## FINANCIAL CRISES AND BANK CAPITAL

## Robert Z. Aliber

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# **ABSTRACT**

Yogi Berra said, "If you don't know where you are going, you will end up someplace else." Virtually all of the initiatives toward regulation since the global financial meltdown of 2008 have confused the symptoms of the crisis including the surge in bank loans to millions of sub-prime borrowers with its cause that was the increase in the variability in cross border investment inflows to many countries. The U.S. banks bought millions of the mortgage loans from sub-prime borrowers because the supply of credit was much larger than the demand from prime borrowers; the banks believed that they had a massive profit opportunity because their cost of funds was much less than the interest rates on these mortgage loans. The surge in cross border investment inflows to the United States and these other countries resulted from the large increase in the export earnings and the trade surpluses of both China and the oil exporting countries including Norway, Saudi Arabia, Kuwait, and the United Arab Emirates. These countries could have achieved trade surpluses only if there was a comparable increase in the trade deficits of the United States and other industrial countries, which was a response to the sharp increases in the prices of real estate and stocks; this surge in household wealth led to massive expansion of consumption spending and payments for imports.

Britain, Ireland, Iceland, and Spain also had banking crises in the Autumn of 2008, Greece and Portugal had sovereign debt crises fifteen months later. Each of these countries previously had had an economic boom, which resulted from the induced domestic adjustments to the increase in its capital account surplus; the sharp increase in asset prices was an integral part of the adjustment process to ensure that the country's current account deficit expanded in response to the autonomous increase in its capital account surplus. The decline in the trade surpluses of the oil exporting countries and of China that began about 2006 meant that the capital account surpluses of the United States and the other industrial countries also had to decline. Asset prices in these countries then fell. Banks incurred massive losses, many failed.

This paper includes a proposal for the re-establishment of the Reconstruction Finance Corporation to provide funds to re-capitalize U.S. banks that have incurred large loan losses as a result of the decline in asset prices.

#### INTRODUCTION

The U.S. government's decision to allow Lehman Brothers to close on September 15, 2008 was the costliest mistake in American financial history. One measure of this cost was the sharp decline in U.S. GDP relative to the projected decline in August 2008; another measure was the increase in the indebtedness of the U.S. Treasury as the ratio of government debt in the hands of the public to U.S. GDP nearly doubled. None of the initiatives that the U.S. government took that might have enabled Lehman to remain open, including its sale to Barclay's or to a South Korean bank or to a consortium of U.S. banks was successful. The Henry Paulson-Ben Bernanke claim that the U.S. government did not have the authority to provide "taxpayer funds" so that Lehman could remain open was smoke; the Bush Administration had made a political decision that taxpayer money should not be used to enable Lehman to remain open. Richard Fuld the head of Lehman may have been the least popular banker on Wall Street, he was not Paulson's best friend. Lawrence Ball concludes that Lehman had sufficient collateral for a loan from the Federal Reserve, which suggests it could have been saved without any cost to the taxpayers. The Bush Administration may have concluded that saving Lehman would lead to charges of nepotism. George Walker, President Bush's first cousin, ran Lehman's asset management decision. Richard Paulson the brother of the U.S. Secretary of the Treasury, sold mortgage backed securities for Lehman in Chicago.

In June 2007 the U.S. government had facilitated JPMorgan Chase's purchase of Bear Stearns which prevented it from closing; the Federal Reserve provided that JPMorgan Chase could put up to \$29 billion of doggy assets to a new firm Maiden Lane Capital that was an affiliate of the Fed after Morgan had incurred \$1 billion of losses on these assets. This put was like a conditional capital infusion of up to \$29 billion. Bear may have been insolvent when it received the blessing of Fed.

