## Systemic Risk is Worse Now than in 2008

By Martin Hutchinson Thu, Jul 3, 2014

"When monetary policy is so extreme for so long, it results in more systemic risk. It's as simple as that," worries our ever-gloomy guest commentator, who pens the Bear's Lair column at prudentbear.com.

Since the crash of 2008, huge attention has been paid by regulators to systemic risk, the risk that some event will cause the crash of the entire banking system, not just of an individual bank. Tens of thousands of pages of financial regulations have been written, and almost as many thousands of speeches have been bloviated, about how we now understand the dangers of "too big to fail" and therefore a crash such as occurred in 2008 can never happen again.

Needless to say this is nonsense; systemic risk is worse now than it was in 2008. What's more, the next crash will almost certainly be considerably nastier than the last one.

The main issue addressed by legislation has been "too big to fail," the idea that some banks are so large that their failure would cause a catastrophic economic collapse and hence they must be propped up by taxpayers. It will not surprise you to learn that I don't regard this as the central problem.

Most of the risks in the banking system today are present in a wide range of institutions, all of which are highly interconnected and getting more so. Hence a failure in a medium-sized institution, if sufficiently connected to the system as a whole, could well have systemic implications. At the same time, pretty well all banks use similar (and spurious) risk-management systems, while leverage—both open and more dangerously hidden—is high throughout the system. Foolish monetary policy is foolish for all, and if a technological disaster occurs, it is likely to affect software used by a substantial faction of the banking system as a whole. There are a number of good reasons to break up the banking behemoths, but breaking them up on its own would not solve the systemic risk problem.

Systemic risk has been exacerbated by modern finance for a number of reasons. The system's interconnectedness is one such reason, because of the cat's cradle of derivatives contracts totaling some \$710 trillion nominal amount (per BIS figures for December 2013) that stretch between different institutions worldwide.

Some of these contracts such as the \$584 trillion of interest-rate swaps are not especially risky (except to the extent that traders have been gambling egregiously on the market's

direction). However, other derivatives, such as the \$21 trillion of credit-default swaps (CDS) and options thereon, have potential risk almost as great as their nominal amount. What's more, there are \$25 trillion of "unallocated" contracts. My sleep is highly troubled by the thought of 150% of U.S. Gross Domestic Product (GDP) in contracts which the regulators can't define!

The problem is made worse by the illiquidity of many of these instruments. Any kind of exotic derivative with a long-term maturity is likely to trade very seldom indeed once the initial flush of creation has worn off. These risks have been alleviated by trading standard contracts on exchanges. But even if banks' risk management were good, failure of a major counterparty or, heaven help us, of an exchange, would cause systemic havoc because of its interconnectedness.

Another systemic risk worsened by modern finance is that of inadequate risk management. This has in no way been improved by the 2008 crash. More than three years after the crash (and nearly two years after Kevin Dowd and I had anatomized its risk management failures in "Alchemists of Loss"), J.P. Morgan was still using a variation on Value-at-Risk to manage its index CDS positions in the London Whale disaster. Morgan survived that one, but there seems no reason from a risk-management perspective why the Whale's loss should not have been \$100 billion just as easily as \$2 billion—which Morgan would not have survived. Regulators have done nothing to solve this problem. Indeed, the new Basel III rules continue to allow the largest banks to design their own risk-management systems, surely a recipe for disaster.

You may feel that risk management, at least, is a problem exacerbated by the size of the too-big-to-fail banks. However, this is not entirely so. Each bank will commit its own trading disasters, so that a reversion to smaller banks would equally revert to smaller but more frequent trading disasters, surely an improvement (and the London Whale's successors would be less likely to get megalomania and attempt to control an entire market). On the other hand, if the market as a whole does things not contemplated by the risk-management system—Goldman Sachs' David Viniar's "25-standard deviation moves, several days in a row" as in 2007—then since all banks use risk-management systems with similar flaws, they are all likely to break down at once, producing systemic collapse. As I shall explain below, I expect the next market collapse to take place in pretty well all assets simultaneously, with nowhere to hide. Hence a collapse in the global banking system's risk management, affecting most assets, will cause losses to pretty well all significant banks. No amount of regulation will sort that one out.

Modern finance has also made systemic risk worse through its incomprehensibility, opacity and speed. Neither the traders nor the "quants" designing new second- and third-order derivative contracts have any idea how those contracts would behave in a crisis, because they have existed through at most one crisis, and their behavior is both leveraged to and separated from the behavior of the underlying asset or pool of assets. Banks do not know their counterparties' risks, so cannot assess the solidity of the institution with which they are dealing. And in "fast-trading" areas, computers carry out trading algorithms at blistering speed, thus producing unexpected "flash crashes" in which liquidity disappears and prices jump uncontrollably.

The opacity of banks' operations is made worse by "mark-to-market" accounting, which foolishly causes banks to report large profits as their operations deteriorate, the credit quality of their liabilities deteriorates and their value of those liabilities declines. This makes the banks' actual operating results in a downturn wholly incomprehensible to investors.

The leverage problem has not gone away, in spite of all the attempts since 2008 to control it. Furthermore, much of the financial system's risk has been sidelined into non-bank institutions such as money-market funds, securitization vehicles, asset backed commercial paper vehicles and, especially, mortgage REITs, which have grown enormously since 2008. These vehicles are less regulated than banks themselves, and where the regulators have tried to control them, they have got it wrong. For example, huge efforts have been made, backed by the banking lobby, to mess up the money market fund industry, which has only ever had one loss, and that for less than 1% of the value of the fund. Conversely, the gigantic interest-rate risks of the mortgage REITs, which buy long-term mortgages and finance themselves in the repurchase market, are quite uncontrolled and a major danger to the system.

Let us not forget the role of technology, a substantial and growing contributor to systemic risk. The large banks these days develop very little software of their own, relying instead on packages both large and small from outside suppliers. The "Heartbleed" bug of April 2014 showed that even tiny programs such OpenSSL, universally used, can be attacked in ways very difficult to defend against, and that bring vulnerability to the bank's entire system. A malicious hacker somewhere in the vast and expanding Russo-Chinese sphere of influence, or even a domestic teenager, could at any time produce a bug that slipped through the protective systems common to most banks, damaging or even bringing down the system as a whole.

However, the greatest contributor to systemic risk, and the reason why it is worse today

than in 2008, is monetary policy. It had been over-expansive since 1995, causing a mortgage finance boom in 2002-06 which was anomalous in that less prosperous areas and poorer people received more new mortgage finance than the rich ones. However, its encouragement to leverage has never been so great as in the period since 2009. Consequently, asset prices have risen worldwide and leverage both open and, more importantly, hidden has correspondingly increased.

In general, very low interest rates encourage risk-taking. Monetary policy makers fantasize that this will produce more entrepreneurs in garages. Actually, banks won't lend to entrepreneurs, so it simply produces more fast-buck artists in sharp suits. The result is more risk. When monetary policy is so extreme for so long, it results in more systemic risk. It's as simple as that.

Precisely what form the crash will take, and when it will come, is still not clear. It's possible that it will be highly inflationary. If the \$2.7 trillion of excess reserves in the U.S. banking system starts getting lent out, the inflationary kick will be very rapid indeed. However it's also possible the mountain of malinvestment resulting from the last five years' foolish monetary policy will collapse of its own weight without inflation taking off. Either way, the banking system crash that accompanies the downturn will be more unpleasant than the last one, because the asset price decline that causes it will not simply be confined to housing, but will be more or less universal.

After that, systemic risk may be very much reduced—mostly because we won't have much of a banking system left!

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