

A Post-Keynesian Analysis of the Subprime Crisis  
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## *I. Introduction*

The present Subprime Crisis represents an intriguing challenge for policymakers whom have been tasked with remedying it. This paper seeks to propose an augmented Minskian solution to the Subprime debacle. In so doing, we will explore several historical financial crises that although superficially dissimilar, are in fact quite alike on the basis of general cause and ultimate result if left unchecked. We will then argue that the pertinent difference between each crisis is the way in which the Government acted to quell it. Once it has been sufficiently argued that the crises are indeed similar enough for comparison, we will attempt to determine if there is a single government action that was the most economically efficient. Finally, we will combine our empirical investigation with a Minskian theoretical analysis to provide a possible solution to the Subprime crisis<sup>2</sup>.

The financial crises that we will be exploring are: The 1933 Banking Crisis, The Savings and Loan Crisis and the Long Term Capital Management Debacle. The former two were chosen because they are quite similar, even on the surface, and are often mentioned by Hyman Minsky in his theories. The Long Term Capital Management debacle is seemingly dissimilar, but actually shares several important underlying similarities to the former two and was chosen because the policy that was utilized was unique and illustrative. There are a great many other crises that could have been chosen, however, these three seem to provide the most contrast while remaining comparable.

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<sup>2</sup> Please note that this paper is a theoretical exercise, and does not purport to provide an actual policy proposal.

## *II. Minsky's Financial Instability Hypothesis*

The so-called Financial Instability Hypothesis is Hyman Minsky's response to orthodox (i.e. neo-classical) macroeconomic theory regarding business cycles. Minsky suggests that bankers<sup>3</sup> "like all entrepreneurs in a capitalist economy ... are aware that innovation assures profits."<sup>4</sup> Therefore, he goes on to say, bankers "strive to innovate in the assets they acquire and the liabilities they market."<sup>5</sup> Minsky rejects the orthodox Quantity Theory of Money that there is a positive, linear relationship between the quantity of money, and the nominal price level, suggesting that there are other dynamic relationships that need be considered. That is say that changing the supply of money will not merely reduce or increase the price level and aggregate demand, but will also change the way in which banks will "deal debt," which in turn will cause structural changes in the financial system. These structural changes due to monetary policy might be amplified as the "dealers of debt" shift from being chartered banks to other types of institution; Minsky<sup>6</sup> states:

The 'declining' role of banks has significance for the efficacy of monetary policy operations. The channels by which the Federal Reserve operations affect the economy may no loner be by changing the availability or cost of financing, but rather by affecting uncertainty: by affecting the evaluation by portfolio managers of the viability and sustainability of markets. When

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<sup>3</sup> Minsky uses the term "bankers" to describe anyone that "deals debt;" we will use the term in the same vain.

<sup>4</sup> Minsky, Hyman. "The Financial Instability Hypothesis." Levy Working Paper 74 (May 1992)

<sup>5</sup> *Ibid.*

<sup>6</sup> Minsky, Hyman. "Financial Instability and Decline (?) of Banking: Public Policy Implications." Levy Working Paper 127 (Oct. 1994).

Central Bank operations affect the evaluation of uncertainty by financial market agents, market reactions will often be out of line with the size of the operations.

This argument that the holders of debt are no longer banks, but a hodgepodge of financial institutions resonates strongly with modern crises, as we will discover when we conduct our empirical analysis. We will find that anti-recessionary (as well as contractionary) measures often affect far more than real output and price level, as Minsky predicts. Before we can begin our empirical investigation, it is crucial to take a deeper look at the general debt progression process proposed by Minsky.

Minsky fits firms that borrow money into three varieties based on their ability to fulfill their contractual commitments to pay back debt: Hedge, Speculative and Ponzi. Hedge financing units can fulfill their debt obligations with current cash flows. Speculative financing units must roll over debt because current income will only cover interest payments and not principle. And finally Ponzi Units that can neither pay back principle or interest. Minsky also disagrees with the orthodox view that the economy is always in equilibrium. Rather, the Financial Instability Hypothesis theorizes, “the economy has financing regimes under which it is stable, and financing regimes in which it is unstable.” If the aggregate economy contains a greater number of hedge units relative to speculative and Ponzi units, it is likely stable, as weight shifts to speculative and Ponzi units the system becomes increasingly volatile<sup>7</sup>.