Lehman's closing led to a freeze in the international credit market and to a surge in the demand for money; spending declined sharply. If Paulson and Bernanke had known that the cost to the taxpayers of allowing Lehman to close was a hundred times larger than the cost that would have enabled Lehman to remain open, the likelihood is high that they could have placed Lehman in a conservatorship much as the U.S. Treasury did with Fannie Mae and Freddie Mac. Paulson-Bernanke had greatly underestimated the costs of Lehman's bankruptcy; their decision revealed how little they understood about the cause of the surge in property prices that had begun in 2003 when Alan Greenspan was chair of the Federal Reserve. Moreover Lehman's closing revealed that the Fed and the Treasury had done little contingency planning to cope with the financial distress that would follow from the decline in property prices.

The 2008 U.S. financial meltdown was a systemic crisis. Between 2003 and 2006 the market value of U.S. residential real estate increased from \$12,000 billion to \$23,000 billion. Much of the increase was in sixteen states that accounted for fifty percent of U.S. GDP, so the percentage increase in many local markets was much greater than one hundred percent.

The financial establishment may have failed to realize that the advice of Walter Bagehot that the central bank should not provide financial assistance to an insolvent institution is not

consistent with his advice that unlimited assistance should be provided to a solvent institution at a penalty rate. The rationale for providing unlimited liquidity to a solvent institution centers on the externalities; if the institution is not provided with liquidity, it will sell assets, and the resulting decline in their prices might lead to the insolvency of other institutions.

The first section of this essay is a brief review of the taxonomy of bank failure; a few small banks fail because of idiosyncratic factors that are firm-specific and many more banks including some large ones fail because of systemic factors that crater a large number of firms previously considered well-managed. The second section provides an explanation of the surge in U.S. real estate prices between 2003 and 2006; real estate prices and stock prices increased in many other countries, and six of these countries including Ireland and Iceland and Britain had banking crises when these prices subsequently declined. The third section asserts that the regulatory initiatives that have been adopted to forestall a repetition of the 2008 crisis are irrelevant to ameliorate or soften a systemic crisis. The fourth section presents a proposal for a new government agency modeled on the Reconstruction Finance Corporation that was established in 1932, one objective is to de-politicize the re-capitalization of failing banks, a second is to minimize the tendency toward the consolidation of banks when one is failing, and a third is to reduce the costs of financial intermediation in the good years. The existing shareholders would be diluted and the top managers would be scalped; these government-owned institutions would be privatized when the economic environment had been stabilized.

#### I. WHY BANKS FAIL?

The statement that a bank fails when its capital is depleted is descriptively correct and without explanatory power. Some banks fail for idiosyncratic or firm-specific reasons while the monetary arrangements are stable; the failure may reflect self-dealing by some of the bankers or by the deterioration the neighborhood around the bank. The major reason that banks fail is that there is a systemic shock, a dramatic change in the financial environment that leads to a sharp change in the price relationship between two assets classes—stocks and bonds, bonds and real estate, domestic securities and foreign securities, and short term securities and long term securities. These systemic shocks reflect macro-mismanagement. Often real estate prices have increased to non-sustainable levels and then plunged, which led to the bank loan losses that often were larger than the current earnings of the banks, so their capital was depleted.

Walter Bagehot, in his classic *Lombard Street*, advised that a central bank should provide unlimited credit to an illiquid, solvent bank; otherwise the bank would sell assets to enhance its liquidity, and the resulting decline in asset prices might cause some otherwise solvent banks to fail. Bagehot also wrote that a central bank should not provide any assistance to an insolvent bank. This distinction is both logically fallacious and not operational; the boundary between solvency and insolvency changes as asset prices fall. A bank often is illiquid because its peers are not one hundred percent confident that it is solvent—and will be solvent one month and three months from now. If a bank is not solvent, then the courts will require that its assets be sold to satisfy its

creditors; the prices of these assets will decline, and the solvency of other institutions will be impaired.

One response to systemic failure was central banks were established to provide "unlimited" liquidity; Bagehot advised that these loans be at a penalty rate. Deposit insurance was adopted, initially at the state level, and then at the national level, to reduce the likelihood that depositors would run for their money if they believed their money was guaranteed.

