Reflections on the International Dimensions and Policy Lessons of the U.S. Subprime Crisis

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"There is nothing new except what is forgotten."

Mlle. Rose Bertin

The financial press has often characterized the 2007-2008 United States subprime mess as a new breed of crisis. Indeed, this view often points to the international repercussions of the U.S.-based crisis as evidence that the globalization of financial portfolios has introduced new channels for spillovers that were never present before. At present, there is also considerable confusion in academic and policy circles as to whether the shaky predicament of the global economy owes to contagion or to shared (common) economic fundamentals. I address these issues, in turn, and discuss some of the questions, as regards regulation of financial institutions, that the current crisis has raised.

Financial Crisis: the setting

Across countries and over the centuries, economic crises of all type follow a similar pattern.[1] An innovation emerges. Sometimes it is a new tool of science of industry, such as the diving bell, steam engine, or the radio. Sometime it is a tool of financial engineering, such as the joint-stock company, junk bonds, or collateralized debt obligations. Investors may be wary at first, but then they see that extraordinary returns appear available on these new instruments and they rush in. Financial intermediaries—

[1] Michael D. Bordo (2007), "The Crisis of 2007: The Same Old Story Only the Players have Changed". At Michael Bordo's webpage.

banks and investment companies—stretch their balance sheets so as not to be left out. The upward surge in asset prices continues, and that generation of financial market participants concludes that rules have been rewritten: Risk has been tamed, and leverage is always rewarded. All too often, policy makers assert that the asset-price boom is a vote of confidence on their regime—that "this time is different". Only seldom, to my knowledge, do they protest that perhaps the world has not changed and that the old rules of valuation still apply.

But the old rules *do* apply. The asset price rise peters out, sometimes from exhaustion on its own or sometimes because of a real shock to the economy. This exposes the weaknesses of the balance sheets of those who justified high leverage by the expectation of outsized capital gains. Many financial firms admit losses, and some ultimately fail. All those financial firms hunker down, constricting credit availability in an effort to slim their balance sheets. With wealth lower and credit harder to get, economic activity typically contracts. Only after the losses are flushed out of the financial system and often with the encouragement of lagging monetary and fiscal ease does the economy recover.

The role of the real estate market

This sorry spectacle repeats itself in the various types of crises, but the most relevant to the present situation is the aftermath of banking crises. In recent work with Kenneth Rogoff, I documented eighteen such episodes in industrial economies over the past thirty years. [2] [3] Declines in assets, including those of both houses and equities that

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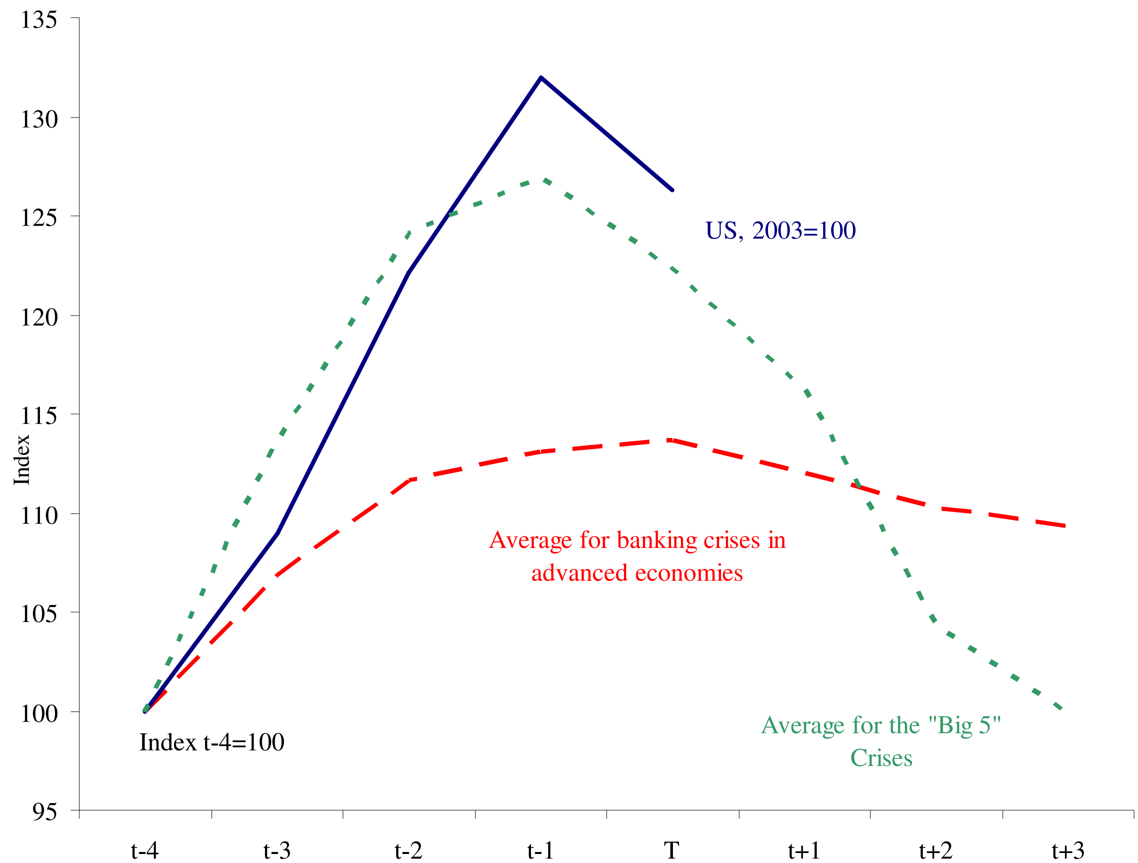
[2] Carmen M. Reinhart and Kenneth S. Rogoff (2008), "Is The 2007 U.S. Subprime Crisis So Different? An International Historical Comparison," forthcoming in *American Economic Review*, May.