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<sup>7</sup> Minsky 1992

Minsky argues that over prolonged periods of economic prosperity, economies tend to automatically shift from stable to unstable. This can be accelerated by contractionary monetary policies (e.g. appreciating interest rates) that make debt more expensive and shift speculative units into Ponzi ones because their interest payments become greater. Even more detrimental is the fact that this can cause the asset value of Ponzi units to “evaporate,” hence forcing them to liquidate assets. When assets are liquidated on the aggregate scale, (real and/or financial) asset values plummet, this is called debt deflation. It is essential that the government act at this crucial juncture, referred to as ‘The Minsky Moment,’ before debt deflation to keep the economy from collapsing. Although this action saves the economy from doom, it causes economic agents to have renewed faith in the economy and restarts the debt progression process. There is also the issue that there is moral hazard such that organizations realize that the Government will bail them out, so they reduce lending standards and actually accelerate the cycles<sup>8</sup>.

The conclusion that Minsky comes to is that business cycles, and therefore financial crises, come about endogenously and are unavoidable. The government must act to quell crises lest the business cycle will become more severe and the cycle will none-the-less repeat. It is at this point that we divert from economic theory, and look at financial crises that have occurred in the United States throughout the 20<sup>th</sup> and 21<sup>st</sup> century. We will, however, analyze each one of these historical events through the framework of financial instability. Since government intervention is a necessary evil, we

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<sup>8</sup> *Ibid.*

will consider the economic effects of each policy and try to determine if a single policy is most suitable.

### *III. The 1933 Banking Crisis*

The 1933 Banking Crisis came about some four years after the 1929 stock market crash. The banking crisis that put into question the soundness of the United States' financial system is perhaps one of the most dramatic in history. The causes of the Banking Crisis are incredibly numerous, and equally controversial, but looking at figures gives us a clue of the magnitude of the situation. After the stock market crash of 1929, the banking system began collapsing – by 1933 nearly 20 percent of all banks in the United States suspended their activities<sup>9</sup>.

A major problem was that these banks were frequently chartered on the state level, and were often left unregulated and out of the control of the Federal Reserve. This implied that not only could banks collapse because of national depressions, but they could also collapse on the basis of local problems because local people often put in deposits and took out loans. To compound the problem, the Federal Reserve failed to even attempt to stop the consistently reducing asset prices, hence forcing banks into failure because the value of liabilities ended up being greater than the value of assets. Moreover, the Federal Reserve was not keen on lending money to non-member banks, so they frequently had no way of borrowing money to cover liabilities. To further

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<sup>9</sup> Chandler

compound the issue, the government increased the tax rate, which was even more deflationary and contractionary<sup>10</sup>.

In February of 1932 President Hoover created the Reconstruction Financing Corporation (RFC), which would loan money to banks to help them remain solvent. The Federal Reserve also began open market operations (namely purchasing bonds) to inject money into the banking system. This intervention briefly helped the banking system, but a great many banks remained insolvent. As time went on, people began demanding deposits, and banks would not be able to provide them, this caused great uncertainty and amplified the rate at which this occurred. States began implementing “Bank Holidays” that forced banks to close, and also imposed strict regulations on the amount of deposits individuals could withdraw. The nation had become disgusted with Hoover’s inaction by November of 1933, and voted Franklin Delano Roosevelt into office. By February of 1933, the situation had become very grim, and most banks were closed. On March 12 of that year, only four days after his inauguration FDR made a radio address concerning the banking system<sup>11</sup>.

“What, then, happened during the last few days of February and the first few days of March? Because of undermined confidence on the part of the public, there was a general rush by a large portion of our population to turn bank deposits into currency or gold. -- A rush so great that the soundest banks could not get enough currency to meet the demand. The

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<sup>10</sup> *Ibid.*

<sup>11</sup> Roosevelt, Franklin Delano. “Address of President Roosevelt by radio, delivered from the President’s Study in the White House at 10 PM today.” Radio speech. 12 Mar. 1933

reason for this was that on the spur of the moment it was, of course, impossible to sell perfectly sound assets of a bank and convert them into cash except at panic prices far below their real value.”

FDR faced a Minsky Moment in March of 1933, when banks reopened they would have to sell off both real and financial assets to make-good on deposits. This glut of supply would force the price of the assets to decrease in a race to the bottom and could have caused the entire economy to collapse. Instead of allowing banks to re-open, FDR called for a federal bank holiday wherein every bank would close until it could be individually reviewed and re-opened. The idea was to weed out the banks that were actually insolvent and save those that were indeed solvent but lacked the currency to make-good on deposits without selling assets. FDR also told the American people “Your Government does not intend that the history of the past few years shall be repeated. We do not want and will not have another epidemic of bank failures.” Although seemingly merely patriotic this bold and powerful statement soothed people’s fears and kept them from demanding deposits, which would have voided the policies that he would utilize<sup>12</sup>.