The Federal Reserve was established as a lender of last resort in 1914 to in response to the systemic shock of 1907. (JP Morgan had been the lender of last resort in 1907 crisis.) There have been four systemic shocks in the last one hundred years; many banks failed in each episode. Each episode was associated with a sharp change in the price relationship between at least two classes of assets. The first episode was during 1920 when a sharp decline in food prices led a dramatic decline in the price of farm land, which had increased dramatically in the previous several years. The second was the Great Depression of the early 1930s, which followed both the sequential devaluation of many currencies and the Smoot-Hawley tariff of 1928. The third systemic crisis in the early 1980s was triggered in response to the dramatic change in the Fed's monetary policy at the end of 1979. More than five hundred banks failed in 2008 and 2009, and the U.S. investment banking industry was decimated.

The U.S. government's policy response in the first episode was benign neglect; the Fed remained on the sidelines. The U.S. economy boomed in the late 1920s, stock prices increased by a factor of three between 1927 and the peak in October 1929. Some foreign governments were crowded out of the U.S. financial markets by the increase in the allocation of funds to financial transactions. The Smoot Hawley tariff diverted demand from foreign goods to U.S. goods, and the response in many foreign countries was to allow the prices of their currencies to decline. The U.S. banks were squeezed between the decline in U.S. prices of traded goods in response to the declines in the prices of foreign currencies as the various foreign countries broke the fixed price link between their currencies and gold and as Americans began to buy more gold. Home owners with mortgage indebtedness found that they could not re-finance maturing mortgages. The Hoover Administration promoted the Reconstruction Finance Corporation that would provide capital to banks. President Roosevelt nationalized American holdings of gold soon after he took office, which reduced the banks' concerns about liquidity.

The third systemic shock followed the dramatic change in the Federal Reserve's monetary policy in late October 1979, the policy had been feckless in the previous several years and slighted investor concerns that the inflation rate would accelerate. U.S. interest rates surged after the change in policy, short term interest rates increased more than long term rates, and the interest rate yield curve became negative, with the result that the interest payments on the short term deposit liabilities of many thrifts climbed above their interest income on their long term mortgages. The capital of the thrifts was being depleted; the concern was whether the short term interest rates would decline significantly to reduce the bleeding before they failed. The U.S. Government eased some regulations in the effort that the firms might be able to earn their ways out of their holes, which led to financial shenanigans.

The failure of more than 500 banks since 2007 reflects the sharp decline in home prices that began at the end of 2006, which lead to more than ten million foreclosures on home mortgages. The Greenspan Fed had adopted an expansive monetary policy in 2002, which contributed to the sharp increase in real estate prices and the consumption boom financed with mortgage equity withdrawals. Various policies were adopted to dampen the impact of declining prices, including the establishment of Maiden Lane One to facilitate JPMorgan Chase's purchase of Bear Stearns and the establishment of Maiden Lane Two to enable AIG to remain in business. Then in October the U.S. Congress approved the request for more than \$700 billion—the Troubled Assets Relief Program or TARP-- to enhance the capital of different banks.

Once property prices start to decline, the banks become more cautious lenders. Some borrowers will not be able to refinance maturing debt and they will become distress sellers of real estate, which could cause the price decline to accelerate. Without government intervention, the prices might decline below long run equilibrium values. Home prices in Florida declined below reproduction costs.

This review suggests that monetary policy is not effective in dealing with or forestalling a systemic crisis that leads to a significant decline in bank capital. The concern about re is modest understanding of the advantages of a more systematic approach toward dealing with bank capital adequacy problem. The Fed's policies—usually its actions, occasionally its inactions—have contributed to two of the most recent systemic crises. The policy choice is whether the variability in the GDP growth rate can be enhanced by policies that might conform bank capital to bank liabilities rather than relying on bank liabilities to conform with bank capital.

## II. THE EARLY 2000S GLOBAL SURGE IN REAL ESTATE PRICES

The banking crisis in Iceland in 2008 was a country specific manifestation of a global event; four other countries—the United States, Britain, Ireland, and Spain also had crises at the same time. Iceland's banking crisis was triggered by its currency crisis when its banks could no longer rely on money from new loans from foreign banks for their interest payments on their outstanding loans from these banks and they then defaulted. The sovereign debt crisis in Greece reflected an incipient currency crisis that the country might separate from the Euro. The crises in these countries followed booms that were associated with rapid increases in their external indebtedness; perhaps twenty countries experienced real estate booms. The features of these 2008 crises were similar to the currency and banking crises in Thailand and Indonesia and other countries in Asia in 1997 and to the Mexican crisis during its presidential transition at the end of 1994.