the United States has experienced over the past year, are common markers of the onset of banking crises. In the worst five banking crises (*The Big Five)* in industrial countries over the past thirty years, the value of houses fell about 25 percent on average from their peak (Figure 1)

Figure 1: Real Housing Prices and Banking Crises



Sources: Reinhart and Rogoff (2008) and sources cited therein.

The fallout of banking crises

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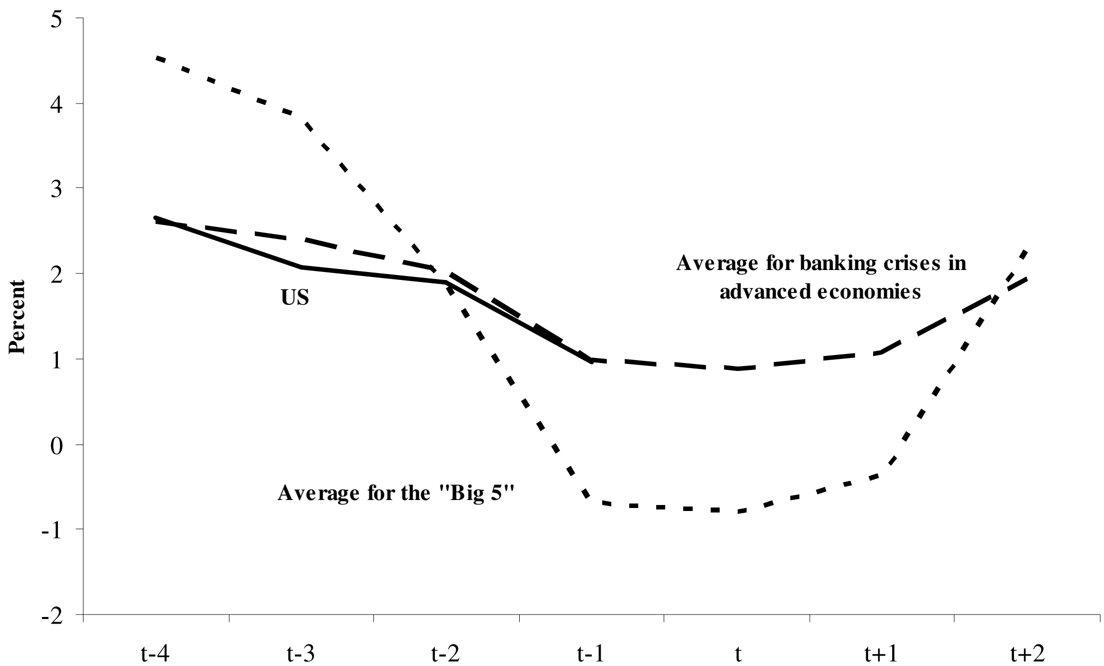
[3] *The Five Big Five Crises*: Spain (1977), Norway (1987), Finland (1991),Sweden (1991) and Japan (1992), where the starting year is in parenthesis.
Other Banking and Financial Crises: Australia (1989), Canada (1983), Denmark (1987), France (1994), Germany (1977), Greece (1991), Iceland (1985), and Italy (1990), and New Zealand (1987), United Kingdom (1974, 1991, 1995), and United States (1984).