The way in which FDR pulled the banking system from the brink of failure was ingenious. He utilized Hoover’s Reconstruction Financing Corporation to place equity in roughly 33 percent of closed banks. This equity injection ensured that banks were solvent and would not need to sell assets to

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<sup>12</sup> Chandler, Lester. “The Banking Crisis of 1933.” Reviews in American History

allow depositors to withdraw money. The true brilliance of this concept is reflected in the fact that as banks began to recover, the RFC received its money back by either the sale of equity interest or the repurchase of RFC's investments out of retained earnings<sup>13</sup>. Minsky<sup>14</sup> points out that "On the whole, the investments in failed banks yielded sufficient funds so that the costs to the government were nil." This implies that there was no net increase in national debt caused by the bailout. Minsky refers to this type of bailout as the government acting as an investment bank. As we will see in the Savings and Loan crisis, the government can bail banks out in different ways<sup>15</sup>.

#### *IV. The Savings and Loan Crisis*

Savings and loan associations, or thrifts, caused the now infamous Savings and Loan Crisis, so it is useful to define exactly what a thrift institution constitutes. Thrifts have existed in the United States since the early 1800s and generally specialize in taking savings deposits and creating mortgage loans. Thrifts were very heavily regulated up until the 1970s; for example, the interest rate that they could provide depositors was capped. However, a combination of inflation, that caused real interest rates to climb, and the introduction of money-market funds caused thrifts to become uncompetitive. Many thrifts made fixed interest rate mortgages, however, as real interest rates grew higher depositors desired greater interest rates. Since loans are a thrift's assets, and deposits are

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<sup>13</sup> *Ibid.*

<sup>14</sup> Minsky 1994

<sup>15</sup> *Ibid.*

its liabilities, this ever-increasing spread made it difficult for thrifts to balance their assets and liabilities<sup>16</sup>.

The government noticed this happening, and began deregulating the industry. The first step, taken late in President Carter's administration, was to remove the aforementioned cap on the interest rates that Thrifts could provide for deposits. Also, the government began allowing Thrifts to become involved in commercial lending and unsecured (those that are not backed by assets) loans and brokered funds. Brokered funds were when a broker would be paid a commission for assisting someone in finding the CD that pays the greatest interest rate. Thrifts, therefore, could easily set their interest rate to be the highest, and they would receive large inflows of deposits. However, to pay these high interest rates they needed to create loans with higher interest rates. Generally, the way that they would produce high interest rate loans would be by giving them to rather risky (speculative or ponzi) firms rather than less risky home loans<sup>17</sup>.

It became clear by the mid-1980s that there was a major problem developing in the Savings and Loan industry. Thrifts were making poor, and very risky loans and as they were defaulted on, the thrifts quickly fell short on assets to adequately back their liabilities. By the end of 1986, 441 Thrifts valuing \$113 billion in assets were considered insolvent and another 553 Thrifts valuing \$453 billion in assets had less than 2 percent of assets backing liabilities<sup>18</sup>. Consequently, the Federal Savings and Loan Insurance Corporation (FSLIC) became insolvent in December of 1986, which spurred Congress to create the Financing Corporation (FICO) in 1987 that would flood the FSLIC with long-

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<sup>16</sup> The S&L Crisis: A Chrono-Bibliography. The Federal Deposit Insurance Corporation (FDIC)

<sup>17</sup> *Ibid.*

<sup>18</sup> *Ibid.*

term bonds to try to pull it out of insolvency. FICO completely failed, and Congress created FIRREA in August of 1989 that would abolish the FSLIC and create a new FSLIC Resolution Fund that would be administered by the Federal Deposit Insurance Corporation. Estimates of the costs of the crisis were estimated between \$50 billion and \$163 billion at the time, but it was near impossible to come to a consensus because thrifts continued failing<sup>19</sup>.

Once again, the government reached a Minsky Moment, thrifts increasingly lacked the requisite assets to fulfill their contractual agreement to pay depositors back. If left unchecked, these thrifts that were now Ponzi units would have to sell their real and financial assets at ever-decreasing levels to attempt to pay depositors back. The FDIC finally took control of the situation by backing deposits and paying people back, it is estimated that it cost the Federal Government \$123.8 billion<sup>20</sup>.

