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Reassessing the Financial Panic – More Evidence Implicating Mark-to-Mayhem

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The chief cause of the Financial Panic of 2008 and the ensuing Great Recession has been mostly overlooked. But a new book indicts the real culprits in more detail than ever.

Very few attempts so far satisfactorily explain the timing, mechanism, and severity of the events. Many ably pinpoint important components of the crisis, such as housing subsidies or easy monetary policy. Others claim some vague mix of financial deregulation, bankers' compensation, too-big-to-fail, subprime loans, income inequality, derivative securities, and greed. Another argument (Scott Sumner) says tight monetary policy in the summer of 2008 led to an unprecedented drop in aggregate demand. Some (Tyler Cowen, Peter Thiel) say a three-decade technological plateau has left us with a Great Stagnation. Others (Joseph Stiglitz) say just the opposite: technology is racing too fast for the workforce to keep up.

But still: Why the timing and nature of the banking crisis? Why such a deep and long impact on the real economy?

In *Engineering the Financial Crisis,* Jeffrey Friedman and Wladimir Kraus offer a much more incisive and broadly persuasive argument: **Well-meaning banking and accounting regulation, particularly capital requirements, inflated demand for and supply of mortgage backed securities, sparked a fire-sale when the housing market declined, and decimated bank lending, leading to the Great Recession.**

Summarized this way, it may not sound so different from many of the popular explanations of the crisis. But few popular or technical explanations we've seen pinpoint the key culprits or mechanisms with such particularity.

Friedman and Kraus summarize the sequence of regulations that led to the crisis:

- Beginning in 1936, the SEC and state regulators order minimum credit ratings for increasing numbers of institutional investments.
- In 1975, the SEC creates a ratings-agency oligopoly by naming the three existing firms "NRSROs."
- The Basel I capital accords of 1988 enshrine favorable risk weights for mortgages and GSE-issued mortgage backed securities (MBS).
- Mark-to-market accounting returns, beginning with FAS 115 in 1993 and refined with FAS 157 in 2006.
- In the late-1990s and 2000s, Washington encourages low-income housing, resulting in falling downpayments required by GSEs.
- The Fed, FDIC, OCC, and OTC adopt the Recourse Rule in 2001, anticipating Basel II.

"There is no obvious connection among most of these regulations," write the authors. "Yet without understanding how they intersect, and thus may interact, one cannot – arguably – begin to understand the largest economic disaster since the Great Depression."

Basel Banking

As banking began to globalize, regulators sensibly sought to establish worldwide standards for this heavily networked industry. The Basel I capital guidelines offered a way to estimate the riskiness of

various types of securities and ultimately to judge whether banks were well capitalized. Banks sporting a 10% capital buffer were labeled "well capitalized," while 8% earned an "adequately capitalized."

The triple-A security became the *sine qua non* of the bank balance sheet, and because of its low risk-weighting, the MBS was king. Through the 1990s, global regulators worked on Basel's next iteration. Basel II was not finalized until 2005, and the U.S. did not adopt it until after the crisis. But in 2001 the U.S. did adopt the Recourse Rule, which anticipated and matched Basel II in important ways.

The Recourse Rule penalized banks for holding business or commercial loans or whole mortgages and greatly encouraged holding not just highly rated agency MBS but also private label MBS and triple-A and double-A asset backed securities (ABS). Private label MBS issues skyrocketed beginning in 2001, continuing through 2006. Likewise, annual issuance of ABS jumped from under \$500 billion in 2000 to almost \$2.3 trillion in 2006. The authors also show a spike in asset backed commercial paper, especially in Europe in 2005, just as Basel II came online.

The authors think the Recourse Rule "may be the primary explanation for the overconcentration of securitized mortgage risk in commercial banks." By 2008, U.S. commercial banks held 7.7% of assets in agency debt, 3.5% in AAA private MBS, and 0.8% in AAA CDOs. Those may not seem like large numbers, but commercial banks held three times more MBS and CDOs than non-commercial financial institutions – evidence, the authors believe, that Basel and Recourse created powerful incentives. By all accounts, U.S. commercial banks held no MBS rated lower than AAA. Their chief concern, it seems, was achieving capital targets, not reaching for yield.

