

# Making Sure “It” Never Happens Here (Again)

*Restructuring Banking Regulation To Actually Be Prudent*

May 17<sup>th</sup>, 2009

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## Executive Summary

The banking crisis, and our economic mess, was caused through willful and negligent failures in the regulatory apparatus governing our banking system.

Prudent regulation not only would have prevented the damage that our economy has suffered, it would have largely prevented the bubbles that lead to busts. We will examine in this paper how we got here, who was responsible, how we can keep it from happening again and why we must as a nation come to grips with prudent regulatory requirements for banking – requirements that have existed since the beginning of fractional reserve lending, as practiced in all advanced economies.

The key to understanding what happened, and how we can prevent it in the future, lies in one simple principle: *Banks and other financial institutions that utilize fractional reserve principles must not be allowed to commit accounting fraud or become insolvent.*

A financial institution that has more outstanding in *unsecured loans* than it has in excess capital is in fact insolvent and is thus unable to repay its depositors should they all want their money back. Preventing that from happening insures that the FDIC will never take a loss and thus neither will the taxpayers.

Such regulation also prevents systemic risk; while it will not prevent banks from going out of business, business failure is in fact the correct resolution for excessive risk-taking and imprudent management.

This goal can be achieved with relative simplicity. 100 years ago there was no Internet and books were kept in a physical ledger, making summing the books and computing valuations on a daily basis difficult or impossible.

This is no longer true; we are now able to provide actual prudent supervision of financial institutions in such a fashion that is inherently counter-cyclical, prevents the “boom and bust” mentality from damaging anyone other than the institution involved, and provides a level of safety and soundness to our banking system that has been sorely lacking over the previous years.

These changes in our regulatory posture can, and indeed must, be made if we are to have a stable economy going forward.

## Fundamentals of Sound Banking

To understand all modern banking systems we must first understand the principle of “fractional reserves” and how this plays into the monetary system. Many people, including many economists, believe that the reserve fraction is a primary determinant of safety and soundness. This is false.

The reserve fraction is the primary regulator of monetary velocity, that is, the speed with which money and credit circulates in the economy. The lower the reserve ratio the more “turns” that a dollar can make in the system before it is exhausted.

Safety and soundness in a banking system is defined by one thing and one thing only: *whether or not a bank has more outstanding in unsecured loan balances than it has in excess capital.*

If it does, it is insolvent.

If it does not, it is safe and sound.

We will demonstrate this with a hypothetical nation that has no banks. We will then establish one bank with a 10% reserve ratio. To make it simple we will provide that there is no “excess” capital – that is, the bank’s owners will not have put anything into setting up the bank originally. This is the balance sheet after Joe comes in and deposits \$10,000 into the bank.

<b>Assets</b>	<b>Description</b>		<b>Liabilities</b>	<b>Description</b>
10,000.00	Cash (Joe)		(10,000.00)	Deposit (Joe)

The books are in balance; Joe has deposited his money, the bank has it in the vault, and Joe has an account entry stating that he has loaned the bank \$10,000 which he may call when he wishes.

The next morning Jane comes in and wishes to buy a car, desiring a loan to do so. The bank evaluates her credit quality and decides to loan her \$9,000. We now have the following:

<b>Assets</b>	<b>Description</b>		<b>Liabilities</b>	<b>Description</b>
1,000.00	Cash (Joe)		(10,000.00)	Deposit (Joe)
9,000.00	Note, Jane*			

The “\*” is present because we are *presuming* that the note that Jane signed is in fact *secured*; that is, the collateral she posted (the title to the vehicle) is worth more than the \$9,000 she owes.

Since we’re the only bank in town this car sale shortly generates more transactions; specifically:

Assets	Description		Liabilities	Description
1,000.00	Cash (Joe)		(10,000.00)	Deposit (Joe)
9,000.00	Note, Jane*			
9,000.00	Cash, Dealer		(\$9,000.00)	Deposit (Dealer)

There is where the yelling begins, because it appears that the bank has “printed money” – that is, the appearance exists that where there was only \$10,000 suddenly there is \$19,000.

This appearance is false.

In fact the same money was circulated more than once. We can run this to “extinction” which will happen when roughly 10 “turns” have been made with the original \$10,000, resulting in a balance sheet that has roughly \$100,000 on both sides of the ledger.