Clearly, \$123.8 billion is a tremendous amount for the government to spend to clean up the problems caused by the Savings and Loan industry. The government, in this case, decided to play the role of liquidator, which involved paying off depositors, closing down banks, foreclosing on debtors and selling the assets of failed banks as quickly as possible. This, unlike the bailout in 1933, caused the government to incur a significant net debt because thrifts were closed without much consideration of their solvency. The next crisis that we will consider involves banks in a very different sense.

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<sup>19</sup> *Ibid.*

<sup>20</sup> *Ibid.*

## V. *Long Term Capital Management*

The story of Long Term Capital Management is one of the most awe-inspiring tales of magnificent wealth gain, and equally incredible failure. Stock brokers, and traders alike still shudder when the name Long Term Capital Management is uttered. John W. Meriwether, a well-known bond trader, founded Long Term Capital Management in 1994. Meriwether intended on opening a hedge fund that would provide consistent returns using advanced investment strategies. He believed there would be a market for this among wealthy individuals and institutions that were tired of volatile markets. At first, the road show went very slowly as people were skeptical of Meriwether's investment strategies. However, after he appointed to well-respected economists to his board, he started picking up many investors that were willing to invest upwards of \$10 million, the Fund's minimum investment<sup>21</sup>.

Long Term Capital Management's hedge fund opened in 1994 with a net asset value (NAV) of \$1.3 billion<sup>22</sup>. This thoroughly broke every record for opening NAV of a hedge fund or mutual fund of the time. How did a new fund, with a fairly heterodox investment strategy gain so much prominence, so quickly? One of the reasons was most

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<sup>21</sup> Lowenstein, Roger. When Genius Failed: The Rise and Fall of Long-Term Capital Management.

<sup>22</sup> *Ibid.*

likely that the investment strategy supposedly provided very consistent returns at very manageable risk.

The investment strategy the Fund used was extremely quantitative, heavily relying on economic models. The general theory that LTCM worked under is that there are inefficiencies in the Bond market that can be sought out and then. Although the actual theory is out of the scope of this paper, the general idea is that prices of financial assets tend to reach an equilibrium price over time. One can capitalize on this by finding securities that are improperly priced and “betting” that they would converge over time. Take for example, on-the-run and off-the-run treasury bonds. These bonds are quite similar, but off-the-run bonds are older and slightly less liquid and therefore tend to be less expensive. The LTCM team would short sell<sup>23</sup> the on-the-run bond because it is more expensive, and long buy the off-the-run bond knowing that the price of the bonds will have to converge to some level. The purpose of this strategy is that LTCM did not need to know whether prices would rise or fall, just that they would converge so risk other than non-convergence is largely negated. Generally, these convergence trades yield very little returns per trade at a low and quantifiable risk level; however, if the trader is to utilize leverage (i.e. borrowing) they could greatly magnify returns. This is exactly what Long Term Capital Management intended on doing.

The economists and traders that ran Long Term Capital Management were extremely proficient at orchestrating very complex convergence trades. A notable reason

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<sup>23</sup> Short selling is the opposite of long buying; it essentially represents a bet that a security will fall in price. Functionally, it is slightly more complex and risky than long buying in that the firm on the short end agrees to buy the security today and pay for it at a later date. Since the price of securities can increase infinitely, losses are unlimited as opposed to a long position that can only devalue by 100%.

for their proficiency is the fact that they were able to negotiate with investment banks and provide themselves with excellent borrowing terms. For example, banks generally force institutions to put up collateral, called a haircut, when borrowing for trading in case the securities completely devalue. However, the LTCM was able to convince them that they were too important to receive a haircut. The convergence trades they were running involved many small trades, and LTCM conducted these trades through several banks such that no one bank could determine their real exposure to a single trade. Overall, this enabled LTCM to leverage at unprecedented levels. Indeed, LTCM reportedly leveraged the aforementioned off-the-run, on-the-run trades thirty to forty times<sup>24</sup>!

The statistics are truly astonishing; by 1998 LTCM had assets on the balance sheets valuing \$125 billion with only \$5 billion in equity backing them<sup>25</sup>. Moreover, LTCM used very advanced futures and swap contracts that would balance out, so they were not recorded on the balance sheet. With these contracts accounted for, the value of liabilities was roughly \$1.2 trillion<sup>26</sup>. This leverage did not directly calculate into risk, because trades did indeed involve very little risk and the managers very precisely accounted for risk levels. In fact, they even sent a letter out to shareholders detailing the exact risk calculations.