Mark-to-Mayhem

So how did a measly 4.3% of assets in private MBS and CDOs lead to crisis? The key was the vicious interaction of two well-meaning guidelines: capital requirements, intended as a cushion in tough times, and mark-to-market accounting standards, intended to encourage transparency. Who could frown on capital cushions and transparency? What could go wrong?

The ratings agencies obviously gave out far too many triple-A seals of approval. Banks were scrambling to acquire triple-A paper, and Wall Street, with compliant raters and a super-accommodative Federal Reserve, found creative ways to give it to them. The triple-A paper and easy money helped fuel the housing boom. Some parties, wary of ever-upward home prices, however, began hedging their bets. They bought insurance against a housing downturn in the form of credit default swaps (CDS). Insurance giant AIG was the largest CDS issuer, counterparty to Goldman Sachs, Merrill Lynch, and Société Générale on some \$62.1 billion in CDOs. The housing market did peak and begin a decline in 2006. But for all of subprime housing's excesses and its disastrous fall, the segment was just not big enough, on its own, to crash both the financial sector and the whole economy.

In the spring of 2007, Goldman Sachs marked down the value of several mortgage securities, triggering the quick collapse of two Bear Stearns hedge funds that had bet heavily on MBS. In July of 2007 Goldman, citing MBS mark downs, demanded \$1.8 billion in collateral from AIG. AIG paid Goldman \$450 million, but in September Goldman demanded an additional \$1.5 billion and \$2.8 billion more in November. AIG and Goldman would continue arguing over these marks and collateral calls up to and beyond the crisis the next fall. (William Cohan, blogging for the *New York Times*, described the Goldman-AIG mark-down process here. Reporters Gretchen Moregenson and Louise Story also detailed the process in a series of articles.)

In late 2007, however, an accelerant was added to these hot cinders. An update of mark-to-market accounting guidelines approved the previous year, known as FAS 157, was just going into effect. It said banks must mark assets at "observable" prices for similar assets even if there were no real price of the asset in question. "Thus," write Friedman and Kraus, "the observable prices for CDS insurance on PLMBS were used to mark down the type of asset that they insured. Eighty-two percent of assets marked down by banks in an SEC study of [mark-to-market] were valued in this fashion, with only 11 percent marked against actual prices."



Over this period, from the spring of 2007 to the summer of 2008, prices for for triple-A tranches – *inferred from the cost of CDS protection* – fell by 60%. These "prices," examples of which are shown above, then swept across the MBS, ABS, and ABCP landscape.

Mark downs began eating into bank capital. Thank goodness for those Basel bank buffers – or not. Because the 10% capital buffer was enshrined in law, it was no cushion at all. In theory that 10% cushion is there for a rainy day. If investments turn out worse than expected, or if the economy turns down longer than expected, reach into your capital buffer to tide you over. But laws and rules that effectively prohibit the use of the rainy day fund can lead to fire sales to preserve the value of the rainy day fund, which can't be used. A buffer that can't be touched isn't a buffer, especially in a panic. The mark-to-market interaction just caused more selling, lower prices, more selling, etc.

"Prices" Hit the Real Economy

The authors show how a drop in the value of private MBS and CDOs, which constituted just around 4.3% of bank assets, could cause such a calamity. Between the second quarter of 2007 and March of 2008, U.S. banks wrote down \$250 billion of their \$472 billion in MBS, a mark-to-market decline of 53%. "In principle, this 2.2 percent write-down [53% of 4.3%] could have interacted with the 10 percent capital minimum for well-capitalized banks to reduce U.S. banks' lending capacity by *22 percent of total U.S. commercial bank assets, amounting to \$2.5 trillion*." On top of that, non-mortgage asset backed securities (ABS) were also suffering seemingly indiscriminate markdowns, resulting in an additional \$131 billion hit to lending capacity.

