paper.

Blanchard,Olivier and Francesco Giavazzi. 2002. Current Account Deficits in the Euro Area: The End of the Feldstein Horioka Puzzle? *Brookings Papers on Economic Activity* 33(2): 147-210.

Broz, Lawrence and Seth Werfel. 2014. Exchange Rates and Industry Demands for Trade Protection. *International Organization* 68, 2 (May): 393-416.

Chinn, Menzie and Jeffry Frieden. 2011. *Lost Decades: The Making of America's Debt Crisis and the Long Recovery.* New York: W. W. Norton.

Du, Wenxin and Jesse Schreger. 2015. Sovereign Risk, Currency Risk, and Corporate Balance Sheets. Working paper.

Frieden, Jeffry, Michael Pettis, Dani Rodrik, and Ernesto Zedillo. 2012. *After the Fall: The Future of Global Cooperation* Geneva Report 14. London: Center for Economic Policy Research.

Frieden, Jeffry 2015a. *Currency Politics: The Political Economy of Exchange Rate Policy.* Princeton: Princeton University Press.

Frieden, Jeffry. 2015b. The Political Economy of Adjustment and Rebalancing. *Journal of International Money and Finance* 52 (January).

Frieden, Jeffy. Forthcoming. The Governance of International Finance. *Annual Review of Political Science* 19.

Funke, Manuel, Moritz Schularick and Christoph Trebesch. 2015. Going to Extremes: Politics After Financial Crises 1870-2014. CEPR working paper 10884.

McCauley, Robert, Patrick McGuire, and Vladyslav Sushko, "Dollar credit to emerging market economies," *BIS Quarterly Review* December 2015: 27-41.

Mian, Atif, Amir Sufi, and Francesco Trebbi. 2014. Resolving Debt Overhang: Political Constraints in the Aftermath of Financial Crises. *American Economic Journal: Macroeconomics* 6(2) (April): pp.1-28.

Miranda-Agrippino, Silvia and Hélène Rey. 2015. World Asset Markets and the Global Financial Cycle.

Nurske, Ragnar. 2011. *Ragnar Nurkse: Trade and Development* Edited by Rainer Kattel, Jan Kregel, and Erik S. Reinert. New York: Anthem Press.

Reinhart, Carmen and Kenneth Rogoff. 2009. *This Time is Different: Eight Centuries of Financial Folly*. Princeton: Princeton University Press.

Sobrun, Jhuvesh and Philip Turner. 2015. Bond markets and monetary policy dilemmas for the emerging markets. BIS Working Paper No. 508. Bank for International Settlements: Basel.

Turner, Philip. 2014. The global long-term interest rate, financial risks and policy choices in EMEs. BIS Working Paper No. 441. Basel: Bank for International Settlements.

Walter, Stefanie. 2013. *Financial Crises and the Politics of Macroeconomic Adjustment*. Cambridge: Cambridge University Press.