The above transaction stream is *completely safe*. If Joe comes into the bank it does not have \$10,000, but it does have a title worth \$9,000 or more, and it thus can sell the promissory note into the market immediately or take a loan out itself against that value, generating the “missing” \$9,000 immediately and paying Joe. This can all take place in seconds if need be.

The safety problem occurs when Jane’s title isn’t worth \$9,000. Now we get this situation:

Assets	Description		Liabilities	Description
1,000.00	Cash (Joe)		(10,000.00)	Deposit (Joe)
7,000.00	Note, Jane*			
9,000.00	Cash, Dealer		(\$9,000.00)	Deposit (Dealer)

Oops. You can see the problem here; we now have \$19,000 in liabilities but there is only \$17,000 in assets! Now if Joe and The Dealer come in and want their money the best the bank can do results in coming up \$2,000 short.

*At the instant this happens, the bank is in fact insolvent – liabilities exceed assets. That is, the bank is in fact **bankrupt**.*

Notice that whether the bank has a 10% reserve ratio, a 5% one, or a 20% ratio *has no bearing on the safety of the transaction or the bank*. In all such cases where the bank has made an unsecured loan that exceeds its *excess capital* it is unable to satisfy Joe if he demands his money – that is, bankruptcy has in fact occurred. *The loss severity is also unrelated to the reserve ratio; the amount of eventual loss is in fact determined only by the amount of unsecured lending that has occurred.*

How do we avoid this risk? Quite simple – we introduce a new requirement for banks, that of *excess capital*. We have something close in today’s system called “Tier 1 Capital” but the definition of “Tier 1 Capital” includes things that cannot be readily sold and only have value in the future (such as deferred tax assets), which is potentially an accounting fiction (if there are no

profits there is no tax, ergo, those “deferred assets” are dependent on something that hasn’t happened yet. Sound regulation doesn’t permit counting something that hasn’t happened yet; ergo, we will avoid using the phrase “Tier 1 Capital” as it is in many ways an *accounting fiction* as currently defined.)

We will thus define “*excess capital*” as precisely what it is – capital. Capital is either actual money or those things that are *guaranteed* to be good for actual money in a very short period of time. For this purpose we will restrict the definition to either cash or Treasury Bills of no more than 26 week duration. In our example bank we will obtain this *excess capital* by selling stock to the owners of the bank and retaining the money thus generated:

Assets	Description		Liabilities	Description
5,000.00	Paid-In Capital		(\$3,000.00)	Shareholders Equity
1,000.00	Cash (Joe)		(10,000.00)	Deposit (Joe)
7,000.00	Note, Jane*			
9,000.00	Cash, Dealer		(\$9,000.00)	Deposit (Dealer)

Note that the books are once again in balance. There is \$22,000 on both sides of the balance sheet. But what happened to Shareholder Equity? It has been “damaged” to the tune of \$2,000; as the value of Jane’s note falls, the shareholder equity takes the hit. While the shareholders **paid** \$5,000 in capital into the company, the value of their holding is only \$3,000.

*When the Shareholder’s Equity - that is, excess capital – falls to zero, the bank is insolvent (**bankrupt**). It is unable to repay all of its depositors and now there is the potential for actual economic loss to those depositors should they all appear and want their money.*

Note that a bank can also acquire “*excess capital*” by retaining earnings from prior periods. If the bank was to earn \$5,000 in interest over some period of time and did not need to spend that money on expenses (salaries, rent, the light bill, etc) it could choose to retain that capital as part of its *excess capital* cushion.

The key point to banking system solvency lies here:

*So long as excess capital exceeds the amount of unsecured credit extended, the bank is solvent. The instant this is not the case the bank is in fact insolvent – that is, **bankrupt** – and must be closed.*

Note that this constraint does not require any “radical” change to how banks operate, it does not require that The Federal Reserve be “abolished”, and it does not change how our banking and financial system interfaces with the rest of the world.

It only requires prudent regulation that is difficult or impossible to “game”.