The cautionary lesson for today's situation in the United States is that the decline in output after a banking crisis is both large and protracted (Figure 2). The average drop in (real per capita) output growth is over 2 percent, and it typically takes two years to return to trend. For the five most catastrophic cases, the drop in annual output growth from peak to trough is over 5 percent, and growth remained well below precrisis trend even after three years.

Figure 2: Real GDP Growth per Capita and Banking Crises
(PPP basis)



Sources: Reinhart and Rogoff (2008) and sources cited therein.

The international repercussions of the U.S. crisis: contagion or confusion?

Swift international spillovers are not a new phenomenon. In this regard, the panic of 1907, which began in the United States and quickly spread to other advanced economies (particularly, Denmark, France, Italy, Japan, and Sweden), serves as an illustrative historical benchmark for modern-day financial contagion. [4] Like in the present episode, emerging markets were mostly spared in 1907; the only casualty in that episode was Mexico.

There is little doubt that the U.S. crisis has spilled over into other markets. Two major advanced economies, Japan and Germany, have been singled out by the financial press as being particularly hard-hit by the crisis in the United States. There is no denying that German and Japanese financial institutions sought more attractive returns in the U.S. subprime market, perhaps owing to the fact that profit opportunites in domestic real estate were limited at best and dismal at worst (Figure 3). Indeed, after the fact, it has become evident that financial institutions in these countries had nontrivial exposure to the U.S. sub-prime market.[5] This is a classic channel of transmission or contagion, through which a crisis in one country spreads across international borders. In the present context, however, contagion or spillovers are only a part of the story

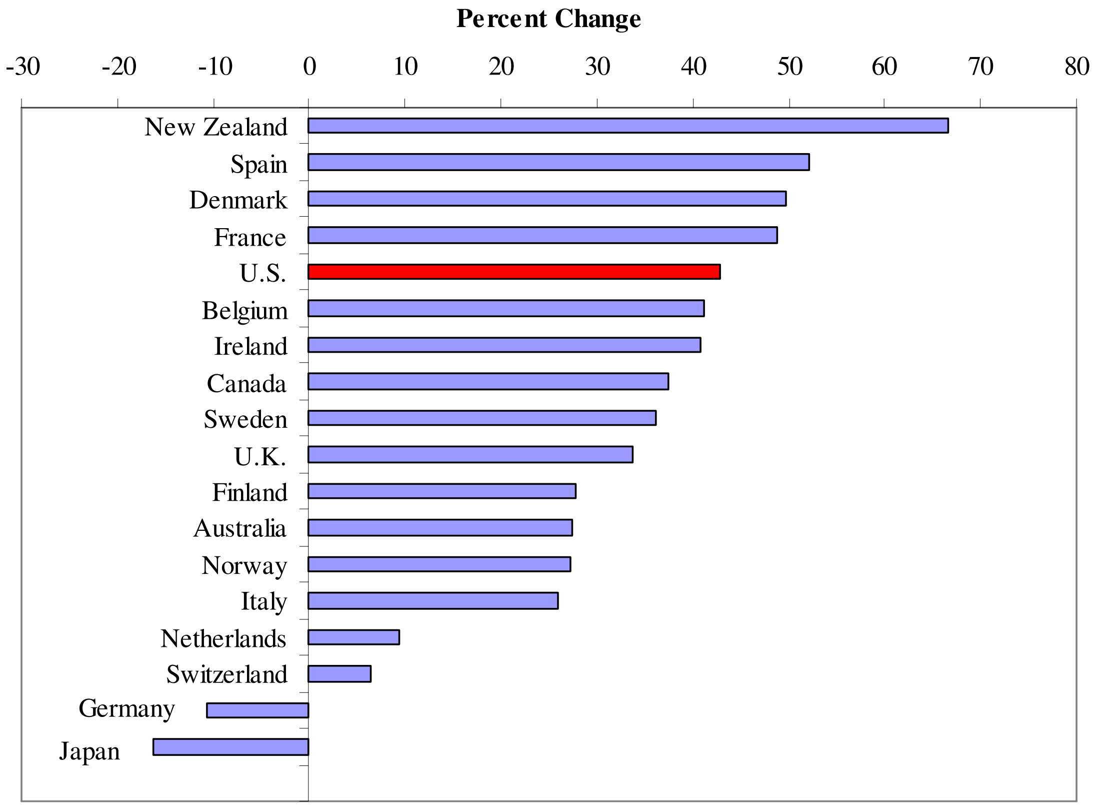
If other countries are experiencing economic difficulties at the same time as the United States, it importantly owes to the fact that many of the features that characterized the run-up to the subprime crisis in the U.S. were also present in many other advanced economies. Specifically, many countries in Europe and elsewhere (New Zealand, for example) were having their own home-grown real estate bubbles (Figure 3). This, in and of itself makes, these countries vulnerable to the usual nasty consequences of asset market crashes—irrespective of what may be happening in the United States. This cannot be pinned on the U. S. subprime fiasco or on contagion. The odds of a correction were