The likelihood that the 2008-2010 crises in seven countries were independent national events is trivially small. Moreover the preludes to the crises in Greece and Portugal were similar to those in the other counties, the major difference was the identity of the borrowers.

Every country that has had a banking crisis since 1980 previously had a boom; not every boom has been followed by a crisis but every crisis was preceded by a boom. The boom in each of these countries except Japan was induced in response to the increase in its capital account

surplus; the boom in Japan was associated with a decline in its capital account deficit. (Hence the first difference of the change in the Japanese capital account balance was the same as the first differences in the changes in the capital account balances of these other countries). The capital account surpluses of these countries could not increase unless there was a counterpart contemporary increase in their current account deficits. The increase in their capital account surpluses led to consumption booms as prices of securities and real estate and hence of household wealth moved up.

The external shock that led to the booms that preceded the 2008 global crisis was a sharp increase in the demand for international reserve assets, partly from the oil-exporting countries including Norway and Saudi Arabia and the United Arab Emirates, and partly from China. Soon after 2002, these countries experienced sharp increases in their export earnings, about the time that China became a member of the World Trade Organization. They used part of the increase in their export earnings to buy off-the-shelf securities available in the United States and Great Britain and other European countries, which meant that the capital account surpluses of these countries increased. The decline in their demand for international reserve assets after 2006 and 2007, which meant that the capital account surpluses of the United States, Great Britain, and these other countries also fell.

China and the oil exporting countries, and the United States and the other energy-importing countries were involved in a tango; the former group could achieve increases in their current account surpluses only if there were adjustments in the major industrial countries that led to larger current account deficits. The invisible hands were at work to motivate the increases in spending in the industrial countries.

During the expansive phase, some borrowers relied on money from new loans to pay all of the interest on their outstanding loans. For eight or ten years, all of the money that the Government of Greece needed for the interest payments on its outstanding indebtedness was obtained from new loans. Once the foreign banks slowed their purchases of the IOUs of the Greece Government, it lacked the money for the interest payments.

The ratio of Iceland's capital account surplus to its GDP increased sharply between 2002 and 2008—and the ratio of its current account deficit to its GDP increased by the same amount. Iceland had a massive boom, stock prices increased nearly tenfold and real estate prices doubled. The increase in asset prices was a response to the surge in the supply of credit from the sharp increase in cross border investment inflows and from dramatic increase in the domestic loans from the three Icelandic banks. An increase in the growth of domestic credit by itself would have led to the increase in asset prices and in total spending, and the price of the Icelandic krona would have declined because of the increase in spending on foreign goods. Hence the key factor was that the autonomous increase in the investor demand for Icelandic securities facilitated an increase in asset prices that enabled the Icelandic banks to rapidly increase their domestic loans. Some of the borrowers from the banks used the money to buy goods, some used the money to buy real estate and stocks.

The Icelandic banks took the initiative to sell more of the IOUs in foreign centers soon after they were privatized; they brought some of the foreign funds to Iceland which they converted to krona and then increased their krona loans. They also lent some of the foreign funds to Icelandic households and business firms, who brought these funds to Iceland and also converted them to krona. Iceland could experience an autonomous increase in its capital account surplus only if there was a counterpart induced increase in its current account deficit. The principal factor that contributed to this surge in consumption spending was the dramatic increase in household wealth, the secondary factor was the increase in the price of the Icelandic krona.

The increase in the price of Icelandic stocks led to revaluation gains for the Icelandic banks on their holdings of these securities, which led to increases in their capital, which enabled them to buy more domestic loans. The capital of the Icelandic banks increased by a factor of nine, which enabled them to increase their loans by the same amount. Their capital increased by about the same amount, primarily because of the increase in the market value of their stocks.

