The Financial Crisis

Financial crises are often compared to epidemics. First one institution fails, then another, and the crisis spreads by contagion. But while epidemics spread by contagion, the current crisis is more like an infection with a single major vector that impacts all of the institutions at once. In the current crisis there are several root sources of a common ailment that impacted many of the institutions simultaneously, in particular, the rapid deterioration in fixed income asset prices, beginning with residential housing, spreading to corporate lending and now infecting all manner of consumer lending. The question of contagion is the issue of systemic risk where one failing institution takes many others down with it and starts a cascade of failures. That is certainly a concern but as we shall see, as a focus it can lead to a misdiagnosis and treatment.

Like all infections, the severity depends on the weakened condition and the susceptibility of the patient. That the patient was weakened is no mystery. At the core of the world economy is a growing imbalance between the productivity of the importing nations and the source of their growth and that of the world economies that export to them. Western nations are simply not as productive as they used to be. Labor costs are high, capital is no longer in great scarcity in developing and newly developed nations, and the structure of the US and other Western economies is changing rapidly and under duress. The problems have been growing for years. Prior to 2008, the consumer was the engine of the growth in the US and Western European economies. From consumer durables, to clothing and, of course, to housing, the Western consumer was on a binge of unprecedented magnitude. But, if the consumer was no longer as productive, how was this financed? By the self interested largesse of the exporting nations. To maintain their economies at full capacity, the exporters - largely Asian - were more than willing to lend the American consumer to purchase their goods. The alternative for them was to retard their own growth and the extraordinary demographics of their economies as the urban centers grew while the rural ones declined.

This is not to say that there are not great springs of productivity in the West. The West remains the center of technical innovation. Agriculture in the West is extraordinarily productive, and education - particularly higher education - is the model for the rest of the world. And the view from New York can be distorted; while finance and finance related activities suffer, in the heartland the decline in the dollar has strengthened some basic industries. What we no longer can compete with is the mass production of automobiles and large consumer durables. While each industry has its own story, the bottom of this is that foreign countries have lower labor costs and sufficient technology and capital to out compete the US and that will continue perhaps with mixed production models where most of the physical production is outsourced abroad. In addition, newly developed and rapidly economies of the rest of the world, particularly in China and India, have enormous internal markets and to a great extent the hope and intention is that that will insulate them from the problems in the West and their dependence on Western demand to fuel their growth.

The current crisis is often compared to the Great Depression, although the hope of all is that this will be more of a footnote to history than a chapter. But the comparison is not apt. A better historical precedent can be found in the European crash of 1873. I can do no better than quote from an email from Scott Reynolds Nelson, an historian who works on the 19th century:

"In the Austro-Hungarian Empire, formed in 1867, in the states unified by Prussia into the German empire, and in France, the emperors supported a flowering of new lending institutions that issued mortgages for municipal and residential construction, especially in the capitals of Vienna, Berlin, and Paris. Mortgages were easier to obtain than before, and a building boom commenced. Land values seemed to climb and climb; borrowers ravenously assumed more and more credit, using unbuilt or half-built houses as collateral. The most marvelous spots for sightseers in the three cities today are the magisterial buildings erected in the so-called founder period.

But the economic fundamentals were shaky. Wheat exporters from Russia and Central Europe faced a new international competitor who drastically undersold them. The 19th-century version of containers manufactured in China and bound for Wal-Mart consisted of produce from farmers in the American Midwest. They used grain elevators, conveyer belts, and massive steam ships to export trainloads of wheat to abroad. Britain, the biggest importer of wheat, shifted to the cheap stuff quite suddenly around 1871. By 1872 kerosene and manufactured food were rocketing out of America's heartland, undermining rapeseed, flour, and beef prices. The crash came in Central Europe in May 1873, as it became clear that the region's assumptions about continual economic growth were too optimistic. Europeans faced what they came to call the American Commercial Invasion. A new industrial superpower had arrived, one whose low costs threatened European trade and a European way of life. As continental banks tumbled, British banks held back their capital, unsure of which institutions were most involved in the mortgage crisis. The cost to borrow money from another bank — the interbank lending rate — reached impossibly high rates. This banking crisis hit the United States in the fall of 1873. Railroad companies tumbled first. They had crafted complex financial instruments that promised a fixed return, though few understood the underlying object that was guaranteed to investors in case of default.

