REVISITING THE FINANCIAL COLLAPSE OF 2008: LESSONS ABOUT CAUSAL FACTORS AND THE PATH TO SERIOUS ECONOMIC STRESS

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"We have Armageddon" -Jim Cramer, anchor of "Mad Money," August 6, 2007

ABSTRACT

This article disputes the view of financial markets expressed by Alan Greenspan and others in arguing that the economic crisis of 2008 was not caused by an "unquenchable capability" of human beings to seek excessive wealth but instead by a failure of the United States regulatory system to appropriately mitigate speculative investments including those made by Wall Street investment bankers and financial lending institutions. Greenspan may be correct in his assessment of the predictably selfish nature of investors and lending institutions. However, to blame the near collapse of the U. S. and global financial system on "human nature" is grossly oversimplifying a complex string of events in a way that shifts blame away from those who were responsible for the collapse - including Greenspan. In contrast to Greenspan's claim I argue that overly aggressive lending policies and regulatory failures were the product of theory that assumes markets function efficiently and individual actors within an economy act rationally. What I characterize as failed theory resulted in over-reliance on a vast set of risky investment tools and practices that treated the marketplace as an entity that would function best without significant regulation or oversight.

Keywords – Alan Greenspan, deregulation, Efficient Market Hypothesis, securitization, sub-prime lending, US financial policy

INTRODUCTION

In October, 2008, the United States financial system nearly collapsed, pushing the U.S. and much of the rest of the world into an economic whirlwind that, according to many economists, landed us in the midst of the worst financial crisis since the end of World War II (Yandle, 2010: 1). Major financial firms, including Bear Stearns, Citigroup, Lehman Brothers, and Merril Lynch, were tearing at the seams with no end in sight. Certainly, the last three decades have seen their share of crises - the stock market crash of 1987, the bursting of the "Dot-Com" bubble, the Asian currency crisis, Russian bond

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defaults of 1990, and the tequila crisis of 1995. Yet, consensus among experts favored the view that this crisis is different. As Kevin Phillips wrote in "Bad Money: Reckless Finance, Failed Politics, and the Global Crisis of American Capitalism,"

History does seem to repeat itself, if only in outline or rhyme. Unfortunately, vague memories of past financial bubbles almost never suffice to inoculate a people or nation against repeating an earlier generation's mistakes. Despite highly cautioning precedents, the US...had laid down a national and international playing field no more controllable than the earlier venues of the Gilded Age and the Roaring Twenties. Technology, quantitative mathematics, and leverage allowed more to go wrong more quickly, and with much greater global reach (Phillips, 2008: 4).

Thus, while it could be argued that the crisis of 2008 followed a script similar to other crashes, this crisis was different insofar as its impact was more immediate and its reach more geographically extensive than other crises of the last three decades.

What caused the financial crisis of 2008, and who was responsible? Certainly, it is difficult to point to a single culprit. Some economists blame the Federal Reserve and Securities and Exchange Commission for lowering interest rates to 50-year lows (Morris, 2008: 59), opening the flood gates to unprecedented approvals of sub-prime loans. Government regulators point to greedy lending firms who considered themselves "too big to fail." Lenders blame rating agencies for providing overly-confidant assessments of securitized mortgages, and rating agencies point to corrupt mortgage brokers, who misled lenders into believing they were purchasing sound investments. All in all, the failures of myriad entities within the financial market should be held partly responsible for the market crash. Yet, to lay blame on individual actors within the economy is to ignore the systemic and ideational factors that allowed such excessive financing to occur in the first place. To be sure, the profit opportunities of the last 10 years of the sub-prime boom were exploited and abused by Wall Street. However, the majority of the players in the aforementioned script were working within the legal bounds of a system that was nurtured by a relatively recent influx of government policies encouraging a hands-off approach to government regulation of the economy. As Charles R. Morris wrote in "The Two Trillion Dollar Meltdown,"

The reason that all developed nations regulate their financial sectors is precisely because very highly leveraged players can make huge profits by risking other people's money...Uniquely, the United States adopted a pronounced hands-off attitude toward the financial sector throughout the 2000s, ensuring that taxpayers would eventually reap the whirlwind. (Morris, 2008: xix).

Thus, to attempt to blame instances of "greed" or specific mistakes by business or government leaders is to miss the bigger picture of the previous forty years - a picture that is defined by systemic deregulation and a failure to enforce existing rules regulating the financial services industry.

Now, after the United States and many other nations have pumped billions of taxpayer dollars back into financial systems that failed, it would seem important to ask proponents of a "small government" agenda this question: If the crash of 2008 was not

caused by a lack of government regulation, and if the majority of the big players in the financial sector were working within the limits of the law, why shouldn't we have expected the outcome that occurred 2008? In my view, we should have expected this crisis to occur, and the fact that we didn't reflects that we ignored the lessons of the past and the economic indicators that hinted at the coming of a crisis. On July 21, 2010, the Obama Administration passed through Congress a significant financial services industry regulatory reform package, called the Dodd-Frank Wall Street Reform and Consumer Protection Act (Montopoli, 2010). As a result of this legislation, the US Federal Government was able to further regulate credit and debit card fees, mandate that lenders are more stringent in verifying the capacity of borrowers to repay loans, and also establish a Bureau of Consumer Financial Protection that gave the government the authority to rein in the use of certain risky financial instruments, in addition to permitting the government to break apart financial institutions that grow to be too large (Montopoli, 2010). But what has been left unchanged, and what dangers still loom unregulated? If it was the case that the crash of 2008 was a result of the lack of a few necessary regulations, we should rest assured that the economy will never again crash in such spectacular fashion. Yet, such a perspective presupposes that the causes of the crash were not systemic, and that defining the root causes of the 2008 financial crisis is an irrelevant endeavor. As I will argue, such a discussion is not only relevant, but critical to an accurate understanding of the systemic and theoretical underpinnings of the US economy that led to the 2008 destabilization.

Perhaps, as some suggest, we should accept the condition of economic chaos as the norm for the future, the status quo of a modern and rapidly growing international economy. On September 17, 2009, the former chairman of the Federal Reserve, Alan Greenspan, sat down with *BBC News* to discuss his economic forecast for the future. Greenspan's outlook was anything but optimistic. As he explained:

Crisis will happen again, but it will be different. They are all different but they have one fundamental source - and that is the unquenchable capability of human beings when confronted with long periods of prosperity to presume that that will continue, and they begin to take speculative excesses with the consequences that have dotted the history of the globe basically since the beginning of the 18th century. Go back to the south sea bubble, go back to the tulip bubble before. It's human nature, unless someone can find a way to change human nature, we will have more crises. None of them will look like this because no two crises have anything in common except human nature ("Market Crisis will Happen Again", BBC News, September 17, 2009).

As such, Greenspan's view seems to support the notion that economic crisis should not be viewed as a failure of capitalism, but rather as par for the course. But is Greenspan's assessment of market stability accurate, or could it be viewed as a justification of past mistakes?

In this article I dispute Greenspan's view of financial markets by arguing that the economic crisis of 2008 was not caused by an "unquenchable capability" of human beings to seek excessive wealth, but instead by a failure of the United States regulatory system to appropriately mitigate speculative investments and Wall Street greed.

Greenspan may be correct in his assessment of the selfish and sometimes predictable nature of human behavior. But, to blame the collapse of the global financial system on "human nature" is to grossly oversimplify a complex crisis, and to shift blame away from those who were truly responsible for the collapse - including Greenspan himself.

In contrast to Greenspan's claim, I argue that the root of aggressive lending and deregulation was not "human nature," but instead a prevailing market ideology that placed too much confidence in the theory that actors in a market are rational. This theory served as the underpinning to an over-reliance on investment tools and methods that treated the marketplace as an entity that could be managed, or be left unmanaged, in accordance with the view that markets naturally tend toward efficiency. Certainly, Greenspan and other conservatives are right to say that "greed" played a role in the crash of 2008. However, for the sake of the 65 percent of Americans who currently own a home (Bitner, 2008: xii), such simplistic explanations are as incorrect as they are irresponsible. Greenspan is wrong to say that the only way to prevent a future crisis is to fashion a way to "change human nature." In reality, smart government intervention is more than capable of overcoming the tendency of markets toward unsustainable growth, a tendency which has been proven by crises of the past 40 years. In the end, while it is easy to hyperbolize polemics of "Wall Street greed," and even easier to write off crises as part of the stream of an inevitable series of events, what is more difficult, and more relevant for the future of the global economy, is to address the systemic forces that allowed the crisis of 2008 to occur in the first place.

Thus, in my view, the theory espoused by Greenspan that the market is destined for peril is false. Certainly, the previous forty years have seen their fair share of disequilibrium. Yet, such tremors and crashes have not been caused by irrational exuberance, but by a failure to intelligently regulate the financial services industry. It is my hypothesis that systemic deregulation coupled with a lack of regulation of new financial instruments from the Regan era on are responsible for the crash of 2008. Namely, the deregulation of the subprime industry and banking industry resulted in a hands-off approach to lending which led both industries astray, and eventually into bankruptcy. Simultaneously, the failure to effectively regulate new financial instruments, such as Collateralized Mortgage Obligations (CMOs), Golden Parachutes (GPs), and Structured Investment Vehicles (SIVs) allowed Wall Street insiders to manipulate public and government perception of the stability of major Wall Street firms while they cashed in on record profits. Of course, as the government stood idly by, the Fed was just as culpable during the cash-fed frenzy of the past decade. Instead of slowing the growth of a rapidly inflating housing market, and controlling market liquidity, the Fed failed to do its job of guiding the economy towards stable growth, and alternately chose to pursue policies which championed economic "growth" at any cost.

IDEOLOGICAL UNDERPINNINGS AND ECONOMIC ASSUMPTIONS

To analyze what happened during the crash of 2008, it is first important to consider the ideological forces that generated tendencies towards deregulation. Though the focus of this paper will be on how deregulation caused the crisis of 2008, I will first touch on the

genealogy of deregulatory policies to provide a context for our discussion. It is my contention that ideological conceptions about "rational markets" were influential in the process of the deregulation of the US financial sector. In particular, the creation of the Efficient Market Hypothesis by Eugene Fama created a framework within which deregulation was not only justifiable, but considered necessary for increased profits. Other authors espouse different theories, such as the view that pressures from globalization produced deregulation, or that institutional infiltration by the banking industry created collusion among bankers and regulators. Though these counter theories provide interesting insight into certain logistical factors that contributed to deregulation, they fail to account for the underlying root cause behind the deregulation of the financial sector. In many areas, regulators and bankers (though supposedly in opposing camps) shared the conception that a liberalized and booming financial industry would stabilize minor disruptions in the "real" economy. It is my contention that the prevalence of this theory was an influential contributing factor to deregulation, and that it proved to be misleading as to how the modern financial market operates. In the final section of this paper, I will take up this theme again, focusing on how Alan Greenspan's handling of the Fed was influenced by a monetarist theory of the Efficient Market Hypothesis.

Why did our financial models fail us in the crash of 2008? Our models proved to have one fatal weakness - they based their predictions on the notion that markets were efficient, and that lenders and investors were rational. The Efficient Market Hypothesis, originally developed by Eugene Fama at the University of Chicago, argued that investment pricing always reflected all the available information regarding the investment in question (Hilsenrath, 2004). In other words, according to the theory, markets were thought to be efficient because the variables that determine the soundness of an investment are discernable to lenders and investors. This ability to discern economic indicators meant that actors within the economy were rational because they understood the variables at play on Wall Street, and acted accordingly. However, this theory proved to be problematic. As Fama himself conceded at a 2004 University of Chicago economics conference, stock prices can, in fact, be "somewhat irrational" (Fama qtd. in Hilsenrath, 2004). Still, despite evidence that supported Fama's 2004 change of heart, the rational market theory persisted. As Paul Krugman explained in the New York Times,

"By 1970...The field was dominated by the "efficient-market hypothesis," promulgated by Eugene Fama of the University of Chicago, which claims that financial markets price assets precisely at their intrinsic worth given all publicly available information. (The price of a company's stock, for example, always accurately reflects the company's value given the information available on the company's earnings, its business prospects and so on.)" (Krugman, September 2, 2009: 2).

In short, since the 70s, the Efficient Market Hypothesis has been a prevailing theory in economic circles. One economist who backed the Efficient Market Hypothesis was Alan Greenspan. As Princeton Professor and Nobel Laureate Daniel Kahneman explained in

a talk titled: "How Greenspan's Framework and Efficient Market Hypothesis Went Awry,"

"...there are really two elements that are very surprising in Greenspan's framework...one is really the assumption that agents are fully rational, and there is a lot of evidence clearly that they are not. The other is the idea that firms are actors - that firms are rational agents. But firms are really not actors...they are agents making decisions" (Kahneman, January 27, 2009).