Because of their capital cushions of ~3% above the regulatory minima, bank lending declined not 22% but 7% in the year prior to August 2008 – still the worst credit contraction in 40 years. Nonetheless, because business loans under Basel are risk weighted less favorably than loans to homeowners or the government, banks were scrambling for capital, and "new *business* lending fell during this period by 67 percent."

Other new research confirms this conclusion: a January 2012 NBER working paper from Arvind Krishnamurthy *et al* examines repo markets, money market funds, and asset backed commercial paper and says the financial collapse "looks less like a traditional bank run of depositors and more like a credit crunch among dealer banks."

The authors conclude that "the regulatory interaction" and its downward pressure on credit "appears to have been sufficient to generate the Great Recession in the United States."

Policy and rhetoric in Washington during this period were less than confidence-inspiring. And since the panic, years of misguided government fiscal policy and regulatory action across a range of industries has probably intensified and prolonged the Great Recession and clouded the economic outlook. So it is difficult to apportion blame for the long list of ongoing ills.

What Does It Mean?

If this theory of the crisis is true, what does it mean?

The frustrating fact is that much of the market panic at the time and the government policy panic since was unnecessary. Many of the U.S. government efforts to recapitalize the banks could be seen as giving back what mark-to-market had taken away. Despite the very real trauma in the subprime mortgage market, and despite years of tepid economic recovery, mortgage cash flows have been far better than the mark-to-panic prices that torpedoed the banks. Many of the Fed's bailout funds – Maiden Lane I, II, and III, for example – have proved profitable, with many financial institutions bidding to reacquire the assets at substantially higher prices.

On one hand, because this was in some sense an artificial crisis, the American economy may be in better shape, fundamentally, than is widely believed. If this was a silly self-inflicted wound and not part of a secular "Great Stagnation," then the prospects for recovery and future prosperity are not necessarily dimmed.

On the other hand, the crisis itself and especially the ensuing policy responses may have severely damaged (1) our capital markets and (2) the productive and innovative capacity of the wider economy.

Another important implication is the importance of decentralized decision making and a wariness of the unintended consequences of centralized regulation. As we wrote in a recent *Forbes* column:

"The world is inherently risky and uncertain. Bad things happen. We don't know if investments or start-ups will succeed. When risk and uncertainty are decentralized, however, we get lots of experimentation and lots of small failures. We learn and move on, better prepared for the next try.

"The addition of excess risk and uncertainty by powerful centralized forces discourages risky new ventures, products, and investments, which are the source of all economic growth. The centralization of power, information, and money – and thus the centralization of risk – is more likely to yield widespread, systemic failure.

"The housing bubble was not about 'too much risk.' It was about one-way bets, which are the antithesis of risk. The Fed/Treasury weak-dollar policy created one-way bets of ever-rising real estate – a centralized, systemic failure. With more neutral monetary and housing policies, investors would have had to weigh more factors. More investors would have been on either side of the 'bet,' leading to more, smaller, and thus non-systemic successes and failures.

"Bank regulators then compounded the mistake by severely curtailing lending in the downturn after they had encouraged wild lending during the boom. This pro-cyclical banking policy is the opposite of the neutral policy we need to balance risk in a decentralized economy."

Friedman and Kraus weren't the first to address these topics. The FCIC, for example, weaved Basel capital guidelines and mark-to-market accounting standards into its narrative. But the FCIC viewed them as extras, watching as the drama unfolded. For Friedman and Kraus, Basel and mark-to-market were the protagonists, driving the story from beginning to end.

At the time, the most insightful and forceful critics of the mark-to-market regime were former FDIC head Bill Isaac, Brian Wesbury of First Trust, David Malpass of Encima Global, and business journalists Steve Forbes and Holman Jenkins. We wrote about this deadly interaction of bank capital and mark-to-market here, here, here, here, and here.

The new volume, however, offers the most detailed treatment so far of this "senseless panic." EE