(Answer: nothing). The bonds had sold well at first, but they had tumbled after 1871 as investors began to doubt their value, prices weakened, and many railroads took on short-term bank loans to continue laying track. Then, as short-term lending rates skyrocketed across the Atlantic in 1873, the railroads were in trouble. When the railroad financier Jay Cooke proved unable to pay off his debts, the stock market crashed in September, closing hundreds of banks over the next three years. The panic continued for more than four years in the United States and for nearly six years in Europe."

There is little in this tale except the names – China for America - that have to be changed to get a reasonable description of what has happened in 2008 and continues today. The West has been financed by the new producing economies of the East and that has fueled the housing and consumption binge. And, not unlike 1873, the financial institutions and the new financial instruments made this easier. And the role of government and the press to prod an expansion of affordable housing played a major role. Another element that is often ignored is the role of regulation. Much is made of the greed of Wall Street but finance only facilitated the speed with which it all occurred it was not the cause. As the financial flows and assets built up at banks and other financial institutions, regulation required for good risk control that they invest in high rated debt instruments. This created an enormous and somewhat artificial demand for AAA and investment grade instruments that Wall Street accommodated. So high was demand, that yield spreads on such investments from Treasuries and truly risk free instruments became uncommonly narrow falling to historically low levels along with other measures of perceived ex ante risk such as implied volatilities on stocks. In hindsight but clearly observed by many, the premium for taking credit risk had gotten too low and the market's perception of the risk itself was far too low.

Those who cite lax regulation as the key flaw in the current system, do not fully grasp the role that existing regulation has played in the current crisis. By imposing risk control regulation on financial institutions that may have made each institution safer, they fostered an environment that produced an excessive amount of high grade but highly vulnerable securities. It is not the case that the AAA tranches of a CMO with 20% subordination are, as some would have us believe, intrinsically flawed and doomed to failure. What is the case is that they are vulnerable to precisely the sorts of drops in the underlying collateral values, beginning with residential house prices, that we have experienced. Nor is it the case that the financial institutions had fundamentally flawed risk models. In hindsight, the models and the attendant risk analysis did not have given enough weight to scenarios with a precipitous decline in house prices, but keep in mind that even the best of models are probabilistic and doomed to fail in critical times. Keep in mind, too, that the regulators were fully aware of the risk models used by the financial institutions. Those who call for increased regulation to prevent other crises from occurring must to confront this conundrum which is a form of the fallacy of composition, i.e., doing what is best institution by institution may be precisely the wrong thing to do for the system as a whole.

In 1937 a hurricane devastated the East Coast of the United States slamming into Long Island in New York and onto the Connecticut shore. Then there were potato farms on Long Island and now it is one of the most densely populated areas of the US. The same hurricane would now bankrupt nearly all of the major US property and casualty insurers and this is not some hypothetical scenario; it is an event that actually occurred. The proper response for any company is, of course, to hold reserves, but the question is how much. It is simply not possible to keep idle reserves on hand until such an event occurs and the attempts to forge financial instruments to share this risk haven't proved sufficiently successful. Ultimately, financial institutions plan for reserves to cover a one in one hundred year event, say, but when the event is shared by many simultaneously as with a hurricane or a precipitous drop in the values of their investments, there is no adequate level of reserves they could have held. At that time the only fall back is the government which, implicitly, holds arbitrary reserves.

But what is government to do? Surely the easing of monetary policy and the provision of capital to the banks has aided the situation, but if the above description of the crisis is correct, then the current solutions are treating the symptoms and not the illness. In the current crisis the markets are frozen and there is no liquidity for many troubled assets. The source of the problem is that the usual buyers cannot finance their purchases either because regulation won't let them or because they are concerned about taking illiquid positions that may have to be held for a long period or because they simply are unable or unwilling to analyze and take the risk of further deteriorations in collateral values. Additionally, accounting rules as coded into regulation and statute create artificial barriers to banks, insurance companies and other institutions who would be more than willing to reposition their portfolios if the realization of losses didn't push them into severe regulatory capital deficiency.

The solutions proposed by the government are to provide subsidized financing for institutions that buy these assets from banks and to provide direct financing for special institutions that purchase them. While the former has some stop gap merit, the problems with the latter are multiple. With no recourse financing as a subsidy, many of the assets will surely be put back to the government when they cannot repay the financing. In addition, the basic issues of being illiquid remain since the financing goes with the initial purchaser and not with any secondary market purchasers.