Thus, Greenspan, like many economists of his day, supported the view that the market was a place where "rational" actors made informed investments. In fact, according to Greenspan, in the 90s the US economy had entered a "new paradigm" of economics in which, so long as liquidity was readily available, the economy would continue to grow at a pace that was desirable (Morris, 2008: 61). This view carried with it the implicit assumption that growth would continue because the market would create growth in a manner that was predictable and efficient. But was Greenspan's proclamation of a new age of economics correct?

Unfortunately, as the economy ballooned in the 2000s, Greenspan's prediction of continued, predictable growth under a "new paradigm" of economics proved to be incorrect. Instead, the economy acted much the same way it had during the previous 20 years - erratically and unpredictably. Ronald Regan would likely have been surprised to see the free market act in such fashion. Regan, much like Greenspan, was an adamant supporter of deregulation, frequently championing the view that government interference in the free market was "doomed to failure" (Phillips, 2008: 74). In fact, as Phillips explains, the foundation of Regan's economic philosophy was a type of economics that espoused the view that "markets were held to be inherently rational and efficient...rebutting the Keynesian assumption that they were unstable" (Phillips, 2008: 74). Interestingly enough, despite the apparent failure of the Efficient Market Hypothesis to account for the crash of 2008, some economists have argued that the crash merely showed us that the hypothesis needs slight refining. As Peter Boettke writes in the *Independent Review*:

This is not to say that classical economics needed no adjustment - it certainly did. But the great discovery of the self-regulating properties of a market economy and the central importance of private property, free pricing, and the lure of pure profit and the penalty of loss in explaining the market's self-regulation needed not so much repair as refinement in explanation (Boettke, 2010: 365).

Thus, some did not understand the crash of 2008 as the death of a more "classical" viewpoint of the market as a self-regulating system (i.e. the death of the Efficient Market Hypothesis). However, Boettke's argument glosses over certain economic conditions of the last 40 years which, as he admits, were marked by trends toward deregulation and economic instability (Boettke, 2010: 363-364). Such turbulence amidst an era that should, according to efficient market theorists, experience the most stable growth, indicates at the very least that in a rapidly changing economy markets aren't terribly predictable. In fact, as Boettke concedes earlier in his paper, the market is, after all, a "profit and loss system" (Boettke, 2010: 364).

Other economists have viewed the crash of 2008 through different lenses, and do not place blame on the preeminence of the Efficient Market Hypothesis on Wall Street. For instance, one explanation for why the financial sector became so unstable was provided by MIT Professor Simon Johnson in his book, "Thirteen Bankers: The Wall Street Takeover and the Next Financial Meltdown." As Johnson argues, the economy crashed because business insiders from Wall Street were essentially dictating regulatory policies in Washington. As he writes:

By March 2009, the Wall Street banks were not just any interest group. Over the past thirty years, they had become one of the wealthiest industries in the history of the American economy, and one of the most powerful political forces in Washington. Financial sector money poured into the campaign war chests of congressional representatives. Investment bankers and their allies assumed top positions in the White House...What 'we're all in this together' really meant was that the major banks were already entrenched at the heart of the political system, and the government had decided it needed the banks at least as much as the banks needed the government (Johnson, 2010: 3).

As such, according to Johnson, the reason for changes in finance policy in the lead-up to 2008 was the omnipresence of industry leaders in Washington.

Johnson's theory is worth considering, as it does provide an account of how regulatory bodies in Washington became corrupted. In truth, his perspective is useful in understanding how interrelated Wall Street has become with Pennsylvania Avenue. However, Johnson's theory fails to account for *where* Wall Street leaders got the idea that a deregulated economy would produce stable growth. In other words, a theory of institutional infiltration by business leaders fails to account for *why* Wall Street wanted such extensive deregulation. After all, it would be presumptuous to discount offhand the notion that Wall Street firms wouldn't prefer stable long-term profits under a regulated system to potentially larger short-term profits that risked institutional bankruptcy under a deregulated one. As it stands, common sense tells us that lending firms wanted deregulation because it boosted short-term profits, but even this assumption fails to account for how Wall Street insiders were capable of convincing the SEC that deregulation would be conducive to stable long-term growth. In my view, the answer has everything to do with the Efficient Market Hypothesis.

Regulators in Washington, much like lenders on Wall Street, were convinced of the 'magic of the market', and that the US financial sector was following a predictable trend. If this wasn't the case, why was it that regulators took such a hands-off approach to regulating bodies such as Credit Rating Agencies, and other financial institutions? For instance, why were financial firms on Wall Street (and government regulators) so certain that mortgage scores provided by such agencies were reliable? As Dieter Kerwer argues in *Governance*, NMRs (nonmajoritarion regulators) such as credit rating agencies (CRAs) are relatively unreliable in predicting underlying market instability: "More recently, the Asian financial crisis revealed that the activities of CRAs can have catastrophic consequences. Initially, CRAs failed to spot the upcoming crisis. On the

contrary, their fairly high and stable ratings even contributed to the false sense of security" (Kerwer, 2005: 465). Of course, in addition to being unreliable, the three major CRAs have a virtual monopoly over the credit rating business. As Kerwer writes, "...CRAs have become coercive by having acquired a monopoly position in capital markets. For access to capital markets, borrowers depend on the services of the credit rating agencies...Moody's, Standard & Poor's, and Fitch" (Kerwer, 2005: 462). As such, CRAs leave much to be desired when it comes to providing supposedly "objective" guidance. As Mark Flannery adds in a 2007 issue of *Economic Review*, "The conventional wisdom on Wall Street is that the rating agencies are generally slow to downgrade firms. For many years, the academic literature could detect no significant valuation effect of a rating change" (Flannery, 2007: 88).

Yet, despite the shadow of uncertainty cast over CRAs, their ratings were trusted by regulators across the board as objective and accurate. As Richard Deeg and Mary O'Sullivan write in *World Politics*:

For Sinclair, rating is a rudamentally (sic) political process in which rating agencies propagate their norms across markets, corporations, and governments. Although rating agencies make judgments about creditworthiness based on cognitive processes that are opaque and subjective, Sinclair argues that their assessments are given the status of objective 'facts' by market actors. (Deeg and O'Sullivan, 2009: 738).

As it turned out, a large portion of the CRA's ratings were much too optimistic. So, if CRAs were providing such misleading ratings, why were they trusted? CRA ratings were trusted because of a predominant ideology that the market could be understood and objectified. In my view, this theoretical underpinning was the justification behind Fama's original explication of the Efficient Market Hypothesis, as well as one of the major reasons behind why Wall Street and the White House were unconcerned about the lack of regulation in the financial sector.

But, let's return to Johnson's theory of insider collaboration. Johnson's theory could account for the monopolization of the credit rating market by the three major CRAs, but it cannot account for the shear inaccuracy of the major agencies' ratings of securitized loans, and for why CRAs were trusted. In other words, Johnson's theory can explain how Wall Street became incorporated into the policy making process, but it cannot explain why Wall Street pushed so hard for deregulating banks, and against regulating rating agencies and various investment vehicles. Thus, in some sense, a theory of institutional infiltration puts the cart before the horse. The horse driving the ideology of market insiders was an over-confidence in markets performing as predicted, and an over-zealous drive to rubber-stamp loans that were questionably rated. As such, an analysis of the inability of CRAs to spot catastrophe that relies on a theory of institutional infiltration neglects the underlying philosophical shortcomings of the actors involved.

However, institutional infiltration isn't the only counter theory provided by economists to explain why deregulation happened so ferociously in the US. Others posit that

globalization and the role (or lack thereof) of international regimes were responsible for trends toward deregulation. As Deeg and O'Sullivan write:

The current global financial crisis has interrupted a long period of dramatically rising financial mobility marked by the increased integration of currency, banking, and securities markets around the world...Along with globalization came the related phenomenon of financialization (sic) in which the financial sector grew larger as a percentage of economic activity...These developments were facilitated by the emergence of a new global order in financial politics in which policies that facilitated the liberalization of monetary and financial flows were emphasized. (Deeg and O'Sullivan, 2009: 731-2).

As such, simple economic pressures from deregulated industries overseas could be looked to as the culprit for deregulation in the US. But is this an accurate assessment? Is it true that globalization is the culprit for the deregulation of the US financial industry?

Jason Sorens posits in a Critical Review paper titled "The Failure to Converge: Why Globalization Doesn't Cause Deregulation," that it is true that globalization has had an impact on the impetus to deregulate: "The oft-cited fiscal competition among government induced by globalization has been at work in finance, since funds can move easily across borders" (Sorens, 2000: 23). However, as Sorens points out, it is not the case that globalization necessarily causes deregulation. Instead, certain ideological factors are largely responsible for an actor's decision of whether or not deregulation is the best course for an institution: "Vogel shows that government ministries have been able to determine the character of reform according to their historical interests and orientations, without (and even in the face of) pressure from distributive coalitions in society" (Sorens, 2000: 25). Thus, it is not the case that governments function along the lines of a supply and demand curve - supplying a deregulation for every drop in demand, and supplying a regulation for every rise in demand. As he concludes, "Perhaps cultural factors, then - the traditions of different countries and the ideas of those in power - have been responsible for regulatory reform" (Sorens, 2000: 25). Thus, ideational factors, as opposed to economic factors could be considered most significant in understanding why certain countries deregulate while others don't. In this way, governments can be thought of as entities which are hamstrung to a degree by the cultural and ideational undercurrents that derive from the constituents they govern. For example, if nations were induced to deregulate their economies based on sheer market competition, why is it that European countries (which mirror US markets in many respects) had more stringent financial regulations than the US before the 2008 crash? What force can be looked to as the culprit for an economic difference between superpowers with a history of economic interdependence? As a 2009 World Bank Working Paper reported,

EU regulators have more discretion in authorizing investment firms and intervening in their management since they can judge whether the managers of investment firms or regulated markets are sufficiently experienced and reputable, while the US regulator can only control their reputation and competences. The EU regulations go one step further in allowing supervisors to control the integrity

of ultimate controllers of Regulated Markets regardless of their ownership, while the US rules generally base the notion of control on ownership (World Bank Working Paper # 154, 2009: 33).

Given this view, the theory that globalization necessarily causes deregulation fails to take into account the state-specific context in which deregulation is occurring. Certainly, a theory of globalization can account for why the SEC would lower leverage ratio requirements (in order to spur competition with foreign lenders), but it doesn't account for the underlying ideational analysis on the part of regulators that produces the decision to take a deregulatory action. At the end of the day, a theory which defends the idea that globalization causes deregulation views the governmental decision-making process as one that is calculative purely on economic grounds. Certainly, Deeg is not arguing such a radical thesis. However, it is important to point out that, at the very least, something ideational above and beyond sheer market competition is at play in the impetus for deregulation.

This point is the central theme of Mark Blyth's 2003 paper titled, "The Political Power of Financial Ideas." As the John Hopkins Associate Professor explains,

The politics of such ideas is important. Not only do the ideas that underpin these markets dictate specific governance solutions, but also such ideas are valuable political weapons. Both financial interests and states have used these ideas to defend and extend the current regime despite the volatility and asymmetric distributions it produces (Blyth, 2003: 241).

Blyth highlights an important point in our discussion - the notion that ideology is uniquely important because it frequently overrides material realities in the economy which might contradict its underlying tenants (realities such as globalization or institutional infiltration).

Specifically, the derivative instruments invented by the private sector to manage risk may themselves be a new source of instability, a theme I return to later. In sum, the empirical benefits of the new system of finance are, by any measure, far lower than what the regime's proponents have claimed. Given that the case for the new regime cannot be made on empirical grounds, one has to ask why such a regime persists (Blyth, 2003: 242).

Ideological factors are arguably a root-cause in determining policy decisions in many instances. As Sorens and Blythe both highlight, there is something more than political and economic factors driving markets. At a given point in time, ideational factors can be just as influential, if not more influential, than factors in the "real" economy that supposedly are driving policy-making decisions. In the context of the crisis of 2008, it is my contention that the Efficient Market Hypothesis was an important ideational tool underpinning the US's trends towards deregulation. From its inception at the University of Chicago, to its prevalence as a justification for viewing CRA scores as objective, to its propagation by figures such as Greenspan who had proposed the dawning of a "new paradigm" in economics, the Efficient Market Hypothesis served as an influential ideational tool that underscored deregulatory and anti-regulatory trends in the US. As I will discuss later, this hypothesis was also influential during the advent of excessive

debt securitization, as well as during the deregulation of banks and the Financial Services Industry. Though theories concerning globalization and institutional infiltration account for ways in which deregulation occurred, they can't account for the underlying ideology behind why deregulation was so vigorous in the US. This point should serve as a backdrop for our continuing discussion on the policy changes that occurred in Washington during the era of finance deregulation.