[4] See , Reinhart and Rogoff (2008).

[5] Owing to the opaqueness of balance sheets in many of these financial institutions in these countries the full extent of exposure is, as yet, unknown.

already present.

Figure 3. Percent Change in Real Housing Prices: 2002-2006



Sources: Shiller, and Bank of International Settlements.

Policy Lessons: the banana republic approach to banking supervision

As Venezuela's worst banking crisis unfolded in 1994-1995 (conservative estimates of the bailout costs of that crisis are at around 18 percent of GDP), no one in that country seemed to know whose responsibility it was to supervise the financial institutions. As is usual in most banking crises, lending standards had become lax, there was interconnected lending, and there was plenty of plain old-fashioned graft. The central bank blamed the main regulatory agency (SUDEBAN), the regulatory agency blamed the deposit insurance agency (FOGADE), and everyone else blamed the central bank. [6]

At the time of that crisis, the received wisdom was that such supervisory disarray could only happen in an emerging market; advanced economies had outgrown such chaos. We now know better.

For starters, part of the supervisory responsibilities in the United States is delegated to the states, which is to say that 50 emerging markets agencies were partially responsible for the oversight of real estate lending. Supervisors failed to caution depositories as they offered potential borrowers unsuitable mortgages. They also acquiesced as complicated structures were booked off the balance sheet, even though, in the event, they were not treated as such by corporate headquarters at the first sign of stress. And after the fact, they have pointed to the other guy as responsible for the problem.

In the private sector, mortgage brokers often sought no more assurance of future repayment than a signature. That act of faith was made easier because their own compensation owed to originating loans rather than how the loans played themselves out. And underwriters took that raw material of mortgages and somehow convinced themselves that the law of large numbers would make the whole better than the sum of its parts, even though many of those pieces needed double-digit house price growth to make economic sense. Credit rating agencies, encouraged by their own fee structure, listened attentively to underwriters' assurances of the power of pooling and their ability to predict despite a limited track record. And final investors substituted the judgment of the rating

[6] Superintendencia de Bancos y Otras Instituciones Financieras (SUDEBAN) ; Fondo de Garantías de Depósitos y Protección Bancaria (FOGADE) .

agencies for their own due diligence, perhaps abetted by regulation and accounting rules that imparted special significance to those judgments.

No doubt, change is needed in both the private and public sectors. My immediate fear is that, as in most prior episodes, the initial reaction will be overdone and inefficient. Financial institutions are already tightening the terms and standards for new lending at a ferocious clip. Rating agencies, following their pro-cyclical tendencies, will overreact as well in the effort to distract the investing public from their laxness of the past few years by strict standards going forward. [7] Similarly, bank examiners will interpret the regulations narrowly, reinforcing the natural tendencies of depositories to tighten credit availability.

And last but not least, politicians have already turned their focus toward the financial industry. If the regulation of financial institutions needs to be revisited, there are compelling arguments to pare the multitude of regulators of depository institutions and insurance companies and to restructure the supervision of rating agencies. [8] But the outcome of hurried debate in the heat of the moment is more likely to be legislative overreach than informed policy making. It would be far better to get the job done right than get the job done quickly.

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[7] See Carmen M. Reinhart (2002), "Sovereign Credit Ratings Before and After Financial Crises," and other chapters in Richard Levich, Giovanni Majnoni, and Carmen M. Reinhart, eds. *Ratings, Rating Agencies and the Global Financial System*, (New York: Kluwer Academic Press, 2002).

[8] See Richard Portes (2008) "Rating Agencies Reform" http://www.voxeu.org/index.php?q=node/887 for an insightful discussion.