Since the problem is that the assets are impaired and could fall further in value, the solution is simply to have the a guarantee or subsidy attach to the assets themselves and not to the buyer. To bring liquidity to a market buyers have to know that they can turn around and sell assets into the secondary market for close to what they paid for them. The buyers under the PPIP cannot do so and they will warehouse the assets rather than wholesale them. A mechanism that could be used to deal with these issues would be to enhance the liquidity of the pool itself by borrowing a successful page from the Freddie Mac and Fannie Mae securitization playbook. Whatever their current issues, there is no denying that the agencies jump started the market for mortgage backed securities and kept it going for decades. They did this by freeing investors from the difficulties of assessing the risk of the unknown defaults of homeowners, i.e., they made their pass through securities default free. With the agency guarantee in place, investors only had to concern themselves with interest rate risk and with the related risk of prepayments. Agency pass-throughs became some of the most liquid securities in the world and the government's guarantee has protected investors in these securities from nearly all of the current turmoil. It is the same risk of what will be the ultimate defaults and impairments on securities that makes finding their economic value extremely difficult to do with any precision and makes investors so wary.

In the current situation the existing toxic assets cannot be guaranteed to be free of all default risk without making up the full value of their market discounts, but this isn't necessary to make them liquid. What is required is to put a floor on the impairments that investors can suffer. Putting a floor on losses beyond what the market has already priced into the assets and removing the possibility and the uncertainty of losses below this threshold will make it much easier for investors to assess the value of a pool in the same way that eliminating default risk permitted investors to ignore default risk when buying residential mortgage pools.

One way this might work in practice would be to have banks and other financial institutions identify pools of their assets and choose to apply for these guarantees directly. (Intermediaries could also pool assets from different institutions.) Doing so would raise the value of these assets and give the banks greater flexibility in selling them. It would also only indirectly impact the values of the assets they did not apply for by presumably increasing their value as the market improved. Banks could choose to sell the assets with a guarantee attached and take a write off or, alternatively, they could hold the assets with the assurance that further mark-to-market write downs would be bounded and with a resulting enhancement in the asset values. A buyer of such a pool would be free to sell off pieces of the pool - tranches - with different features that appealed to different investors. Some pieces could be very highly rated debt and others could be riskier equity pieces. Putting a government cap on the cash impairments for these pools will make the initial buyers wholesalers who will be able to sell off their pools into liquid secondary markets. It would be appropriate for the government to charge poolers a fee for providing these guarantees, a 'g-fee'. The g-fee would be determined by the government's assessment of the risk it is taking on in providing this impairment 'put' and typically it would be amortized and charged over the life of the pool - an arrangement the mortgage markets understand and are comfortable with.

It is difficult for people to believe that crises are endemic to the economic system and even more difficult to believe that crises and failures will always be a feature of economic systems. Instead of looking for institutional causes, we naturally want to find evil doing culprits and think that by punishing them we will purge the problems. Perhaps the most common culprits cited in the press are the investment bankers and their personification of the greed and excesses in the financial markets. But, surely it is the height of naivete and a gross ignorance of history to think that bankers are more greedy today than they were one hundred years ago or, for that matter, one thousand years ago. It is also equally naive to think that policies that foster more lending won't lead to abuses. If there is to be a call for increased regulation it should not be directed at large financial institutions but, rather, where it has long been used for consumers, at the level of the individual borrower. People who borrowed with 'low doc' or even 'no doc' loans - often called 'liar loans' - should not have been allowed to do so just as loan sharks shouldn't be allowed to break legs to collect their fees. Borrowing to get the down payment defeats the purpose of the down payment and borrowing with teaser rates in the hope that house prices will continue to rise is an abuse that should be regulated on the simple basis that the borrower is less informed than the lender. Of course, there is no excuse for the financial institution that let underwriting standards slip so as to boost its share of lending to premier commercial real estate and private equity firms. Poor – covenant light - underwriting was certainly not confined to residential mortgage lending.

What will happen going forward? There will, of course, be more problems with asset values. The commercial mortgage shoe is just beginning to drop as the values of commercial properties - office buildings, hotels, and retail properties - continue to fall. But I am at heart an optimist and I am hopeful. Whatever policies governments pursue they will be far more enlightened than those of the past century when governments decided to close banks in response to a crisis. That was the height of the fallacy of composition; each bank was dealt with individually and the entire banking system contracted precisely when it should have been expanded. Hopefully, too, policymakers will not just think in broad strokes about traditional monetary and macro solutions and will, instead, listen to some tried and true solutions such as have been proposed here. Simply guaranteeing the assets against further deteriorations in values beyond what is currently expected would be immensely worthwhile and would go a long way to stemming further problems. Once that has been accomplished, the capital problems of the bank can be much more easily dealt with.