At this point it is useful to look back toward the financial instability hypothesis that we have been building upon. Leverage, of this magnitude, is codeword for Ponzi financing. Despite the fact that risk is low, the downside potential for LTCM and the financial system in total was quite great because if LTCM were to collapse for some

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<sup>24</sup> *Ibid.*

<sup>25</sup> *Ibid.*

<sup>26</sup> *Ibid.*

reason, they would have to liquidate an unbelievable number of assets, valuing billions of dollars. Despite this downside potential, euphoria existed amongst the LTCM managers because returns were quite impressive.

The fund, between 1994 and 1996 performed extremely well, returning 28%, 59% and 57% respectively<sup>27</sup>. Additionally, returns were quite steady in that they generally did not fall as the market did (see **Figure 1**). The returns in 1997 were not quite as impressive mostly because more institutions began using convergence trades so there existed fewer possible trades available. It was at this point that the LTCM managers began making poor choices.

Long Term Capital Management decided to give investors back about \$2.7 billion in equity<sup>28</sup>. The purpose of this strange move was to artificially make returns higher by further increasing the leverage. They also became involved in more risky markets that they were less knowledgeable about. Generally there was less assurance that the new trades they were making would converge, but LTCM betted they would and continued highly leveraging them.

LTCM began facing major issues on August 17, 1998 when Russia devalued the ruble and defaulted on \$13 billion of debt<sup>29</sup>. This situation caused a global flight to quality, which meant that people began moving assets away from risky assets and into less risky assets. For example, people began investing heavily in on-the-run treasury bills that drove the price of these securities up, thereby increasing the spread between on-the-

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<sup>27</sup> *Ibid.*

<sup>28</sup> Prabhu, Siddharth. "LONG-TERM CAPITAL MANAGEMENT: Dangers of Leverage."

<sup>29</sup> *Ibid.*

run and off-the-run bonds that LTCM bet would converge. Overall, spreads that LTCM hoped would converge to zero, flew higher and caused major losses for the Fund.

QuickTime™ and a  
decompressor  
are needed to see this picture.

### Figure 1

By September 21, 1998, only a month and four days after the Russian debt default, LTCM's equity fell to about \$1 billion from \$4.5 billion, however liabilities still valued over a trillion dollars<sup>30</sup>. If LTCM went bankrupt it would have caused turmoil in worldwide financial markets. The issue is that if a firm defaults on an option, the other party can liquidate the defaulting company's assets. LTCM, however, was trading in very illiquid markets so selling assets would have caused spreads to further diverge, hence causing more and more divergent spreads that would cause a downward spiral. The problem was compounded by the fact that many financial institutions utilized a similar strategy, so potentially those institutions could have had to default, worsening

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<sup>30</sup> *Ibid.*

the spiral. Many of these institutions were banks that owned both real and financial assets so it is possible that this could have caused a debt deflation for the World's macroeconomy.

This condition represents yet another example of a Minsky moment. This time the potential debt deflation would have started in the financial market, but could easily have moved to the real markets. Clearly, the government had to intervene to stop financial and real markets from completely collapsing. The Federal Reserve organized a very interesting bailout. The Federal Reserve Bank of New York organized a meeting of banking executives and encouraged them to inject equity into LTCM to avert the imminent financial crisis. In the end, several banks agreed to buy LTCM out for about \$3.7 billion<sup>31</sup>, which brought the Fund back to an acceptable level of leverage. This time, the government worked in a way that Minsky did not consider, instead of acting as an investment bank, they convinced money center and investment banks to buyout a failing company. This is an interesting solution, because it saved the government from having to nationalize a company, and obviously there was no national debt created from this process. Before we consider this further, lets discuss the present Subprime crisis and determine if a Minskian analysis would apply to it.

## *VI. Subprime*

The Subprime crisis of 2007 is an extremely complex situation to analyze. Although the details are interesting, they are out of the scope of this paper so we will

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<sup>31</sup> *Ibid.*

provide a broad-based analysis of the causes and dangers of the crisis with the ultimate goal of proving that Subprime represents yet another Minsky moment. Subprime mortgages are defined as loans given to individuals with the lowest credit ratings. Credit ratings function in such a way that as credit rating declines, the risk of default climbs.