## How Did We Fail?

Our regulatory structure failed in the following ways leading up to this crisis, and as a consequence, has caused the taxpayer to be put “on the hook” for trillions of dollars of direct loans, handouts and guarantees:

- The OTS and OCC failed to monitor financial institutions under their jurisdiction to insure that they in fact did not lend funds unsecured beyond their *excess capital*, thereby allowing these firms to become both functionally and actually insolvent – that is, **bankrupt**. We know this to be true because failed institutions, including IndyMac, imposed billions of dollars of losses on the FDIC; proof that their *excess capital* was not only exhausted but that depositor capital (which should be inviolate) was in fact invaded. *This is a regulatory failure of both malfeasance and misfeasance in each and every case where the FDIC has absorbed losses.*
- The FDIC, OTS and OCC have failed and continue to fail to follow “PCA”, otherwise known as *Prompt Corrective Action*, USC Title 12, Chap. 16, Sec. 1831<sup>1</sup> on multiple occasions. Specifically, these regulatory bodies have failed to act as demanded by this section of United States Code to “*resolve the problems of insured depository institutions at the least possible long-term loss to the Deposit Insurance Fund.*” The OTS, in particular, has been documented to have allowed IndyMac Bank to improperly book deposits and all three agencies have generally failed to monitor and discipline the financial institutions over which they have supervisory authority in order to prevent losses from being taken by the insurance funds. All three institutions have also failed to make and file reports on the cause of material losses suffered by the FDIC’s insurance funds as required under Section 1831(k)<sup>2</sup> along with plans to prevent future material loss events.
- In 2000 Henry Paulson came to Congress and the SEC as a “point man” to ask that the investment bank “leverage limits” be effectively removed; these rules previously limited leverage to 12:1. He was rebuffed. In 2004 he (along with others) returned and asked the SEC again; this time his request was granted.<sup>3</sup> Just four years later three of the five firms granted permission to expand leverage failed, all with **at least double** the previously-allowed leverage (Bear Stearns, Lehman and Merrill Lynch, which was taken over in a “fire sale”.) In addition AIG, Fannie and Freddie all had far more than 12:1 leverage at the time of their failure with these three firms operating with leverage ratios somewhere between 80:1 and 200:1. *It is important to note that at 30:1 leverage, the average of the failed three investment banks, a 3.3% loss on your assets is sufficient to render you*

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<sup>1</sup> [http://www.law.cornell.edu/uscode/uscode12/usc\\_sec\\_12\\_00001831---o000-.html](http://www.law.cornell.edu/uscode/uscode12/usc_sec_12_00001831---o000-.html)

<sup>2</sup> *ibid*

<sup>3</sup> <http://www.nysun.com/business/ex-sec-official-blames-agency-for-blow-up/86130/>

*bankrupt. At 80:1 only slightly more than 1% is sufficient. Every major firm that has failed during this crisis has been carrying 30:1 or more leverage at the time of its insolvency. This action by the SEC was demonstrably unsafe and in fact was directly responsible for the debacle that followed beginning in 2007.*

- The Federal Reserve System failed to monitor financial institutions under its jurisdiction including the primary dealers they trade with and in fact has intentionally allowed firms in trouble to increase their risk to the banking system! This is proved by the fact that *Bear Stearns* and *Lehman* were able to find themselves insolvent; again, the problem is that *they were lending unsecured beyond their excess capital*. The Federal Reserve has made this situation dramatically worse throughout the financial system by imprudently granting “23A” waivers like candy since the middle of 2007 – waivers that remain outstanding to this day. “Regulation W”, otherwise known as Title 12 Chapter II(a) Part 223<sup>4</sup>, the section of bank regulatory code addressed by “23A” waivers, prevents concentration of risk by forbidding more than 10% of a bank’s *excess capital* (capital stock and surplus) from being placed at risk through any one affiliate, and more than 20% through *all* affiliates combined. *Several of the banks provided these waivers subsequently failed or were forcibly acquired, including Wachovia, Merrill Lynch and others, dramatically increasing the damage to our economic and banking systems.*
- Glass-Steagall was intended to prevent the “gaming” of regulatory systems and over-concentration of risk. By prohibiting banks from becoming intertwined with insurance companies and securities businesses, the law prevented circumstances where “hidden” liabilities could wind up “boomeranging” back onto the regulated (and government-guaranteed) depositor. Glass-Steagall was repealed in no small part to make legal a merger (Citi/Solomon/Travelers) that had effectively already taken place – an extreme act of regulatory “capture” that went all the way to the top of the Clinton Administration. Unfortunately, we have some of the same people, such as Larry Summers and Mr. Rubin, involved with the current Obama Administration.
- The claim has been made that AIG, for example, fell *outside* of the federal regulatory apparatus and thus their near-failure and the more than \$170 billion “given” to rescue them was both inevitable and unforeseeable, absent major regulatory changes. *This claim is categorically false*. The systemic risk does not come from AIG, it comes from their counterparties *which are all regulated banks*. If the regulators had been doing their jobs the CDS and other instruments that banks *purchased* from AIG would have been considered *unsecured* assets exactly as would be a credit card loan to a consumer, as AIG could not (and did not) have sufficient assets behind the liability taken on in those CDS.