The necessary condition for the banking crisis in Iceland was that the external liabilities of the Icelandic banks had increased at a pace that was too rapid to continue for more than a few years. The sufficient condition was that the ratio of the Iceland's gross external liabilities to its GDP probably was about as large as the country's GDP. It was predictable that when the foreign demand for Icelandic IOUs slowed, the price of the Icelandic krona would decline, and at least by thirty or forty percent, since Iceland would no longer be able to finance a trade deficit. The krona equivalent of the indebtedness denominated in foreign currency would increase by same percentage as the decline in the price of the krona. Some of the Icelandic households and business firms with indebtedness denominated in a foreign currency would then default; others would sell domestic stocks and real estate and their prices would decline. As the price of Icelandic stocks fell, the capital of the Icelandic banks would decline, and they would be compelled to reduce their assets; they would sell stocks and they would not renew some maturing loans.

The ratio of the U.S. capital account surplus to U.S. GDP surged in the early years of each decade beginning with the 1980s. The U.S. banks and other financial firms did not take the initiative to sell their IOUs to foreign investors; these banks were largely passive. Instead the surge in the U.S. capital account surplus resulted primarily from the increase in purchase of U.S. securities by China and the oil-exporting countries.

China and the oil exporting countries could develop current account surpluses only if the United States and other countries developed the counterpart current account deficits. The financing of the U.S. current account deficit and the deficits in other energy importing countries was "automatic"; adjustments were necessary in the United States and these other countries to ensure that their demand for imports of goods increased as their exports of securities increased. The primary factor that contributed to the increases in their current account deficits was the surge in consumption spending that followed from the increase in the prices of real estate and stocks and hence household wealth. The second factor is the increase in the prices of securities and real estate in the countries in the several years before their crises. Every country that has had a banking crisis had previously experienced a boom in asset prices, no country has had a banking crisis since the early 1980s that had not previously had an asset price boom.

These asset price booms are transient events and continue as long as the countries experience increases in their capital account surpluses, which may continue for three or four years, or in some cases longer. When the capital account surpluses decline, asset prices decline.

Japan experienced the "mother of all asset bubbles" in the second half of the 1980s. Property prices and real estate prices increased by a factor of three. During the first half of the 1980s, there was a massive increase in Japanese purchase of U.S. dollar securities; the price of the yen declined sharply. The background for the Japanese experience differed from most other countries, since Japan had a large but declining capital account deficit in the second half of the 1980s. By 1985, the U.S. dollar had become overvalued; the incentives for Japanese investors to buy U.S, dollar securities had greatly diminished. Instead Americans began to buy Japanese securities, motivated in part by the anticipated increase in the price of the Japanese yen and in part by anticipated increase in the price of Japanese stocks. Japan then had to adjust to a decline in its capital account deficit, which could have occurred only if there was a counterpart decline in its current account surplus. The principal factor that contributed to the reduction in the Japan's current account surplus was the sharp increase in the prices of real estate and stocks. Japan's imports are skewed to primary products; Japan produces relatively small amounts of the goods that it imports. As a result, the increase in the price of the yen led to a very modest increase in imports and hence the decline in the trade surplus from expenditure-switching was modest. Hence Japan needed a massive increase in household wealth to effect the necessary increase in imports—and many of the increase in imports were impressionist paintings.

The transfer problem process was at work in Iceland, the United States, and Japan, and in each of the other countries that experienced an increase in its capital account surplus. When a country's currency is not anchored to a parity, the country cannot experience an increase in its capital account surplus unless there is a comparable increase in its current account deficit. Every country that has had a banking crisis previously had an asset price boom, and most of these countries—the principal exception is Japan—experienced an increase in their capital account surplus. Their capital account surplus could increase only if there was a counterpart increase in their current account deficit. The intermediate argument was that asset prices increased by the amount necessary to ensure that consumption spending increased and the demand for imports increased to ensure that the increase in the country's payments increased to match the increase in its receipts.