The Subprime market grew considerably during the 1990s as a result of improved underwriting capabilities of firms providing loans. More importantly, perhaps were major financial innovations that changed the way in which lending money works. In the past, banks would receive deposits and would loan out funds. Banks yielded a profit by receiving a greater interest rate on their assets than what they paid on their liabilities. However, within the last fifteen years, deregulation combined with financial innovation has changed the way in which mortgages function. Now when a bank creates a mortgage, they frequently re-package it and sell it on the secondary mortgage market. That is to say that they break the mortgage up and distribute the risk and returns among many parties. This, however, tends to confuse the risk rating system, as the securities are broken down several times and each time the risk rating is re-adjusted and it becomes difficult to gauge the actual risk that the holder of the mortgage backed security will face. The mortgage backed securities market as been growing over the last fifteen years, and increased the supply of mortgages available.

Subprime mortgages are surprisingly prevalent, in a speech that Federal Reserve Board Chairman Ben Bernanke<sup>32</sup> gave on May 17, 2007:

About 7-1/2 million first-lien subprime mortgages are now outstanding, accounting for about 14 percent of all first-lien mortgages. So-called near-

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<sup>32</sup> Bernanke, Ben. "The Subprime Mortgage Market."

prime loans--loans to borrowers who typically have higher credit scores than subprime borrowers but whose applications may have other higher-risk aspects--account for an additional 8 to 10 percent of mortgages.

The increased availability of Subprime mortgages, taken together with extremely low interest rates enabled individuals who were previously unable to enter the housing market to enter the housing market.

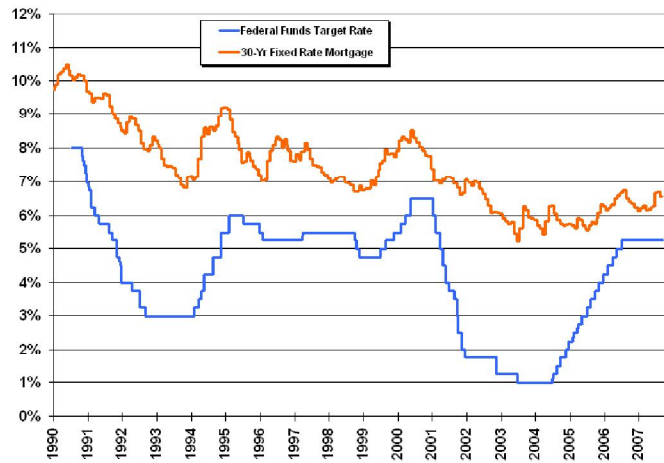


Figure 2

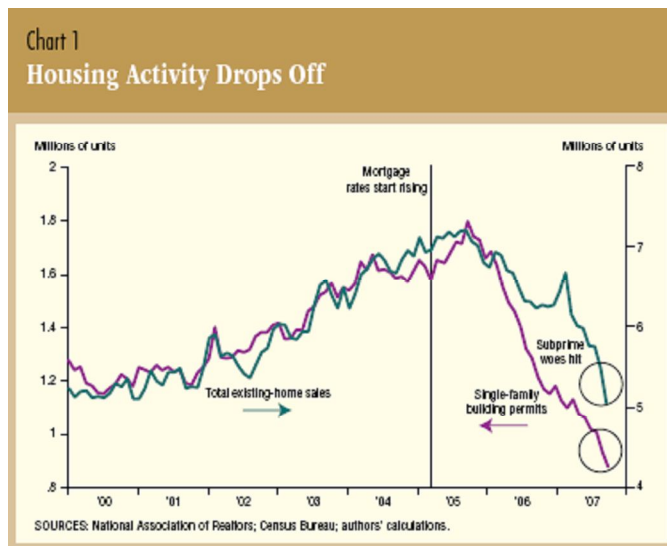
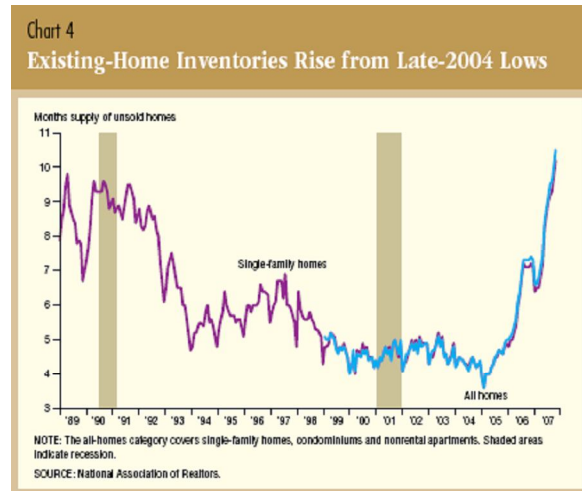