THE CRASH OF 2008

What really happened in the financial collapse of August and later in 2008? Ask any layperson, and you'll receive a myriad of answers - "People were spending more than they made," "the stock market crashed," or the infamous misconception that, "Wall Street just got greedy." In truth, the immediate causes of the crash of 2008 were as widespread as they were interconnected. I feel they are worth mentioning in brief before describing the underlying causes of the crash. To begin, leading up to 2008, there was a widespread increase in non-performing mortgages (Yandle, 2010: 342). Essentially, people weren't making enough to pay off their high-interest-rate home payments. This trend caused a spike in defaulted mortgages, and a rise in unsold homes. When homes aren't selling, it is tougher to get financing to build a new home, so the mortgage defaults had the double impact of increasing the number of unsold homes on the market, and decreasing new economic activity in home building. As homebuilding analyst Robin Hardy writes, "The housing market still faces an uphill struggle, with recovery hampered by a lack of mortgage finance and severely constrained lenders. With too few mortgages available, we envisage a prolonged buyer's market, and foresee further material falls in house prices" (Hardy, 2010: 1). Furthermore, as economic activity slowed, the large lending firms which originated mortgage loans lost new investment potential, as well as short-term cash infusions from investors at home and abroad. This problem was compounded by the overarching credit crunch which was depressing consumer spending. As Bruce Yandle writes in "Lost Trust: The Real Cause of the Financial Meltdown":

But one trait might distinguish it from the rest. In this disruption, major elements of global credit markets were disrupted. For some major firms, credit markets stopped functioning. For example, French automotive giant Renault reported that money markets were frozen following the collapse of Lehman Brothers (Yandle, 2010: 342).

These economic disruptions eventually led to the bankruptcy of Lehman Brothers, collapse of Fannie Mae and Freddie Mack, bankruptcy and eventual merger of bear Stearns into JPMorgan, and the sell-off of Merrill Lynch. Later, once the wheels came off the mortgage industry, stocks took a nose dive, and the ensuing economic global meltdown forced banks to freeze up credit.

While the specifics to this economic crash are new, the script is somewhat familiar. After the boom of the sub-prime market in the 80s, the market collapsed at the end of 1998 in the wake of the Russian debt crisis, and subsequent collapse of Long-Term Capital Management (LTCM) (Cabral, 2002: 1). In sum, Wall Street firms grew

nervous after they witnessed a spike in non-performing mortgages, and firms started to cut back the amount of money they were putting into sub-prime loans (Muolo & Padilla, 2008: 44). As Paul Muolo and Mathew Padilla explain in "Chain of Blame: How Wall Street Caused the Mortgage and Credit Crisis," in 1999, "One after another, the nonblank sub-prime lenders fell like outdoor Christmas ornaments being swept off the tree in high winds...An industry that looked highly profitable twelve months earlier had been just about wiped off the map" (Muolo & Padilla, 2008: 45). Thus, in some sense, it would be wrong to say we haven't been here before. Still, the circumstances of this crash are different, and the implications much greater. While some say that a collapse of the magnitude we witnessed in 2008 was unbelievable, others were blowing the whistle on aggressive Wall Street lending practices long before the crash. For example, in a 2005 speech at Stanford University, 77-year-old former Fed chairman Paul Volcker lamented his reservations about the present economic climate:

I have to tell you my old central banking blood still flows. Under the placid surface, at least the way I see it, there are really disturbing trends: huge imbalances, disequilibria, risks - call them what you will. Altogether the circumstances seem to me as dangerous and intractable as any I can remember, and I can remember quite a lot (Volcker, qtd. in Cohan, 2009: 293).

A few months after Volker's Stanford address, Greenspan replied to similar claims of imbalance in the housing market, arguing that although "Pockets of severe stress within the household sector...remain a concern..." the likelihood that we were in the midst of a housing bubble appeared small (Cohan, 2009: 293). But, others were sounding the alarm too, and much earlier than Volcker. For example, an eerily spot-on warning came from Senator Byron L. Dorgan of North Dakota during Senate debate over a 1999 resolution to deregulate the US banking system. As Dorgan argued on the Senate floor:

[the deregulation of banks]...will fuel the consolidation and mergers in the banking and financial services industry...the bill will raise the likelihood of future massive taxpayer bailouts...we will look back in ten years time and say: we should not have done that because we forgot the lessons of the past...I say to the people who own banks, if you want to gamble go to Las Vegas... (Dorgan, 2009: 34).

Eight years later, the sub-prime market began to show its first significant cracks. In august 2007, the economic tremor known as the "august panic" swept through Wall Street (Mumford, 2009: 1). Housing news was looking grim, and President Bush convened "The Working Group on Financial Markets" to discuss the situation. As Kevin Phillips explains in "Bad Money: Reckless Finance, Failed Politics, and the Global Crisis of American Capitalism," "Their immediate concern was the 311-point loss the Dow had suffered the day before, largely because of jolting housing news" (Phillips, 2008: 26). Then, nearly 10 years later, coinciding with Senator Dorgan's forecast, the financial market collapsed.

While it is the case that certain economic trends accompanying this crash were unique, it is not the case that the deterioration of the US sub-prime industry is anything new. Given this fact, it is important to ask the question: if the sub-prime lending industry

failed in the late 90s, why did it come back, and with such vigor? Didn't lenders learn their lesson the first time around that the sub-prime industry was a gamble, at best? As it turns out, the answer appears to be fairly simple - the game changed.

THE INCENTIVE FOR RISK - KAMIKAZE FINANCE

In every business, risk is a conditional necessity in order for profit to be earned. Without risk, businesses would be stuck with low profit margins, and stiff competition from firms overseas more willing to take risk in their investments. However, while risk (and even excessive risk) can be very profitable, there is a point at which too much risk can threaten the very existence of a firm, and in some cases, the entire economy. Leading up to the crash of 2008, many of the largest mortgage firms on Wall Street were playing the odds as if Wall Street had moved to the Las Vegas strip. Instead of taking moderate or even somewhat aggressive lines in investments, once the wheels of deregulation were set in motion in the post-Regan era, firms began loaning money that never before would have passed as "investment grade," all the while pumping unprecedented amounts of liquidity into the marketplace thanks to changes in collateral requirements for large investment firms. How did this happen, and what specific deregulatory policies made such unprecedented risk the norm on Wall Street? In my view, three significant deregulatory actions taken by the Federal Government are to blame for the rise in risky investing: The legalization of the sub-prime industry and subsequent "hands-off" approach to its evolution, the reduction in leverage ratio requirements by the SEC, and the deregulation of the banking industry.

To begin, economic deregulation throughout the past forty years has not been defined by a conglomerate of independent deregulatory actions, but rather by a conservative strategy for economic growth. As Morris writes, "Ronald Reagan's election in 1980 signaled that Keynesian liberalism was dead. Vaguely, inchoately, but unquestionably, voters had signaled their readiness for a change of ideological horses. The theorists of the free market would get to run their race" (Morris, 2008: 18). This ideology was characterized by a trust in the efficiency of the marketplace, and also a trust in our ability to make predictive assessments of it. So, what did such a shift look like in policy terms? Before 1980, congress heavily restricted the types of loans lending firms could make to individuals. Then, in 1980, Congress passed the Depository Institutions Deregulation and Money Control Act (DIDMCA) which removed a number of such restrictions, and legalized the subprime mortgage business (Bitner, 2008: 23). Along with DIDMCA, the Alternative Mortgage Transaction Parity Act (AMPTA) was passed in 1982, making it legal for lending firms to charge variable interest rates (ARMs), or rates that a firm could increase after a certain period of time (Bitner, 2008: 23). Together, these two deregulatory actions signaled a new hands-off approach towards regulation of the mortgage industry. As Elizabeth Warren, Professor of Law at Harvard explains,

Since the early 1980s, the credit industry has rewritten the rules of lending to families. Congress has turned the industry loose to charge whatever it can get and to bury tricks and traps throughout credit agreements. Credit-card contracts that

were less than a page long in the early 1980s now number thirty or more pages of small-print legalese (Professor Elizabeth Warren, Harvard Law School, 2006, 4td. in Phillips, 2008: 29).

From credit card companies to lending firms, the rules of Wall Street were changing.

As the 80s bore on, the deregulation movement saw no sign of slowing. In particular, lending firms were increasingly given more freedom in determining what types of loans they could write to borrowers. For instance, in addition writing ARMs (also known as "Taser Loans") (Dorgan, 2009: 45) that trapped consumers into contracts they eventually wouldn't be able to afford, lending firms were also given the green light to lend to borrowers who previously would not have possessed enough equity to be considered "credit worthy." This door was opened by the passage of the Tax Reform Act (TRA) of 1986, which allowed people seeking mortgages to deduct the interest of their loan on their taxes (Lowenstein, 2006: 1). The effect of this policy was that it created unprecedented new demand for mortgages in the US. As Kenneth Harney writes in a 1994 Washington Post article,

The first boom began in the 1980s, with a vigorous assist mid-decade by the 1986 Tax Reform Act, and took second mortgages and home equity lines of credit from virtually nowhere to a \$ 275 billion industry. The tax reform act phased out interest deductions on traditional loans for autos, college tuition, vacations and other personal expenditures (Harney, 1994: 1994).

The wheels of deregulation were moving full steam ahead, and consumers were beginning to catch on. Yet, to be precise, even though deregulation was moving ahead in leaps and bounds, the sub-prime industry hadn't yet caught up with the profit potential generated by the policy changes instituted in Congress. As Bitner points out, it wasn't until 1993 that the sub-prime market really began to "take off" (Bitner, 2008: 23). But, the ascent of the sub-prime market didn't occur because of a spike in demand from borrowers of sub-prime loans. In reality, the sub-prime industry was having trouble writing new loans due to the high interest rates of the early 90s. As Richard Bitner explains in "Confessions of a Subprime Lender," "To fill the void, brokers and lenders began originating sub-prime mortgages" (Bitner, 2008: 23). This point highlights an important aspect of the deregulation movement from the post-Regan era on: The deregulation of the financial sector in the US did not necessarily occur because of new demand for high-risk loans. Rather, the deregulatory policies of the late 20th century occurred in large part because there was profit to be made in a deregulated economy. That is to say, deregulation did not fill a demand void, but a profit void. This point is evidenced by the fact that many of the deregulatory actions taken by Congress in the last forty years occurred not because there was a demand for new types of loans, but because the financial industry was struggling and was seeking new profit potential.

What was the effect of the legalization of the sub-prime industry, and the steady relaxation of lending restrictions? By 2000, many lenders had shifted their mortgage requirements from requiring money down with substantial collateral, to focusing mostly on a borrower's credit score as the determining factor in whether or not to issue a loan (Bitner, 2008: 79). In fact, according to Alan Greenspan in a testimony before the Joint

Economic Committee in 2005, 25 percent of all mortgage loans made in 2005 were "interest-only" (Lewis, 2009: 309). Some lenders and brokers were even advertising "no-documentation loans." As Senator Byron Dorgan writes in "Reckless: How Debt, Deregulation, and Dark Money Nearly Bankrupted America," "These no-doc loans really take the cake. That meant if you agreed to pay a higher interest rate, you weren't required to document your financial information, including how much money you made" (Dorgan, 2009: 44). Now-bankrupt Countrywide was one firm in particular that put significant energy into promoting its no-doc loans (Dorgan, 2009: 45). Furthermore, some brokerage firms were even advertising for loans that required a borrower to pay nothing on a loan for one entire year. As one advertisement from *Millennia Mortgage Corporation* read, "12 months no mortgage payment. That's right. We will give you the money to make your first 12 payments if you call in the next 7 days. We pay it for you" (Dorgan, 2009: 43).

The legalization and steady deregulation of the sub-prime mortgage industry was not the only factor that contributed to a ballooning industry. The second contributing factor was the SEC's decision to change leverage ratio requirements for securities firms in June of 2004 (Cohan, 2009: 448). Traditional banks still were required to keep their leverage ratios at 10 times equity (Cohan, 2009: 448). However, once Congress changed leverage requirements for non-bank entities in 2000, securities firms could increase the amount of leverage they could use on their balance sheets to forty times equity (Cohan, 2009: 448). The result of this change was that some firms began to take on more leverage, and free-floating liquidity in the marketplace began to steadily creep upwards. For instance, Bear Stearns' ratio of borrowed money to equity capital reached 33-1 (Hudson, 2010: 1), and through creative financing, some firms even exceeded the fortyto-one ratio requirement. In fact, at one point, UBS was leveraged fifty to one (Posner, 2009: 221), while some hedge funds were leveraged upwards of one hundred to one (Morris, 2008: 119). For Wall Street firms, the change in leverage requirements met short-term profit demands, but in the long run contributed to the overall instability of the financial industry. When the economy eventually collapsed, a lack of collateral was responsible for a number of bankruptcies on Wall Street, including the failure of AIG and Bear Stearns (Posner, 2009: 58).