## III. THE IRRELEVANCE OF DODD FRANK

Yogi Berra might have said, "If you don't know where you started, you can't get there from here." The financial regulators in many different countries have failed to understand the fallacy of composition after more than one hundred fifty years despite the head start given to them by Bagehot. The practice in the United States, Japan and numerous other countries is that home mortgage loans are collateralized by real property. The regulators still have not learned to ask whether the market value of the real property was consistent with long term equilibrium based on household incomes.

The Wall Street Reform and Consumer Protection Act of 2010—Dodd-Frank (hereafter DF)—is the most comprehensive attempt at financial regulation to avoid a systemic crisis like the one in 2008. There are a lot of oversight features, but they reveal the inability to distinguish bank failure due to firm-specific problems from failure that reflects a systemic shock. Individual banks are subject to stress tests. The practice is that Bank of America, Citibank, and Wells Fargo are subject to the stress test on successive days, Monday, Tuesday, and Wednesday; the regulators should ask whether Bank of America, Citibank, and Wells Fargo can pass the stress test on the same day. A living will may be useful for the ownership transition when one bank fails because of idiosyncratic factors, but it is irrelevant when there is a failure because of a systemic shock.

The United States had no need for additional measures to cope with bank failure because of idiosyncratic factors even before the 2008 crisis. And the United States has no established procedures to deal with a shock that leads to a large decline in capital for all banks as a group or even for a large bank like Continental Illinois Bank. When that bank failed in 1984, the Fed Reserve ensured that the bank would continue to function; its intervention was ad hoc. No effort was made to re-capitalize the bank. More than 1000 thrifts failed in the 1980s as a result of a systemic shock from the Fed.

The rationale for these measures appears to be that the cause of the crisis was a firm-specific event, none of the particular aspects recognize that there was a systemic shock. Dodd Frank does nothing to insulated the monetary economy from an increase in investor demand for U.S. dollar securities and the temporary increase in U.S. asset prices that occur as an integral part of the adjustment program. The inference about the cause of the 2008 crisis from the DF measures is that the 2008 crisis was caused by some sort for financial flu that hit several thousand U.S. banks at the same time. DF does not recognize that the 2008 crisis was a systemic shock; instead it seems that each bank failed because of idiosyncratic show. The legislation ignores that bank failures are interdependent rather than independent events.

There is no recognition in DF about the costs of financial regulation. Regulations incur costs, someone pays—The increase in the bank capital requirement increases the costs of financial intermediation, an implicit subsidy to non-regulated financial firms. The supply of credit may decline modestly, the sources of credit are impacted. That leads to a larger spread for banks, there is no attention to the costs of higher capital requirement.

During a crisis, a healthy firm acquires a failing one, often at what it considers to be a bargain price. Bank of America acquired Countrywide and then Merrill Lynch, in both cases it underestimated the embedded loan losses. Wachovia acquired Golden West.

DF does not recognize that the U.S. banking crisis of 2008 resulted from the variability of the U.S. capital account surplus. The autonomous increase in this surplus induced a massive increase in the price of U.S. real estate as an integral part of the adjustment process to ensure that the U.S. current account deficit increased as the U.S. capital account surplus increased. If his legislation been adopted in 2000 and the flow of investor funds to the United States is taken as a given, the U.S. banks would have supplied less credit and some non-bank lenders would have

supplied more credit. When the investor demand for U.S. dollar securities slackened, U.S. real estate prices would have begun to decline.

#### IV. RE-ESTABLISHING THE RECONSTRUCTION FINACE CORPORATION

One of the unique features of the banking industry is that it has received more government regulation intended to prevent the failure of individual firms than any other industry. One motive is consumer protection, another is economic stability since failure of a bank can be devastating for a small community. A second motive is that the failure of a group of banks in a system crisis can disrupt the national economy and lead to a large decline in GDP, much greater than the decline in a traditional recession.