Figure 3

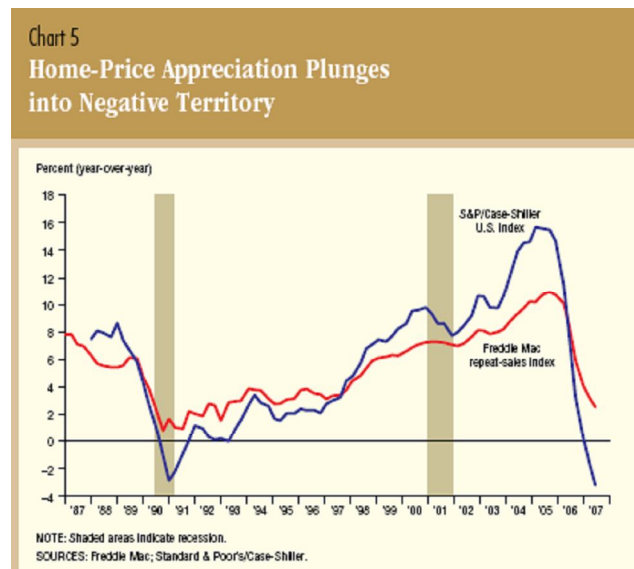
The two charts above graphically depict the situation in the debt and housing market. An important aspect to realize as it concerns financial instability is that between 2000 and 2004 the Federal Reserve enacted a heavily expansionary monetary policy to ease recession. Minsky theorized that with the diminishing role of banks, monetary policy might cause disproportional changes. This is exactly what happened here, the Federal Reserve depreciated interest rates considerably, the direct result is that mortgages (and other loans) became less expensive, however this combined with financial innovation enabled many more people to enter the housing market, which caused a major overheating of the housing market as can be seen in the lower figure. This most likely pushed hedge units into speculative ones, and speculative ones into Ponzi ones.

The Federal Reserve began a monetary contraction in 2005. The purpose of the contraction was to keep the economy from overheating, and to reduce the threat of inflation. Just as the financial instability hypothesis suggests, the effects were quite greater than the Federal Reserve expected. As interest rates grew higher, those individuals that had mortgages with adjustable interest rates began having major problems. The rise in interest rate pushed households from speculative territory where they could pay monthly interest payment with current income, to Ponzi territory.



**Figure 4**

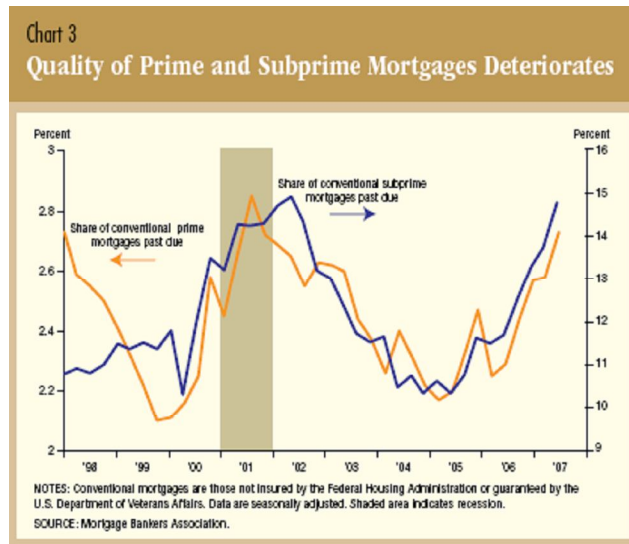
As the above figure illustrates, to avoid the risk of default, people began selling their homes.



**Figure 5**

This, of course, causes a glut of supply in the real estate industry that pushes house prices down. The figure above show that housing prices actually began depreciating in mid-

2006. Ultimately, falling asset values and excessive supply push a larger and larger share of Ponzi units into bankruptcy. As is very obvious from the chart below, there is a quickly increasing share of Subprime mortgages that are overdue.