The third and final aspect of deregulation that was a significant cause of the crisis of 2008 was the deregulation of the banking system in the US. Previously, depositors kept their capital in banks that paid low-interest. However, with the arrival of higher-interest-yielding investment funds made available by investment banks and firms such as Lehman Brothers and Merrill Lynch (Posner, 2009: 45), depositors began moving their money to money market funds and high-interest-yielding checkable accounts. Unlike banks, these new financial arenas were unregulated. Previously, government regulation prevented non-bank entities from offering bank-like services to their customers. However, once investment banks and other similar entities were deregulated, they could provide services virtually identical to those provided by banks. Recognizing that banks were being left behind, the government responded by deregulating the banking industry, allowing banks to engage in similar higher-risk lending in order to compete with the

new and evolving financial industry. As Richard Posner writes in "A Failure of Capitalism,"

Banks responded by supplementing deposits as a source of bank capital with loans from other sources, on which they had to pay interest- and hence had to lend their capital out at a higher interest rate than they were paying for the capital furnished by their depositors. This required them to make riskier loans. The deregulatory strategy of allowing non-bank financial intermediaries to provide services virtually indistinguishable from those of banks...led inexorably to a complementary deregulatory strategy of freeing banks from the restrictions that handicapped them in competing with unregulated financial intermediaries (Posner, 2009: 23).

The banking business slowly began exposing itself to the dangers of a tumultuous free market. In short, the lifting of certain lending and borrowing limitations on banking practices brought banks into lockstep with financial entities that were engaged in a collective race to the bottom to make loans cheaper and more available to borrowers. In the short run, this benefited banks by opening their doors to investors and borrowers who previously would have taken their business to financial firms or investment banks. However, in the long run, it exposed banks to the same dangers previously faced by non-bank entities.

Later in 1999 Congress passed the Financial Services Modernization Act (FSMA) (The Economist, 2007: 1), further deregulating the banking industry. This act did a number of things. However, one of its most significant directives written into FSMA was that it overturned the Glass-Steagall Act (Posner, 2009: 270), a law passed by Congress after the Great Depression to protect banks from market instability (The Economist, 2007: 1). In accordance with the Glass-Steagall Act, banks once were required to remain independent entities, and could not merge or combine in any way with investment banks, insurance companies, or securities companies. However, in 1999, with the passage of the FSMA, the Glass-Steagall Act was repealed, and the role of banks changed forever. Banks were permitted to merge with securities companies, insurance companies, and other non-bank entities in almost any fashion. While this action opened up the world of banking to new profits, it also created new risk due to the fact that bank assets were no longer walled off from the tumults of Wall Street.

Of course, at this time, the prevailing economic view was that markets were efficient, so it only made "business sense" to maximize profit in a system that appeared stable. As Krugman writes in the *New York Times*, "During the golden years, financial economists came to believe that markets were inherently stable — indeed, that stocks and other assets were always priced just right. There was nothing in the prevailing models suggesting the possibility of the kind of collapse that happened last year" (Krugman, September 2, 2009: 1). So, at the time, it is in some sense understandable why these deregulatory steps were considered natural. Although overturning the Glass-Steagall Act is now heavily criticized, the vote in Congress to overturn the act in 1999 was a lopsided 90-8 (Dorgan, 2009: 34). One Senator who voted against FSMA was Dorgan. As he argues, this action was largely to blame for the crisis of 2008: "Of all the shortsighted, greedy, and downright ignorant actions that helped create the economic

collapse, none was more pronounced than the action of Congress and President Clinton to repeal the banking protections that were put in place after the bank failures of the 1930s" (Dorgan, 2009: 33). In fact, it may be argued that banking deregulation was a particularly significant contributor to the crisis. As Posner explains, "The problem with banks getting involved in risky lending is that they got stuck holding a lot of bad debt that had been securitized" (Posner, 2009: 49). In my view, banks were harmed more than they were helped by deregulatory policies. By deregulating the banking sector, Congress chose to ignore the lessons of the Great Depression and plunge ahead towards a more profitable, albeit reckless future.

Yet, to be fair, it is not the case that all forms of financial deregulation are necessarily bad. In retrospect, the deregulations described above had a negative impact on the stability of the US economy, but it is important to point out that calls for widespread regulation must be tempered by the competitive realities of the global marketplace. For example, if we choose to regulate hedge funds, money market funds, and other nonbank regimes too aggressively (and thus protect banks from competition), such entities might be beat out by foreign competitors who aren't regulated, and can offer higher interest yields. Such a trend could be offset by protective tariffs on banking - but unless such tariffs are extremely restrictive, it is likely that foreign competition would impede on the market share of US banks. This, we could assume, would damage the US financial services industry and cause the very harm many advocates for financial regulation hope to avoid. On the other hand, if we don't regulate such non-bank regimes, it seems unlikely that Americans will chose to continue to put money in banks (due to the higher interest rates offered by non-bank entities), and we will find ourselves back at square one with an over-abundance of liquidity flowing through marketplace. Though there is no easy answer to such a predicament, the story of bank deregulation does teach us that regulation is a delicate process which requires balancing the demands of share holders with those of economic stability.

In the end, the most crucial point in understanding the failure of government in preventing the crisis of 2008 was that the economy didn't crash because of specific regulatory failures. Though conservative economists, industry executives, and Wall Street insiders would have us believe that the economy crashed because of a few instances of greed, or select laws which were too overbearing or too lax, this view only distracts us from a more holistic understanding of what went wrong in 2008. The economy was not destabilized because of what happened in 2008, 2007, or any particular year before that - but because conservative deregulatory economic strategies over the last 40 years failed us. As George Soros writes in "The New Paradigm for Financial Markets," "This [crash] will have far-reaching consequences. It is not business as usual but the end of an era" (Soros, 2008: 81). Since the Regan-era, financial policy has been defined by rapid deregulation as a result of voracious profiteering. Deregulation was not an ad-hoc process, but a concerted effort by Ronald Regan, George H.W. Bush, Bill Clinton, and George W. Bush to allow the free-market to run its course in accordance with the theory that the market was efficient, and that individual actors within the economy were rational. The deregulatory acts discussed above spanned all four administrations, so all should be held partly responsible for their

misplaced trust in the magic of the market. Though Greenspan would have us believe that such economic crisis is inevitable, I feel that a more holistic understanding of the crash of 2008 points to the fact that what occurred in 2008 was the result of a proliferation of unsustainable and insolvent deregulatory policies that accumulated over the span of four administrations.

THE SOFT LANDING OF KAMIKAZE FINANCE

Deregulation went a long way in making unsafe lending the norm on Wall Street. However, in the lead up to the crash of 2008, Wall Street firms also played their role in worsening what had become a looming crisis. For instance, in the year before the Fall of 2008, as Wall Street took on more and more risk, large lending firms continued to paint a rosy picture of the sub-prime industry, even though many top executives were well aware that the entire financial sector was on shaky footing. This begs the question: Why is it that firms would continue risky investment strategies if they had foreknowledge that such strategies were bankrupting their firms? As my research indicates, as a result of aggressive deregulation of the financial sector, firms not only had incentives to take risks, but they had new incentives to take excessive risk. Now, instead of worrying about bubbles, the financial sector had evolved to a point where continuing to ride a bubble actually made "business sense." All the while, the federal government sat back and not only let such risky business practices happen, but actively encouraged rolling the dice on the sub-prime mortgage industry and other risky investment strategies (such as Mortgage Backed Securities and securitized credit card debt). Importantly, this view debunks the theory that the economy was out of control because lending firms were breaking the law. To the contrary, my central point is that lenders were following the law, and that is why the economy crashed.

When times get tough, the layman might think it prudent to rollback aggressive business tactics, and focus on a more conservative approach to lending. Though this would seem to be the logical response to economic instability, many financial firms on Wall Street did just the opposite in the lead-up to 2008. Bear Stearns, for example, knew that they were in trouble. On March 6, 2007, Tommy Marano, Bear Stearn's top mortgage trader, placed a phone call to Roddy Boyd, a writer for Fortune magazine. Interestingly, Morano placed the call to see what people outside of Bear were saying about its liquidity position, not to reassure Boyd that Bear was "okay." As William D. Cohan writes in "House of Cards: A Tale of Hubris and Wretched Excess on Wall Street" Marano reportedly told Boyd, "Roddy, our guys, our senior guys here, are hearing a really strange thing from...customers...we were not prepared to hear stuff like this. This is baffling. People are quite literally questioning our solvency, questioning our ability to go on" (Cohan, 2009: 12). That same day, an anonymous employee working for Bear posted on an internet message board under the name "Rutlando," reporting that, "Funding costs surging. Way overleveraged - 33 to 1" (Cohan, 2009: 14). Meanwhile, as Bear found itself unable to make margin calls, and as investors flew out the door, Bear executives met with their parent company, JPMorgan, to discuss the possibility of a buyout that would rescue Bear from its deteriorating liquidity position.

Such talks were held under the utmost secrecy. In fact, as Kate Kelly explains in "Street Fighters: The Last 72 Hours of Bear Stearns, the Toughest Firm on Wall Street," three days before Bear collapsed, Matt Zames (the head of foreign-exchange and interest-rate product trading at JPMorgan Chase & Co.) requested that his driver drop him off across the street from bear's office building "for fear that inside information about his company's talks with the troubled firm would leak into the marketplace" (Kelly, 2009: 52). Bear Stearns and JPMorgan knew what was happening, but they made a concerted effort to keep it under wraps. Simultaneously, the Bush Administration helped strengthen the credibility of failing firms by hyping the doomed mortgage industry, only months before it crashed. For instance, in the summer of 2008, President Bush's Treasury Secretary, Henry Paulson, made numerous trips around the country to assure investors, as well as the public, that the troubling trends in the subprime market would stabilize, and that they had not created a "worldwide contagion" (Muolo & Padilla, 2008: 18).

Yet, concealing the truth was only the beginning of Bear Stearn's strategy for rebounding from the red. While Bear kept its deteriorating liquidity position under wraps, it simultaneously misled its investors, the public, as well as the government, into believing that their liquidity position was under control. Three days before Bear went under (in May of 2008), Bear's CFO, Sam Molinaro, made a special appearance on CNBC in order to reassure investors that business as usual would continue undisturbed at Bear. As he assured investors on live TV, "Our [Bear Stearns] liquidity position has never been stronger" (Kelly, 2009: 46). Later, during a call to Gasparino, Molinaro reportedly pleaded that, "The rumors about Bear's inability to make margin calls and its illiquidity are completely false...I've spent all day trying to track down the source of these rumors, but they are false. There is no liquidity crisis. No margin calls. It's all nonsense" (Molinaro allegedly speaking to Gasparino, qtd. in Cohan, 2009: 26). As Alan Schwartz and Sam Molinaro spent their time criss-crossing Wall Street offices assuring investors of Bear's "stable" liquidity situation, things at Countrywide looked remarkably similar. According to the LA Times, at the same time CEO Angelo Mozilo was touting his company and reassuring investors, Mozilo was unloading \$138 Million of his personal stock in Countrywide (Dorgan, 2009: 46). Meanwhile, the CEO assured investors that despite the dissolving housing market, his company would somehow actually benefit from the market instabilities by picking up business that other firms were loosing - emphasizing that Countrywide was in a "position to capitalize" on the failing market (Muolo & Padilla, 2008: 8). Amazingly, Mozilo's was arguing that even though his company was heavily invested in the sub-prime market, Countrywide would somehow benefit from a market collapse.

What's wrong with this picture? After all, if the market truly was collapsing (as many Wall Street executives were well aware), why would investment firms continue to prop up a dying industry, instead of coming clean and seeking a government bailout? The answer, as it turns out, likely has everything to do with the benefits of riding a housing bubble. Even during a bubble era (like the 2000s), there isn't much of an incentive from the perspective of executives for a firm to put the brakes on risky lending practices. First, unless the firm is certain a bubble is about to burst, short-selling would only cause

the firm to loose out on the massive profits that could be earned up until the time the bubble bursts. Although CEOs knew the market was bad before the 2008 crash, it was virtually impossible to know the exact moment the market might burst, so any short-selling could endanger short-term profits that could be made by continuing risky lending practices. As Chuck Prince, CEO of Citibank famously articulated, "When the music stops, in terms of liquidity, things will be complicated. But as long as the music is playing, you've got to get up and dance. We're still dancing" (Prince qtd. in Soros, 2008: 84).

Second, particularly from the perspective of CEO's on Wall Street, short selling is not a good prospect due to the doctrine of limited liability. Unlike other business models, the assets of CEO's of large Wall Street firms are protected in the case where the firm goes under. As Brander and Lewis explain in *American Economic Review*,

"In this situation, the limited liability provisions of debt financing imply that changes in financial structure alter the distribution of returns between debt and equity holders, and therefore change the output strategy favored by equity holders. Because financial structure influences the output market equilibrium, foresighted owners of the firms will have incentives to use financial structure precisely so as to influence the output market in their favor. Given the behavior of the rival firm, a firm which ignored the strategic effect of financial decisions would have lower total value than a firm which took advantage of these effects" (Brander and Lewis: 1986, 968-969).

Thus, limited liability changes the incentives for financial firms by making an aggressive output strategy a necessity in order to stay on par with competitors. This doctrine has the double impact of encouraging firms to push their liquidity position to the maximum, in addition to creating conditions that result in predatory lending. As Brander and Lewis write, "These strategic uses of financial structure are purely predatory, and the net effect when both firms use them is that both firms are worse off" (Brander and Lewis, 1986: 969).