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<sup>4</sup> [http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=635f26c4af3e2fe4327fd25ef4cb5638&tpl=/ecfrbrowse/Title12/12cfr223\\_main\\_02.tpl](http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=635f26c4af3e2fe4327fd25ef4cb5638&tpl=/ecfrbrowse/Title12/12cfr223_main_02.tpl)

*Again, the failure was caused by regulatory malfeasance and misfeasance within the banking system in that the banks were permitted to hold CDS written by AIG as “money good”, that is, secured assets, when in fact they were not. This misrepresentation was in fact an act of fraud as the inability of AIG to cover those bets was blatantly obvious, yet the fiction of their coverage being “money good” was allowed to remain for an extended period of time.*

- The Federal Reserve Board has taken several actions that are clear violations of *The Federal Reserve Act* since the failure of Bear Stearns and continues to do so to this day, with the most serious being the purchase of assets not guaranteed under the full faith and credit of The United States. This has included several “off balance sheet” tranches of assets from *Bear Stearns* and *AIG*, along with hundreds of billions of mortgage-backed securities from Fannie Mae and Freddie Mac. *The Federal Reserve Act* demands of The Fed that all transactions in fact be *loans* that are fully secured; that is, it forbids The Fed from lending unsecured or making nearly all asset purchases *for the precise reason that The Fed has no “excess capital”*; *all such transactions in fact are written against the taxpayer*. These transactions have dramatically increased risk to the taxpayer and were undertaken without vote or appropriation by Congress as required by The Constitution; they are thus blatantly unlawful. Any claim that Section 13.3 somehow covers **purchases** is factually false; the exact language is:

In unusual and exigent circumstances, the Board of Governors of the Federal Reserve System, by the affirmative vote of not less than five members, may authorize any Federal reserve bank, during such periods as the said board may determine, at rates established in accordance with the provisions of section 14, subdivision (d), of this Act, to discount for any individual, partnership, or corporation, notes, drafts, and bills of exchange **when such notes, drafts, and bills of exchange are indorsed or otherwise secured to the satisfaction of the Federal Reserve bank:**<sup>5</sup>

The legislative language is clear and unambiguous – The Fed may **only** “discount a note” – that is, extend a loan – upon fully-secured collateral **even in unusual and exigent circumstances**. Section 14 of *The Federal Reserve Act* limits outright purchases of securities to those that have explicit *Full Faith and Credit* of the United States Government if those securities have a maturation of more than six months.<sup>6</sup> These acts have, in aggregate, exposed the taxpayer to **more than one trillion dollars** of direct and unlawfully-acquired risk.

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<sup>5</sup> <http://www.federalreserve.gov/aboutthefed/section13.htm>

<sup>6</sup> <http://www.federalreserve.gov/aboutthefed/section14.htm>

## Crafting A Regulatory Structure That Works

We must provide a regulatory structure for financial institutions that:

- Maintains market discipline by insisting that all lenders who have the ability to fractionally lend make all *unsecured* loans, at all times, from *excess capital*.
- Enforces an *excess capital* cushion requirement on all financial institutions so that if and when a firm invades that cushion there remains sufficient time to seize and liquidate the firm without threatening to impose losses on taxpayers (whether via the FDIC or through general bailouts.) This separates the *soundness and safety function* from the function of controlling monetary velocity, which is addressed through the *reserve ratio*.
- Is 100% transparent, all the time, so that investors are able to honestly evaluate the relative and absolute capital positions and strengths of all firms that have publicly-traded stock.
- Contains *no exceptions* for anyone, including but not limited to The Federal Reserve and its regional Fed banks.