**Figure 6**

In the housing market, when a household cannot sell their home, they are forced to default, and the bank (that actually owns the home) must foreclose and attempt to resell it. As this continues to occur, we are left at yet another Minsky moment. Subprime is especially frightening because debt deflation could potentially hit both the housing market and the financial markets because of the way in which these mortgages are spread. What is the government to do to keep debt deflation from occurring?

## VII. *Solving Subprime*

After a thorough theoretical and empirical analysis of financial instability we can finally attempt to propose a policy to fix it. The three case studies we chose each contained a Minsky Moment, that critical juncture before debt deflation where the government must act. Recall that during the 1933 Banking Crisis, the government created a “government investment bank” that injected money into the banking system by purchasing pieces of banks. They later resold the pieces back to the private sector once the crisis was over. When the Savings and Loan crisis finally caused the government to act, the government chose to play the role of “liquidator.” The government paid back depositors, while closing down banks, foreclosing on debtors and selling the assets of failed banks as quickly as possible. In the case of Long Term Capital Management, the government convinced bankers to bail the Fund out and save the system.

Minsky rejects the notion of the government playing the role of liquidator<sup>33</sup>, and we agree. When the government liquidates banks it destroys banks that are solvent, but momentarily in crisis. Moreover, it does not give those whom owe money a chance to pay it back. Instead, the government takes it upon itself to pay back depositors. This creates a great amount of national debt that is rather unnecessary. That leaves the government acting as an investment bank or the government trying to convince investment banks to help out as possible solutions. The real advantage to both of those solutions is that in the long run, it is possible that there will be no additional national debt formed from the bailing out process.

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<sup>33</sup> Minsky 1994

We propose a hybrid between those two policies to solve Subprime in the short run. First, we reject the current Federal Reserve policy of cutting the Fed Funds and Discount Rate further. Although it is essential that banks be able to borrow from the Federal Reserve to sure up bad Subprime investment, it is unnecessary to open up such a broad window that can end up over stimulating the economy. Rather, we call for the government to pursue more targeted measures.

The government should first call for lenders to work with borrowers to save as many viable mortgages as possible. Freezing interest rates on mortgages that currently have climbing annual rates is a good way to do this. The government can lend banks money specifically for the purpose of accomplishing this task through a special window at the Federal Reserve. However, there will invariably be households that have mortgages that are simply unviable. Even with reduced and fixed interest rates, these households might have to default. Rather than banks foreclosing on the home, it would be sensible for the government to buy the mortgage and the home from the lender. The government would obviously possess a great deal of homes if there were many borrowers that default, so allowing default is a worst-case scenario. After the home is nationalized, the government can charge a monthly rent for the current owners to become tenants. The government can then hold on to the home until these “renters” become current in their payments or decide to move elsewhere. Either way, inventories will begin to recede, and then homes will slowly be sold back into private sector, presumably making most of their investment back. This very much capitalizes on the fact that the federal government is one of the only agents that can act counter-cyclically. Theoretically, this should stop the effects of a possible debt deflation in the housing sector.

Unfortunately even with this policy in place, there can be residual problems in the mortgage backed securities arena. In this sector, the government should encourage banks to create a fund that purchases mortgage-backed securities that are failing and the government could lend money at low interest rates to help banks inject money into the fund. It shouldn't need to be terribly large fund, however, because the government should within a fairly short time frame be able to sure up many mortgages through the aforementioned program.

In the long run, although the occasional financial crisis is inevitable and indeed part of how the system functions (according to Minsky), there might be structural changes that can reduce the frequency and severity of crises. One of Minsky's major suggestions is that the Securities and Exchange Commission needs to not only regulate to reduce corruption and protect investors, but to dampen business cycles. That is to say that they are in a much better position to regulate certain aspects of the financial market, for example, they could have tracked the progression of the mortgage-backed securities market. The Federal Reserve can also watch the progression of debt, and consider that when they make their interest rate decisions. There also might be different kinds of open market operations that can be used that have less dynamic effects than broad interest rate changes.

### *VIII. Conclusion*

Hyman Minsky's financial instability hypothesis is a powerful theoretical framework to view financial crises through. Empirical analysis shows us that financial

crises tend to be quite similar in their general causes, and general effects if left unchecked. It is therefore useful compare the effects of varying government policies on solving such crises. We found, through investigation, that when the government acts as a liquidating agent it causes itself undue debt, and acting as an investment bank might be more useful in some cases. We extended this notion into the current Subprime debate, and proposed and short-term and long-term policy that should move us away from our current Minsky Moment, and damper the business cycle some. In all, only time will tell how useful any national economic policy is.

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