Frequently such protection is further enhanced by the availability of 'Golden Parachutes' to executives comprising of an up-front cash payment, as well as stock options in the case that a firm goes under. Originally, GPs were championed because they more closely align a CEO's "interests" with share holders' interests, due to the fact that a CEO wouldn't have to hesitate to make a risky investment (that might benefit the firm) for fear of losing her job (Narayanan, 1998: 6). However, GPs are also frequently criticized for doing just the opposite. For instance, as M. P. Narayanan, an Associate Professor of finance at the University of Michigan writes,

While several arguments have been put forth in favor of GP contracts, some concerns have also been raised. Lambert and Larcker point out that they might transfer wealth from shareholders to management by insulating management from takeover discipline and inducing them to operate the firm inefficiently (Narayanan, 1998: 7).

From the perspective of a CEO, risky lending doesn't look all so risky considering that the assets of CEOs are not at-risk. A prime example of this lack of aversion to risk can be found in the attitude of Bear Stearns CFO, Sam Molinaro before the crisis of 2008. For Molinaro, the possibility of bankruptcy didn't seem to faze the CFO. In fact, before Bear went bankrupt, Molinaro had proudly displayed a 1999 cover of the *Wall Street Journal* in his conference room which read, "If this is a Bubble, it sure is hard to pop" (Kelly, 2009: 11). In my view, this *Wall Street Journal* headline summed up the prevailing logic of Wall Street in the lead-up to the crash of 2008. Lending firms knew there was a chance they were riding a bubble, but they kept on investing anyway. In the end, Bear's reliance on repo loans, and its increasingly thin collateral base caused it to fall first among the lending giants. How hard was Bear's fall? When the market turned south in May of 2008, Bear couldn't get repo loans from its normal business partners. As a result, Bear found itself holding a measly 3 billion in funds for its daily operations, and was forced to merge with JP Morgan (Kelly, 2009: 21).

This incentive for risk on Wall Street is compounded by the simple fact that the lifespan of CEOs is generally quite short, and pressure on CEOs to deliver returns has increased of late. As Robert Reich explains in "Supercapitalism: The Transformation of Business, Democracy, and Everyday Life,"

You could see the trend in 1990, as the economy slowed. That year, high-priced heads rolled at AT&T, GM, Xerox, Coca-Cola, Aetna, and other blue-chip American companies. Such decapitations often occurred quickly and bloodlessly, sometimes after tenure of only a few months (Reich, 2008: 76).

As a 2002 study published by *Booz Allen Hamilton* found, between 1995 and 2001, the average tenure of CEOs had declined from 9.5 to 7.3 years, and the turnover of CEOs at major corporations increased 53 percent (Lucier, Spiegel, and Schuyt, 2010: 3). As the study concluded, "The 'new normal' is an early departure for the CEO, either because of performance or because of a merger. Today's CEOs are like professional athletes young people with short, well-compensated careers that continue only as long as they perform at exceptional levels" (Lucier, Spiegel, and Schuyt, 2010: 3). When this lifespan is considered in the context of economic trends (which tend to change over the course of decades rather than a few years), the incentive for a CEO to take risks becomes even more problematic. Thus, pressure on executives from boards and share holders encouraged executives of lending firms to get in on the party, and stay late. This new business environment was summed up well by the CEO of Coca Cola. As he explained: "Businesses are created to meet economic needs...[when they] try to become all things to all people, they fail...we have one job: to generate a fair return for our owners..." (Reich, 2008: 75). Importantly, Coca Cola's CEO is clear to state that business only exists to satisfy Coca Cola's beneficiaries, not to benefit the economy as a whole, or even the American people. As such, downward pressure from shareholders and a struggling economy changed the way business was run on Wall Street, encouraging executives to make more aggressive investing decisions. In my view, this trend is reflective of a dramatic change on Wall Street - one that turned an already cutthroat business into something more.

In an ideal world, investment decisions would be made with input from those who stand to lose the most from a company bankruptcy (i.e. mid-level employees, managing directors, and share holders who don't have GPs). Unfortunately, Wall Street doesn't work in such a fashion. In describing the inner workings of Bear Stearns, Kelly writes, "...the vast majority of Bear's SMD (Senior Managing Directors) pool was blissfully unaware of the firm's inside workings. As at most investment banks, its levers were pulled exclusively by a short list of managers..." (Kelly, 2009: 6). As such, the true state of a firm is generally understood by few, and unknown to most. In Posner's view, "Until disaster does occur, the riskiness of the firm's investment strategy, although it may be the cause of the firm's high return, will be invisible to most investors..." (Posner, 2009: 27).

Such an explanation would account for the apparently lax attitude from Wall Street CEOs toward the growing housing bubble of the 2000s. Alan "Ace" Greenburg, director and former CEO of Bear Stearns, summed up the Wall Street philosophy of risk-taking when he noted that, "We are working with more capital than ever before...so if every month is not a record-breaker, we are probably getting lazy" (Kelly, 2009: 137). From this explanation of sound economics, the measuring stick of success appears not to be stable growth, but shear growth. Of course, the aggressive investment strategies leading up to the collapse of 2008 were not limited to Bear Stearns. In describing the investment strategies of Wall Street firms, Bennet Sedacca, President of Atlantic Advisors explained: "...if you have all this nuclear waste on your balance sheet, what are you supposed to do? You're supposed to cut your dividends, you're supposed to raise equity, and you're supposed to shrink your balance sheet. And they did just the opposite. They took on more leverage" (Cohan, 2009: 3). As Reich explains, this occurred not because Wall Street got more greedy, but because the structure of the Wall Street game changed, "It has been said by many that the 1980s launched an era of greed in America, as though that particular trait was somehow lacking before. In fact, as we now see, the change occurred not in human nature but in the structure of the capital market" (Reich, 2008: 72). This point, of course, stands in direct confrontation to Alan Greenspan's contention that human nature was the force responsible for the 2008 crash.

In addition to the existence of a structural incentive for corporate executives to take risks, many executives placed too much confidence in their sheer size. The attitude that predominated the marketplace in regards to these giant lenders was that they were quite simply "too big to fail," meaning that the government would never allow such huge lenders to go bankrupt considering the dire economic consequences such bankruptcies would have on the market overall. As such, it could be argued that giant Wall Street firms were actually acting "rationally" in taking such aggressive lending strategies, given the soft landing the government would be forced to supply. As Allan Sloan writes in, "Lessons of the Crash of '08," "Lehman was in fact too big to fail without dire consequences. It was the beta test for the 'too big to fail' doctrine. And the doctrine was validated" (Sloan, 2009: 74).

In some sense, the example of Lehman brothers actually presents a downside to excessive post facto government intervention in the economy. Though post facto intervention after the crash of 2008 was necessary, such bailouts constituted a means to

a safe landing, as opposed to a last resort. Certainly, it is possible to require firms ex ante to have enough capital in reserves that bankruptcy is just a remote possibility - a strategy currently being pursued by the Obama administration (Sloan, 2009: 74). However, such an approach still ignores the fact that taxpayers will take the hit if such giant firms fail. This fact has caused substantial indignation towards large Wall Street firms which, knowing they were too big to fail, took excessive risks. As Dorgan writes, "If these companies were too big to fail, why in the hell weren't they big enough to regulate" (Dorgan, 2009: 39).

So, what solutions are left? As Sloan argues, "...the only solution is to break up some of the giant firms, and make sure no firm is ever again too big to fail" (Sloan, 2009: 74). While such a solution would not please Wall Street, it might be the only sure-fire way to ease such giants off the accelerator of risky lending. Still, even if such an approach were employed, CEOs would still have incentives for excessive short-term risks, knowing that they will be protected by the doctrine of limited liability, as well as GPs. One solution that could help mitigate this problem is to backload the salaries of CEO's by comprising part of their salary as company stock that cannot be sold until a specified time has elapsed. As Posner explains, "The more an executive's compensation depends on how well his firm does, the fewer risks he may be inclined to take" (Posner, 2009: 97). In the end, however, such steps may not even be enough to combat the excessive Wall Street inclination for risk and quick profits. According to Morris, "In raw markets, the scent of money deadens all other sensory and ethical organs" (Morris, 2008: 31).

In sum, the issue of "soft landings" described above highlights not a problem of deregulation, but a lack of original regulation in the financial services industry. For instance, when GPs were originally created in the 70s, it wasn't until the mid-80s that GPs became regulated (Narayanan, 1998: 3-4), and even then their regulation was limited, at best. GPs as well as the doctrine of limited liability gave executives on Wall Street a safety net that allowed them to engage in overly aggressive predatory lending. As we witnessed in the lead up to the crisis of 2008, CEOs intentionally misled shareholders, government officials, and the public - not because they were particularly malicious people, but because the benefit of doing so was clear, and the risk to their firm and stock options, minimal. Incredibly, the majority of the "deplorable" actions described above were perfectly within the bounds of the law.

SECURITIZATION AND MARKET INSECURITY

The key aspect of the mortgage industry that changed drastically after the collapse of the sub-prime market in the 90s was the advent of excessive debt securitization. In my view, the rapid increase in securitized loans is directly attributable to the deregulatory policies discussed above, and an underlying trust in the Efficient Market Hypothesis. Namely, securitization likely would not have been necessary if loan volume hadn't skyrocketed due to the legalization of the subprime industry, nor would it have been possible, due to the fact that before the SEC changed firms' leverage ratio requirements, financial entities were simply not generating the loan volume which would have necessitated the existence of a market for securitizing debt. Furthermore, if banks hadn't

been deregulated, financial firms never would have been able to sell such a large volume of loans to the "less-than-credit-worthy" due to the fact that the types of loans banks could have provided would have come with interest rates too high for such a demographic to afford. Thus, in my view, the rise of securitization should be viewed as a direct effect of deregulation economics, and not an unrelated correlative trend.

What is securitization and how did it change the financial industry? In the past, lenders originating mortgage loans would hold on to the debt they were owed by borrowers, collecting the interest payments on the original loan until its close, or default. To illustrate this old model of business it is worthwhile to consider the case of one mortgage company that survived the sub-prime crash of the 90s - *Beneficial Finance*. *Beneficial* was started in the 1960s, making loans to Americans who couldn't get loans from banks (Muolo & Padilla, 2008: 34). In truth, *Beneficial* was one of the true pioneers into the industry we now call "sub-prime" (at that time, what *Beneficial* was doing was simply called "nonconforming" mortgage loans (Muolo & Padilla, 2008: 34)). As Muolo and Padilla write, "In short order, an industry was born" (Muolo & Padilla, 2008: 30). *Beneficial*'s business model was remarkably successful. Instead of charging the typical 9 percent on a first lein, *Beneficial* would charge around 15 percent to compensate for the added risk of lending to less-worthy borrowers (Muolo & Padilla, 2008: 30).

Here an important question must be asked: If the sub-prime industry failed for so many large Wall Street firms in the 90s, why didn't it also bankrupt *Beneficial*? What was the secret to its longevity? The answer lies in the amount of agency exercised by the company throughout the process of issuing a loan. Because *Beneficial* wasn't securitizing their loans to third and fourth parties, they took a vested interest in making sure their borrowers could pay their mortgages, because they held onto the original debt issued from the beginning to the end of the mortgage process, and would loose out if a borrower defaulted on a mortgage. As Muolo and Padilla explain, "Unlike subprime lenders of the modern era, *Beneficial*'s loan officers were a bit more cautious as to whom they lent money to" (Muolo & Padilla, 2008: 30). Certainly, it is difficult to isolate a 'lack of securitization' as the sole reason for *Beneficial*'s success. However, *Beneficial*'s business strategy does help to illustrate the alternative financial strategy to the quick-profit model of securitizing loans en masse.

Yet, while *Beneficial* was taking the slow route to growth, other Wall Street firms were on a different track. In the early 2000s, lenders increasingly warmed up to securitizing their debt. This was the case with mortgage loans, as well as most credit card debt (Morris, 2008: 127). Importantly, in the case of securitization, the problem lay not in deregulation, but in a lack of original regulation of debt securitization. As Arnold Kling writes in "The Root of the Financial Crisis,"

In fact, some of the most important financial instruments implicated in the crisis, including mortgage-backed securities and credit default swaps, owed their existence to regulatory anomalies. In the way that they specified capital requirements, regulators gave their implicit blessing to risky mortgages laundered through securitization... (Kling, 2009: 22).

What is securitization? Essentially, when debt is securitized, it is sold out to a second, third, or fourth investor who then either collects the payments on the original mortgage (as it matures) themselves, or further securitizes the debt to other investors. As Morris explains,

Instead of holding their commercial mortgages...the way bankers had always done, they began to package them up as CLOs or CDOs and sell them to outside investors. They could still collect hefty fees while encumbering little if any of their capital. Lending, in other words, was becoming costless (Morris, 2008: 60).

In this way, lending was essentially becoming risk-less for large financial institutions.