We can achieve these goals with relatively minor changes to our existing regulatory regime. A framework that will achieve these goals would be to:

- Modify the 6% “Tier Capital” standard to require 6% *excess capital* at all times.
- Define “*excess capital*” as consisting **only** of cash and Treasury Bills of six months or shorter duration.
- Prohibit **all** “off balance sheet” games. **ENRON** should have been sufficient for Congress to learn that there is no possible way to reconcile an off-balance sheet vehicle with transparency, safety and soundness. These accounting fictions must be absolutely barred in our regulatory code for all firms in The United States as they make accurate and transparent accounting, along with valuation of firms by investors and regulators, flatly impossible.
- Require nightly “mark to market” of all positions, with the exception of whole loans held against actual Real Estate, which are marked quarterly against the Case-Schiller real estate index (or other suitable index for non-residential property) in each region where property is held. This will permit hedging using the CME Housing Market futures.

- **Do not** permit “netting” anywhere within a bank’s books (or between banks) for regulatory purposes; that is, if a bank has two loans, one with an outstanding balance of \$100,000 but for which the collateral is currently worth \$150,000, and a second with a balance of \$50,000 but for which there is no collateral, the *excess capital* required is \$50,000, not zero. The reason for this requirement is that in the event a loan forecloses the bank is only entitled to recover the loan balance, not the appreciation or excess collateral value.
- Require *transmission* via electronic, online means of nightly valuation *and current excess capital* to regulators, and make these ratios and facts visible at all times by the public.
- Require *immediate divestiture* of all Federal Reserve acquired “assets” that do not have the full faith and credit of The United States Federal Government , bringing The Federal Reserve into compliance with the law. If the Government wishes to purchase mortgage-backed securities from Fannie and Freddie, or bail out firms such as AIG, it must do so directly through The Treasury via an appropriation.
- Restore Glass-Steagall and force insurance and investment companies to be divested from regulated and federally-insured banking interests. *Depository banking and fractional lending must be returned to the status of “utility functions” as they are inherently “call options” upon the sovereign credit of The United States; to permit otherwise is to permit firms to **gamble** with that sovereign credit, keep the gains for themselves and socialize any loss incurred.* It is not possible to prevent this outcome other than by forcing a strict and binding separation so that all firms that engage in such gambling bear no government guarantee or attachment to sovereign credit.

## Conclusion

The United States and indeed the world did not arrive at our present crossroads as a consequence of an “accident.” Rather, we are here today in our economy and banking system due to the intentional acts of government and quasi-government regulatory authorities who were subject to capture by corporate interests.

These individuals willfully and intentionally tore down regulatory barriers that had successfully prevented systemic risk from asserting itself for nearly fifty years, undertaking their acts at the behest of corporate officers and management who sought these changes for the purpose of enhancing their profit while offloading the risk of failure to the United States taxpayer.

These individuals and regulatory institutions continue to refuse to take responsibility for their actions and in fact continue to violate provisions of United States Code that mandate or forbid specific acts, including but not limited to *The Federal Reserve Act* and the *Prompt Corrective Action* law.

Meanwhile, the bankers themselves understand *the principles of sound banking* as set forth in this document. Proof of this fact – that you cannot continue to lend unsecured beyond your excess capital *unless you can shift off the losses to someone else such as a the taxpayer* – is evidenced by the continuing contraction in unsecured credit such as HELOCs and Credit Cards being experienced across all borrowers. *The bankers know they are out of “bailout ammo” with the Congress and that eventually the math always wins; when the cash flow is insufficient to pay the electric bill it is quite literally “lights out”.*

For those who willfully and intentionally violated the law, sanction appropriate to their action must be brought to bear. Whether it be accounting and securities fraud or willful violation of Federal Statutes, including *The Federal Reserve Act* and *Prompt Corrective Action*, we as a society must not allow this behavior to stand unchallenged and without consequence.

We can only stop the damage to our financial system from spreading further and prevent this sort of disaster in the future if we both demand full and immediate compliance with existing law (e.g. *The Fed*) and also put back in place the “safety mechanisms” that were enacted following *The Great Depression*.

The disaster that befell our economy in the 1930s was largely the result of the same practices that got us in trouble this time: “stretched” and even fraudulent accounting, excessive leverage and regulatory capture along with intentional malfeasance and misfeasance within our nation’s regulators and legislators.

Investor confidence and indeed the soundness of our financial system cannot be restored until these elements of malfeasance and misfeasance are removed and transparency returns.