No regulated industry has failed to deliver on its promises as has banking has. The cause of each wave of crises is a systemic shock, often because of monetary mis-management. The paradox is that the banks have been blamed for the 2008 crisis, even though the banks were the victims. Bank management was crucified, bank shareholders lost eighty percent of their wealth. The source of the problem was monetary mis-management, the Greenspan Fed adopted an expansive monetary policy in 2003 without any awareness of how the U.S. economy would adjust to the increase in the U.S. capital account surplus.

The traditional approach has been to merge failing banks with healthier banks, a marriage that often is blessed by removing doggy assets. One impact is that the ratio of the capital to the deposits of the acquiring bank declines since the acquired bank had too little capital. Another is that the number of banks decline, consolidation increases. A third is that the costs of financial intermediation in the good years is increased.

The U.S. government should re-establish the Reconstruction Finance Corporation II to provide the funds to recapitalize failing and insolvent banks. The first RFC was established in 1932 get the quote write a para on the history of the RFC. RFC II would buy newly-issued common shares in any bank deemed to have too little capital; the current shareholders would be diluted. The senior two or three officers would be removed; the Board of Directors would resign. These RFC II banks would be managed as private enterprises on a care-taker basis; the thrust would be to prepare the banks to be privatized within three or four years.

The re-establishment of the RFC would be accompanied by a reduction in bank capital requirement to five or six percent of bank liabilities. The ceiling of deposit insurance would be reduced.

The objective of the proposal is to stabilize the banking system. The current arrangement requires that bank assets adjust to the level of bank capital, which often has been declining; instead the proposal provides a low cost way to adjust capital to the value of bank assets.

Existing banks would have the option of continuing under the current regulatory regime or of electing to move to the less costly arrangement. And their vested shares would become much less valuable as a result of dilution.

One advantage of the is proposal is that it would sharply reduce the consolidation of banks that now occurs when the FDIC induces a strong bank to buy a failing bank. The acquiring bank often in cautious, and wants a large cash payment for acquiring some loans and securities of uncertain value. One reason the value is uncertain, which provides a downward bias. A second advantage of the proposal is that RFCII would be profitable. The RFCII would be a classic vulture investor, and it would profit because it would acquire the bank at a time when their value was greatly depressed because of cyclical factors.

A third advantage of the proposal is that it would de-politicize the extension of government support for failing banks, they would be well publicized procedures for providing government capital. A fourth advantage of the proposal is that the effectiveness of monetary policy would be enhanced. Monetary policy should focus on economic stability and should not be distracted by a concern for financial stability

A fifth advantage of the proposal is that it would reduce the tax on banks from high capital requirements. These requirements have no advantage, they are irrelevant in preventing a systemic shock and in mitigating a shock

#### **CONCLUSION**

The key idea of this essay is that U.S. macroeconomic stability would be enhanced if the U.S. government funds were available to stabilize the supply of capital to banks after a systemic crisis had led to large loan losses; otherwise the bank liabilities would shrink to correspond with depleted capital. There have been four systemic crises since the Federal Reserve was established in 1914; each was associated with a sharp decline in the price of real estate or in the price of long term bonds. Hundreds of banks failed in each crisis; the early 1930s crisis and the 2008 crisis led to sharp declines in nominal and real GDP.

The Reconstruction Finance Corporation established in 1932 is a model of a government institution that provided capital to banks and to firms in many other industries. The proposed RFCII would acquire common shares in these failing financial firms; the ownership interest of the private shareholders would be extensively or fully diluted. The objective is to save the banks as functioning institutions while disposing of the bankers; the top managers would be displaced and the board of directors would be dismissed. The new managers would be care takers and would prepare the bank for privatization once the economic situation had stabilized. The capital requirements would be reduced, and deposit insurance would be reduced.

One of the collateral benefits is that the banking system would be more competitive; the existing arrangement of merging failed banks with more robust competitors reduces the number of banks. This arrangement would be profitable; at least that is the inference from TARP and from the Maiden Lane firms that were established to facilitate the Federal Reserve's investment in Bear Stearns and in AIG. Monetary policy would be enhanced, since it would no longer be constrained by the adverse impact on financial stability. The costs of bank intermediation in the good years would be reduced because bank capital requirement would be lower.

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