What are CMOs and CDOs? In addition to selling off debt to second, third, and fourth parties, another key difference during the era of the advent of securitization was that instead of investors trading and buying individual mortgages, firms were beginning to package hundreds or thousands of mortgages together for "warehouse sale" into what are called Collateralized Mortgage Obligations, Collateralized Loan Obligations, or Collateralized Debt Obligations. These financial tools made it much easier for firms to turn over profits by shipping millions of dollars of debt off their balance sheets overnight. However, the rapid turnovers of mortgage loans presented a problem. Although lenders were making more fast money, they were taking less care in selecting where their loans were going, knowing that they would sell off the debt anyway. As Richard Posner explains, "Banks that packaged and sold mortgage-backed securities had little incentive to make careful estimates of the real risk of the mortgages that backed the securities, because sale shifted the risk of default to the purchasers of the securities" (Posner, 2009: 59). In other words, packaged securitization was shifting risk farther and farther away from the original loan, leaving loan originators with no real incentive to make smart loans.

Why might this be problematic? Unfortunately, while securitization did make profits easier to come by, it also made firms more vulnerable to failed investments. As Posner explains, "Risky mortgage lending can be extremely risky form the lender's standpoint, because a single default can wipe out the earnings on several good mortgage loans" (Posner, 2009: 25). However, now that banks and firms were securitizing most of their mortgages the minute they were signed, such risk evaporated altogether. Instead of firms holding bad debt, they could now pass the buck along to whatever financial entity was willing to buy.

What was the immediate effect of the advent of securitization? In only a few short years, as securitizing debt became the rule of Wall Street mortgage trading, the industry ballooned into something never before seen. Once firms realized they could write a thousand mortgages, earn a quick commission, and sell off their debt, everyone wanted to get in on the party. Thousands of new brokerage firms began popping up all over the country, as lenders found themselves generating more profit, and making a quicker turnover on loans. What this added up to was a ballooning financial sector. As Phillips explains, by 2007, the US financial services market had "swollen to an unprecedented and unstable 21 percent of GDP" (Phillips, 2008: 4). At the same time, as credit became more widely available, private debt ballooned along with the financial industry. When

Alan Greenspan took up the chieftainship of the Federal Reserve in 1987, private debt totaled 10.5 trillion dollars (Phillips, 2008: 4). By 2006, it had quadrupled to 43 trillion (Phillips, 2008: 5). Coinciding with this trend was a direct correlative decrease in the vitality of America's manufacturing sector. For instance, when John Kennedy, Lyndon Johnson, and Richard Nixon were in the white house, manufacturing as a share of US GDP was almost double the GDP share of financial services (Phillips, 2008: 33). Now, it's nearly half (Phillips, 2008: 31). Of course, some saw nothing wrong with this trend. As Professor Merton Miller of the University of Chicago felt, new securitized derivatives were "essentially industrial raw materials" which were made to deal with market uncertainties (Miller, qtd. in Phillips, 2008: 77).

So, if securitization resulted in an unstable ballooning of America's financial industry, why was it permitted to continue? As it turns out, securitization had some redeeming qualities. First, when debt is packaged into CLOs, the mortgages in one single CLO come from a spread of geographical regions in the US. This means that in theory, because debt is geographically diversified, the industry as a whole is more stable because failures in one region would be compensated for by successes in other regions (Posner, 2009: 53). A second advantage to securitizing debt is that it lowered the cost of mortgages for borrowers. Because banks and lending firms were turning over mortgages faster, and thus making quicker profits, the cost of mortgages plummeted. As Muolo and Padilla explain, "securitization had paved the way for lower-cost mortgages to be made to millions of Americans..." (Muolo & Padilla, 2008: 296). A third advantage to securitization is that it brought in foreign investment that otherwise would never have entered the US mortgage market. This helped to spur the growth of the 2000s. As Posner writes, "...securitization made it possible to obtain credit from foreign lenders who would not have wanted to own mortgages on homes in the US..." (Posner, 2009: 55). Of course, when the benefits of low-cost mortgages are spread throughout borrowers, brokers, and lenders, so are the risks. Thus, while securitization helped to draw in new money to the industry, it also spread the risk of the sub-prime mortgage market globally, contributing to the eventual crash of the market in 2008.

To be clear, there's nothing inherently wrong with the idea of securitizing debt. In theory, it makes sense that a firm with more liquidity and less of an aversion for risk would benefit from buying up mortgages from a less leveraged firm - just as much as the less leveraged firm would benefit from getting debt off its balance sheets. However, the problem with what happened leading up to the crash of 2008 was that securitization got out of hand, and the Federal Government failed to regulate an industry that was clearly out of control.

First of all, the underlying theory that the market was naturally efficient led to the creation of certain forms of schematized financial tools, which assisted buyers in determining which securitized loans were good to bet on (or against). As a result, across the board, firms treated their investments as objective decisions, made within a framework of assumed market rationality. In fact, many firms utilized mathematical models to guide investment decisions on Wall Street. For instance, as Lester C. Thurow explains, many investors relied on computer programs to determine which stocks to buy and sell:

There are two kinds of program trading, stock-index arbitrage and portfolio insurance. The first depends on discrepancies between the current prices of stocks on the New York Stock Exchange and prices on stock futures - contracts to buy a stock at a certain future date...In stock-index arbitrage, a computer program monitors the differential in price between the Standard & Poor's 500-stock index and the futures index of the same stocks. The system is programmed so that whenever the differential reaches a certain point, the computer automatically issues orders to buy and sell (Thurow, qtd in Lewis, 2009: 54-5).

To summarize, one of the various forms of "program trading" looks for discrepancies between the current and projected future price of a stock (based on the stock's futures index), and translates the discrepancy into a numerical investment recommendation. Importantly, the "orders" issued by such programs had nothing to do with consumer confidence, or other human-induced market changes that a computer program would miss. In this way, investors were able to take a hands-off approach to investing. Now, investment decisions could be made by computers which were supposedly much more efficient and effective than human minds.

Yet, "efficiency" had its downside. As Morris writes, "The re-engineering greatly improved market efficiencies and reduced funding costs but also created the illusion that the underlying risks were well understood and under control" (Morris, 2008: 58). Thus, it could be argued that although the efficiencies of schematization made investing easier, the ease created a false sense of security. In my view, this was likely one of the major changes in the financial marketplace that galvanized firms to thin out their collateral base (in order to pump more money into profit-making endeavors), rendering them more vulnerable to liquidity seizures. One such scheme that was relied on by investors was the Black-Scholes financial model, which automatically priced stocks through complex equations. As Lewis describes, "By leading investors to think they understand complicated financial risk when they actually do not, and by mispricing that risk, Black-Scholes encourages them to take more chances than they rationally should" (Lewis, 2009: 7). In some sense, the revolution of schematized finance that swept through Wall Street turned the industry on its head. At one time, Wall Street investment involved substantial guess work and uncertainty. Now, financial investing resembled more of a pseudo-science than "Wheel of Fortune." As Morris writes, financiers were drawing up mathematical investment models as if they were predicting the motion of gas molecules in a room: "For shares truly to mirror gas molecules, trading would have to be costless, instantaneous, and continuous. In fact, it is lumpy, expensive, and intermittent. Trading is also driven by human choices that often make no sense" (Morris, 2008: 56).

Yet, mathematical finance models weren't the only new trend on Wall Street. In addition to an over-reliance on schematized finance models, firms began to grow more and more confidant in securitizing debt to multiple parties. These new types of packaged securities were bought because buyers had an underlying faith that the market was efficient, and that the securities they were purchasing were properly priced. How did it all work? Instead of lender A securitizing debt to lender B, and lender B holding

onto A's debt until its fruition, lender A was securitizing debt to lender B, which was then re-sold tens of times out to lender X, a lender with no business relationship to lender A, and thus no knowledge of the real value of the MBSs lender X was purchasing. This movement of debt from originators to firms buying up securitized loans is known in financial circles as the 'problem of agency'. As Morris explains, "...lending in the shadow banking system seems especially bubble-prone, in part because of the 'agency' problem...originators suspend credit vigilance when they're planning to sell off the loan" (Morris, 2008: 147). Traders in the sub-prime mortgage business call this "IBG-YBG," or "I'll be gone, you'll be gone" (Morris, 2008: 147).

The 'IBG-YBG' strategy was one employed frequently by Bear Stearns, which relied on securitizing their debt to keep business moving at a breakneck pace. As Cohan explains, "...one of the ways Bear Stearns began to increase its return on equity was through the growth of its mortgage-backed securities department" (Cohan, 2009: 208). How did Bear's securitization take off? In November of 1987, Bear hired Howie Rubin, a onetime professional gambler and Harvard MBA. Bear's traders used to joke that "even when Rubin was screwing a customer, the customer enjoyed every minute of it" (Cohan, 2009: 211). In the past, before mathematicians like Rubin became involved in the mortgage industry, things were much simpler. As Cohan explains, before the era of securitization, "There were very few types of securities trading...you didn't have the technology or analytics we have today" (Cohan, 2009: 209). In a few short years, people like Rubin changed the game. Instead of making money by ensuring that borrowers were fit to pay off their mortgages, firms like Bear were making record profits by simply structuring and restructuring securitized mortgages. As Cohan explains, "He [Rubin] realized mortgages were nothing more than math and hired a team of Ph.D.'s to do the structuring [of the securities]" (Cohan, 2009: 209). After the advent of such schematized finance, the entire industry took off, while the bureaucratic distance between the original lender and borrower grew simultaneously greater. The growth of the entire industry was defined, as Morris explains, by fragmentation and specialization of the industry: "Within a few years of the advent of the CMO, however, the industry decomposed into highly focused sub-sectors" (Morris, 2008: 40).

In Morris' view, "the global crisis...was indeed made in America...At its core, it was a...debt-fed party...of an ostentatious new class of super rich, who had invented nothing and built nothing, except intricate chains of paper claims that duller people mistook for wealth" (Morris, 2008: x). What's wrong with intricate chains of paper? When lender A securitized debt only to lender B, lender A had an incentive to make sure the loans they were making were "investment-grade" because if they weren't, lender B would suffer the losses and stop doing business with lender A. However, as was the case with excessive securitization leading up to the crash of 2008, lender X was holding debt originated by lender A, but lender X had no idea how much their debt was actually worth. They thought they did, but because lender A had no real incentive to please lender X, much of the debt sold off by lender A was poorly valued, and thus dangerously unsafe for lender X to purchase. As such, securitization led to value uncertainty because the original value of CMOs and CDOs was unknown before their sale. For instance, in 2007, BNP Paribas, a major French bank, began having problems

with its mortgage securities because they were so difficult to rate. As a spokesperson for BNP stated: "The complete evaporation of liquidity in certain market segments of the US securitization market has made it impossible to value certain assets fairly, regardless of their quality or credit rating" (Norris, 2007: 1). In my view, this trend eventually helped contribute to the market's collapse - due to uneasiness on the part of investors who suddenly withheld needed capital from a market without clearly defined worth. The important point to note about this relationship is that lender X was oftentimes an overseas lender- one of many who didn't necessarily need to be pleased in order for lender A to stay in business (because there were always other "lender Xs" waiting in line to buy up the same bad debt).

But, to speak only of CDOs and CLOs is to leave out a significant part of the securitization picture. In addition to packaging loans and securitizing them off to other lenders, firms also began sloughing off their debt to a world described by some as a "shadow world" of mortgage finance. This world was created by a financial instrument called the Structured Investment Vehicle (SIV). SIVs are entities typically based at offshore locations, such as the Cayman Islands, and are run as partnerships with American lending firms. As Brad Keoun explains in a Bloomberg report, "SIVs were set up to make money by selling short-term debt and buying longer-dated and higheryielding assets including bank bonds, MBSs and CDOs" (Keoun, 2008: 1). Essentially, an SIV is a reservoir in which a firm can store bad debt that it wishes to move off its balance sheet. As Morris argues, "...there is a kind of shadow CDO world called SIVs, or structured investment vehicles, run within, but legally separate from the major money center banks" (Morris, 2008: 82). While lending to an SIV makes it appear that a firm's debt is gone (thus freeing up more money for new loans), the debt is simply temporarily invisible. In my view, the existence of SIVs serves as yet another example of a lack of necessary regulatory action on the part of SEC. Although SIVs might sound like conspiratorial nonsense, in truth they were utilized quite frequently in the 2000s as a way of beefing up a firms' liquidity position. For instance, Citibank was one bank that made lending to their SIV quite a common practice. As Morris explains, "At Citi, the lending to its own SIVs was more than three times higher than its net new global consumer lending" (Morris, 2008: 83). Thus, SIVs provided yet another avenue by which a firm's leverage position could look artificially stable, all the while helping to generate new investments and quick profits.

In some sense, the unprecedented growth of the financial industry created unprecedented new wealth, but it also created its own demise. Even Alan Greenspan, who vigorously encouraged low-interest-rate lending, admitted that CDOs in particular had become so complex that they simply couldn't be valued, and thus didn't reflect real market trends. As he explained in 2007, "Collateralized debt obligations...have gotten much too sophisticated, are priced by extraordinary mathematical models, and are very difficult to value...they've been tried; they don't work" (Greenspan, qtd. in Phillips, 2008: 97). Ironically enough, as we will discuss in the next section, arguably one of the contributing factors to the blossoming of the CDO as a mainstay in modern finance was the flood of demand for cheap mortgages generated by Greenspan's low interest rates of the 2000s.

In sum, the advent of the age of securitization arose out of a demand for quick profits, and an underlying trust in the efficiency of the market (and its pricing models). In my view, such profiteering was sanctioned by lax regulatory policies that looked the other way during the advent of debt securitization. Such policies ignored the decreasing amount of agency exercised by lending firms in issuing loans. When lenders had little or no stake in the continued success of a loan (because it had been securitized), the quality of such loans naturally declined because the only concern the lender had in mind was making the sale, and getting out ('IBG-YBG'). Any thought of ensuring that the "deal" was the right one flew out the window once a quick turnaround became the industry priority. Without any sense of agency attached to a mortgage, the lender's credibility was never at risk, given that firms could immediately turn around and sell off the mortgages they just brokered. Securitization made loans cheap and quick corporate profits easy to come by.

THE "GREENSPAN PUT" AND THE MONETARIST MISTAKE

What was the origin of the current credit crunch? As is the case with most other aspects of the causes of the crash of 2008, there is no simple answer. On one hand, a trend began in the 1970s and 1980s towards consumers growing ever more willing to spend beyond their means. As *Time Magazine* wrote in a 1977 article, "The Affluent Society has become the credit society, and an insistence on buying only what can be paid for in cash seems as outmoded as a crew cut" (Phillips, 2008: 34). Yet, it would be short-sighted to blame consumers for taking advantage of cheap credit when it was made so readily available. On the other end of the spectrum, what fueled the credit binge was a culture of risky investing coddled and encouraged by the low federal interest rates dictated by the then Chairman of the Federal Reserve, Alan Greenspan. As many economists agree, the low rates pushed by Greenspan were not accidental. Rather, they relied on a theory of economic growth that valued liquidity above all else, and enshrined an unshakeable trust in the notion that markets were efficient.

But is it fair to place so much blame on Greenspan? Certainly, Greenspan cannot be held solely responsible for a global economic crisis. Yet, it is important not to underestimate his role, and the extensive authority of the Fed in unilaterally dictating economic policy. In fact, as it turns out, the Fed's authority has not always been so extensive. As Alasdair Roberts, Professor of Law and Public Policy at Suffolk University Law School explains, between 1978 and the financial crisis of 2007-2009, trends toward economic liberalization were coupled with trends toward isolating financial institutions from political pressure: "A variety of legal devices - new laws, treaties, and contracts - were adopted with the expectation that they would constrain the power of popularly elected officials and preserve the autonomy of technocrats" (Roberts, 2010: 56). The new theory espoused the view that, so long as technocrats were held immediately accountable by the democratic masses, decision-making would be strait-jacketed by what was politically possible. If, on the other hand, financial institutions were more isolated from the political process, they would be free to do what was economically necessary and what was good for achieving "market development

needs" (Everett, 2003: 211, qtd. in Roberts, 2010: 59). According to Roberts, the trend towards technocratic autonomy influenced central banks, treasuries, revenue agencies, as well as independent regulators all over the world.

The US Fed and Treasury Department were no exception to this rule. As Henry Kaufman argues in the Financial Times, by responding lethargically to trends in the economy, the Fed failed to use its position of power in the way it should have to address the crisis at hand: "Three charges could be made against the Fed...it had failed to acknowledge evidence of a housing bubble...it had failed to use its regulatory powers to control mortgage lending and the booming market for complex financial instruments...[and] it had failed to use its influence over interest rates to deflate the bubble..." (Kaufman, 2009 qtd. in Roberts, 2010: 61). Thus, vesting regulatory authority in politically insulated institutions can have negative unintended consequences. In the US, the Fed failed to stand up to the powerful market players who were riding the mortgage bubble until the bitter end. What does this teach us about technocratic autonomy? As it turns out, technocracy may not always be preferable to democracy when it comes to crafting financial policy. Though convincing arguments abound for why technocratic autonomy is important in certain circumstances, in other cases the logic behind institutional isolation ends up creating the very evil (shortsightedness) it purports to alleviate. As Roberts writes, "The case for delegation of power to technocrats hinged on the assumption that they could be trusted to exercise discretion properly. The financial crisis provided vivid evidence that technocrats, too, were capable of massive policy errors - and perhaps also that formal mechanisms for ensuring independence could not prevent industry capture or ideologically induced blindness to emerging threats" (Roberts, 2010: 61). So, as it turns out, the power wielded by Greenspan was substantial, due to the fact that the Fed was increasingly less responsible for having to answer to the political process in crafting financial policy.

What specifically did Greenspan do that is blameworthy? As Soros writes of Greenspan, "Responsibility for the real estate bubble can be justly laid at his feet" (Soros, 2008: 119). Why do some economists place so much blame on the former Chairman? In some sense, Greenspan's underlying philosophy regarding the standard by which the health of an economy is judged turned out to be wrong. What was this standard? Instead of focusing on sustained growth, or stability, Greenspan pointed to sizeable corporate profits as the litmus test for whether or not the economy was functioning in a healthy manner. For instance, in the mid 80s, when Greenspan was a private economist, he wrote a letter to the Federal Home Loan Bank Board, explaining his position on the deregulation of the financial industry. As Muolo and Padilla explain, Greenspan's letter argued that "deregulation was working as planned, naming 17 thrifts - including Lincoln - that had reported record profits and were prospering" (Muolo & Padilla, 2008: 291). Subsequently, as chairman of the Fed, Greenspan aggressively sought to deregulate the financial sector, and lower interest rates in order to spur more business "prosperity." For example, after September 11, 2001, Greenspan cut the Federal Funds rate to a mere 1 percent, the lowest rate in half a century (Morris, 2008: 59). The result was that businesses and lending firms had a field day. The low rate meant that businesses could get cheap money at a time when the economy was struggling. As Soros explains, "For thirty-one consecutive months the base inflation-adjusted short-term interest rate was negative" (Soros, 2008: xv). Essentially, this meant that money was free.

The low Federal Funds rate had the desired effect of spurring more business activity, and increasing corporate profits. However, it also served as the genesis for a new and vigorous culture of speculative investing that swept through Wall Street. Doug Naidus, CEO of *MortgageIT*, the largest mortgage broker in the New York metropolitan area, summed up the industry viewpoint well: "The more time that goes by, the less concerned I am about a housing bubble...the fact that the prices have not been growing at an alarming rate in recent months suggests a softer landing" (Doug Naidus, qtd. in Julavantis qtd. in Lewis, 2009: 294).

Unfortunately, though Naidus believed that economies were dictated by month-by-month trends, the trends which matter most are the long-term ones, which Naidus and other Wall Street CEOs ignored. One such long-term trend was the hyper inflation of asset prices, which was a telltale sign that the economy was riding an unstable bubble. As Russell Roberts, professor of economics at George Mason explained in a *Wall Street Journal* article, "Between 1997 and 2005, the average price of a house in the US more than doubled...it wasn't simply a speculative bubble. Much of the rise in housing prices was the result of public policies that increased the demand for housing" (Roberts qtd. in Cohan, 2009: 297). Here, Roberts highlights two important points. First, contrary to Naidus' claim, asset inflation was ballooning at an alarming rate - nearly 50 percent. Second, Roberts is clear to emphasize that the housing bubble was not simply a speculative bubble driven by consumers. Instead, the bubble is also largely attributable to government policies (i.e. low interest rates) which spurred the speculative investments of the 2000s. Thus, contrary to some views, short-term stability in the financial sector was not indicative of systemic vitality.

However, during the lead-up to the crash of 2008, government leaders were proposing their own hypotheses as to why the economy was experiencing "turbulence." One interesting explanation was provided by US Treasury Secretary Henry Paulson. In a speech delivered on September 12, 2007, Paulson explained: "Unlike periods of financial turbulence I've witnessed over many years, this turbulence wasn't precipitated by problems in the real economy. This came about as a result of some bad lending practices" (Phillips, 2008: 30). In sum, Paulson arguing that economic difficulties were not being caused by systemic or regulatory failures, but instead by a select group of lenders making bad loans. Such a view is convenient, considering that it shifts blame away from government regulators who would be otherwise held responsible if the "real" economy was faltering.

But, was Paulson's explanation accurate? In my view, Paulson's assessment of the "real economy" was misleading at best, and at worst, flat out wrong. For instance, one aspect of the "real economy" experiencing significant (and arguably unstable) shifts which Paulson failed to account for was the ballooning of asset prices leading up to 2008. Typically, the value of homes stays relatively steady with the pace of inflation (Morris, 2008: 66). Leading up to 2000, this tended to be true in the US. However, from 2000 to 2005 something strange happened - home prices skyrocketed by more than 50 percent in lockstep with a growing culture of speculative real estate investing (Morris, 2008: 65-

66) which helped fuel the increase. As Morris explains, "home values quickly jumped to reflect the present value of the potential capital gains rather than a steady-state price that a homebuyer could finance form current income on normal lending terms" (Morris, 2008: xvii). In sum, a gigantic real estate bubble was about to burst, and contrary to Paulson's analysis, the bubble was growing out of trends in the "real economy." The result of such rising home values was an unstable market, ready to pop at the drop of a hat.

But what created such an asset bubble, and who should be held responsible? In my view, the low interest rates which were supported by Greenspan and the Fed are largely to blame for the creation of the asset bubble. As a 2005 report by the European Central Bank titled "Asset Price Bubbles and Monetary Policy" explains, the link between lax monetary conditions and asset price balloons is undeniable:

The close association between potentially disruptive asset-price booms and excess credit and liquidity creation is particularly important for central banks...Indeed, certain historical episodes suggest that major asset-price escalations can be encouraged by lax monetary conditions..." (Morris, 2008: 64).

The lessons of history bear out the evidence for this connection. When the Great Depression struck, a bubble not dissimilar from the one of 2008 "popped." Much like today's crisis, in the lead up to the Great Depression, banks were increasingly willing to lend, generating a culture of economic speculation. As Posner writes,

That was risky lending, since stock prices could and did decline by more than 10 percent, and explains why the bursting of the stock market bubble in 1929 precipitated widespread bank insolvencies. New profit opportunities and low interest rates had led to over indebtedness, an investment bubble, a freezing of credit when the bubble burst... (Posner, 2009: 11).

Does this sound familiar? Though the circumstances of the 2008 crash are somewhat different, the fundamental instabilities of both markets before they crashed stemmed from inflated asset prices. What exactly is an "asset bubble?" As Posner explains, "A bubble is a steep rise in the value of some class of assets that cannot be explained by a change in any of the economic fundamentals that determine value" (Posner, 2009: 10). Such determinants are typically driven by the demand for a given product, as opposed to its "real" value (Posner, 2009: 10-11).

Thus, in my opinion, it could be argued that what went wrong in terms of asset price controls was that Greenspan was too busy worrying about economic growth to notice excessively inflated asset prices in the real economy. This error of judgment likely stemmed from the Chairman's monetarist tendencies (i.e. his over-confidence in widely available liquidity as the solution to economic woes). In economic circles, this theory is referred to as the "Greenspan Put." As Morris explains, "That is the 'Greenspan Put': No matter what goes wrong, the Fed will rescue you by creating enough cheap money to buy you out of your troubles" (Morris, 2008: 65). However, this strategy proved to be insolvent. As a 2004 article from *The Economist* explained, "This gush of global liquidity has not pushed up inflation. Instead, it has flowed into share prices and houses around the world, inflating a series of asset-price bubbles" (Morris, 2008: 63). In short,

the 'Greenspan Put' was a monetarist theory, one that focused primarily on market liquidity (the movement and availability of money) as the underlying necessity to a healthy economy. Yet, as Soros contends, monetarist economics only account for economic growth when there is an underlying "willingness to lend" from banks and lending firms. When such a willingness does not exist, excessive liquidity (the monetarist prescription for economic troubles) has the potential of creating asset bubbles. As he explains, "Monetarism is a false doctrine. Money and credit do not go hand in hand. Monetary authorities have to be concerned not only with wage inflation but also with avoiding asset bubbles. Asset prices depend not only on the availability of money but also on the willingness to lend" (Soros, 2008: 144).

Therefore, it could be argued that Greenspan failed to attend to the lack of a "willingness to lend" because he ignored the fact that inflated asset prices could cause business confidence to decline, resulting in fewer loans being issued by banks and thus less economic growth, despite the fact that credit is widely available. In sum, the Fed did exactly the opposite of what it should have done during an expansionary phase - it coddled business interests, and nurtured unstable growth instead of reining in the expansion of available credit. As Soros explains, "The right time to constrain credit expansion is during the expansionary phase" (Soros, 2008: 118).

Yet, corporations weren't the only ones getting in on the cash flurry, and to solely blame corporate profiteering and federal incompetence for the crash of 2008 is to leave out another important part of the picture. For instance, consumers, in addition to aggressive lending firms, threw their money around like monopoly tender, spending far beyond their means. For instance, 2006 was the first year since 1933 in which American's "personal savings rate" fell into negatives (Associated Press, 2009). In essence, Americans were spending, and corporations were lending as if money would always be cheap. Unfortunately, Greenspan kept feeding the frenzy, maintaining low interest rates far beyond the point where they should have been reined in (The Economist, 2007). This philosophy, of course, coincided with Greenspan's notion that healthy corporate profits were reflective of a healthy economy. Yet, others had a different view. William McHesney Martin, chairman of the Federal Reserve for 18 years, was one of them. As he explained, "The function of the Federal Reserve is to take away the punch bowl just as the party is getting good" (Martin, qtd. in Morris, 2008: 62). Unfortunately, instead of taking away the punch, Greenspan kept filling the bowl to directly coincide with investment demand. Thus, in some sense, the Fed was acting counter to its intended purpose. Instead of functioning as a regulatory agency intended to promote economic stability and sustained growth, Greenspan chose to fuel a form of economic growth which was, by many standards, unstable. Eventually, Greenspan came to terms with his mistake. In an interview with 60 minutes in 2007, the former Chairman admitted his underestimation of the dangers of keeping interest rates too low for too long, stating that, "I didn't get it until very late in 2005 and 2006" (Muolo & Padilla, 2008: 291).

But what got Greenspan confused, and why didn't he "get it" until too late? In my view, Greenspan had things wrong from the beginning. In addition to having misplaced confidence in "profit" as a measurement for sound economics, Greenspan ignored the

early warning signs which indicated that the party was over, and that the US economy was standing atop an enormous bubble. Instead, Greenspan endorsed the monetarist view originally espoused by Milton Friedman that if the fed increased the money supply at the same rate of economic growth, growth would be stable while prices simultaneously rose (Morris, 2008: 17-18). For example, at one point, Greenspan actually argued that a lack of margin requirements for Wall Street firms would "promote the safety and soundness of broker-dealers, by permitting more financing alternatives, and hence, more effective liquidity management" (Morris, 2008: 54). Here, instead of addressing inflation in asset prices, Greenspan shows his monetarist colors by arguing that sheer liquidity is the solution to the economy's woes.

In my view, this blind trust in the free market, coupled with Greenspan's vigorous insistence on deregulating finance helped to contribute to the culture of speculation that generated the self-destruction of the US economy. Instead of recognizing clear trends that pointed to inherent economic instabilities, Greenspan kept the punch bowl out far beyond the point where corporate needs had been satiated. I contend that this mistake had much to do with Greenspan's reliance on the Efficient Market Hypothesis. Instead of recognizing that actors in the market were not acting "rationally," Greenspan continued to trust that the efficiency of the market would correct itself. As Kahneman explained, Greenspan would come to regret his misguided philosophy:

"For me one of the interesting moments in this crisis has been what I call Greenspan's confession...saying 'my theory of the world was wrong, my framework was wrong'...and it is interesting to see what was his framework and why was it wrong. And he articulated the framework. He said he expected financial firms in particular to be in the best possible position to protect their interests and to protect their long term survival" (Kahneman, January 27, 2009).

So, in the end, Greenspan came to terms with his error. At the time, however, despite evidence that the US economy was riding a bubble, Greenspan went so far as to argue that "a new paradigm of active credit management" had arrived (Morris, 208: 61). As Morris explains, "As the frenzy fed on itself...Greenspan worried publicly about irrational exuberance in 1996, then reversed himself a year later, cautiously accepting the possibility of a 'new paradigm' - presaging an era of technology-enabled non-inflationary growth" (Morris, 2008: 32). This meant that despite unstable and record-breaking profits, Greenspan felt that the economy had begun to defy previous notions of economics, and had thrust itself into a new era where profits would build upon themselves as long as the Fed kept the money supply flowing to meet demand.

Unfortunately, Greenspan's insistence on the arrival of a "new paradigm" turned out to be dead wrong. While Greenspan might have been right to argue that liquidity was conducive to growth, he ignored an important fact - that growth is only good when it is stable. Some recognized this fact, and sounded the alarm on the Fed's misplaced confidence in growth as a reflection of sound economics. For instance, in opposition to Greenspan's declaration of a "new paradigm" of non-inflationary growth, the Bank for International Settlements of Switzerland published a report in June of 2007 reminding the financial world that: "Virtually nobody foresaw the Great Depression...or the crises which affected Japan and southeast Asia...In fact, each downturn was preceded by a

period of non-inflationary growth exuberant enough to lead many commentators to suggest that a 'new era' had arrived" (Phillips, 2008: 53).

But is it fair to blame Greenspan for his failure to recognize the existence of a housing bubble? After all, Greenspan wasn't the only economist championing the conservative position that the free-market was self-regulating. In my view, Greenspan's incompetence in managing liquidity in the US market was not an exception to a successful tenure as head of the Federal Reserve, but just another failure in a long line of mistakes, all of which were generated by Greenspan's underlying economic philosophy that free markets were self-correcting. For example, one week before LTCM imploded, Greenspan went before Congress and said that "Market pricing and counterparty surveillance can be expected to do most of the job of sustaining safety and soundness" (Morris, 2008: 54). In other words, the fox would do a fine job of guarding the hen. Greenspan's assessment turned out to be misplaced. Exactly one week later, after asserting his confidence in self-regulation, LTCM collapsed, and Greenspan called for federal intervention in bailing out LTCM with taxpayer dollars (Morris, 2008: 55). Greenspan placed the same confidence in the free market to solve the "Dot.Com" crisis. As Colin James reports in *The New Zealand Herald* in 2008, "...Greenspan was allergic to recession. As in turn the late 1990s dot-com share and the 2000s house bubbles swelled, Greenspan said asset bubbles were not central banks' business. The market would fix them" (James, 2008). Certainly, this proved not to be the case.

To be fair to Greenspan, if it was the case that markets function efficiently, the Fed would have been justified in lowering the federal funds rate to 50-year lows. As such, it is important to entertain the argument for a more hands-off economic approach. After all, Greenspan did not stand alone in arguing for less regulation in the US economy. As Isaac Alfon wrote in *Financial Services Authority*:

A regulator who does not use CBA [cost-benefit analysis] to help in the formulation of new policy or to check on the impacts of specific measures or of major blocks of the regime runs the risk of delivering a stream of outputs that may reflect the given objectives but lead to unintended inefficiency. Thus, for example, a regulator who curtails the freedom of banks in order to promote greater systemic safety but does not consider the wider implications of the measures taken runs a greater risk of imposing the costs associated with a lack of innovation and investment (Alfon, 1999: 9).

Thus, some contend that the unintended economic consequences (i.e. hampering growth and innovation) of regulating an industry can outweigh its benefits. Certainly, in some situations, over-regulation has harmed growth. Yet, over the past 40 years, a CBA of financial regulation seems to favor the view that regulating does much less harm than good in many cases. One example that supports this view is the case of the Asian Currency Crisis of the 1990s. For instance, in the lead-up to South Korea's disastrous crash, the nation opened up its economy to foreign investments. However, Korea notably chose not to regulate its banks, and it also chose not to engage in significant financial oversight. As Shalendra Sharma writes in *Progress and Development*:

...the root of the Korean crisis lay in the poorly sequenced capital account liberalization - or liberalization without the concurrent adoption of adequate bank regulation and prudential supervision of the financial system to discourage excessive capital inflow. Such egregious oversight greatly increased the economy's vulnerability to financial panic and economic collapse (Sharma, 2004: 49).

The South Korean crisis supports the view that regulation is necessary to growth, and that markets don't function efficiently when left to their own devices. The Asian currency crisis of the 90s serves as a good example of human exuberance upsetting the predicted efficient functioning of a market. When it was discovered that many Asian markets (including China and South Korea) were holding large amounts of bad debt as a result of a pervasive "crony capitalist" environment, economists predicted that the market would suffer. But, no one expected the Asian markets to experience the excessive runs which sent the entire region belly-up. As Krugman explained, "The unique aspect of Asia's comeuppance is not the awfulness of the crime but the severity of the punishment" (Krugman, qtd. in Lewis, 2009: 87). What was the punishment? Whereas capital was flowing into Asia at a rate of \$100 billion per year in 1996, by 1997 capital was leaving Asia at roughly the same rate (Krugman, qtd. in Lewis, 2009: 88). According to Krugman, "What turned a bad financial situation into a catastrophe was the way a loss of confidence turned into self-reinforcing panic" (Krugman qtd. In Lewis, 2009: 88). Thus, in the case of the Asian currency crisis, what should have happened didn't, and the predicted efficiency of doing business in Asia turned out to be overly-optimistic. Of course, even before the Asian currency crisis, the financial industry had been shocked by the sudden and unpredictable irrationality of the marketplace. For example, in 1987, when the stock market took one of its worse dives in history, losing 23 percent of its value in one day, few economists could find much of an explanation for the colossal collapse. As Phillips writes, "Few could find much rationality there" (Phillips, 2008: 73).

To further emphasize the irrationality of Wall Street, we need look no farther than what happened in the crash of 2008. During the crash, firms holding bad debt (over-valued loans) were the first to suffer. However, even firms that were operating at high efficiency suffered great losses as a result of other firms' blunders. Thornburg Mortgage, for example, was a firm specializing in making "alt-A" mortgages (subprime mortgages) (Cohan, 2009: 4). TM's mortgages were performing remarkably well right up to the economic crash. As Cohan explains, "At Thornburg, 99.56 percent of these mortgages were performing just fine. But that did not matter. What mattered was that the perception of these mortgage-related assets in the market was deteriorating rapidly" (Cohan, 2009: 5). What do these examples demonstrate? In my view, history suggests that markets are not efficient. Contrary to the Efficient Market Hypothesis, agents do not act rationally even when they are fully aware of the economic facts relevant to the market or investment with which they are involved. This point is supported by the examples above. As Soros writes, "The currently prevailing paradigm, namely that financial markets tend towards equilibrium, is both false and misleading" (Soros, 2008: i). Yet, considering how "efficient" and profitable mathematical models

have become, some Wall Street heavy-hitters still stand to benefit from their continued use. One investor who placed little faith in the Efficient Market Hypothesis was Warren Buffet. As he famously stated, "I'd be a bum on the street with a tin cup if markets were always efficient" (Phillips, 2008: 78). Looking to the recent past, history seems to stand on Buffet's side.

If markets are, in fact, inefficient, it is relevant to entertain the question, "What is it that causes the inefficiencies?" Here, it would serve our discussion to revisit Alan Greenspan's comments from October of 2009, when he noted that, "...its human nature, unless someone can find a way to change human nature, we will have more crises..." (BBC News, 2009). In his interview with BBC, Greenspan focused on "human nature" as a primary cause for the economic crash of 2008. But that is not a reason for why the economy crashed - it's an excuse for why our regulation failed. Greenspan would likely take issue with my hypothesis that markets are naturally inefficient. However, his comments are conducive to an understanding of how some economists view the nature of the typical investor. For instance, Keynes writes in The General Theory: "That human decisions affecting the future, whether personal or political or economic, cannot depend on strict mathematical expectation, since the basis for making such calculations does not exist" (Keynes, The General Theory, p. 162-3 qtd. in Posner, 2009: 83). If Keynes and Greenspan are correct to say that humans possess something inherent to their nature which precludes a capacity to think in a purely calculative fashion, such a notion would contradict the fundamentals of schematized finance. Such models exist because of the misconception that the intricacies of human desire and emotion can be plotted, predicted, numericized, and understood. Importantly, this doesn't mean that human nature should be blamed for the economic crash, as Greenspan would have us believe. Instead, it highlights the need for regulating the dangers of "human nature", and the ways in which human nature (short-sightedness, greed, etc.) can negatively affect the financial market. Thus, though Greenspan and other economists may be right to place little confidence in whimsical human decisions, such anti-rationalism shouldn't be used as a scapegoat for our economic times. Instead, it should point us in the direction of taking action to more heavily regulate Wall Street and the collective "greed" inherent to the nature of its business.

In sum, the Efficient Market Hypothesis does not stand up to recent historical trends in economic crises. As I have argued, Greenspan's insistence on cheap money and self-regulation certainly amounted to a "new paradigm." However, what was "new" was certainly not the underlying fundamentals of the US economy. The only aspect of "newness" to the swelling economy of the late 1990s and 2000s was a vigorous over-confidence in economic growth, and an over-exuberance in market liquidity as the solution to economic woes. It is therefore my contention that Alan Greenspan should be held largely responsible for the economic crash of 2008, due to his error of thinking that unprecedented economic growth would continue indefinitely, and that such growth would be self-stabilizing. As Joseph Stiglitz, Nobel Prize winner in Economics, writes, "Alan Greenspan really made a mess of all this. He pushed out too much liquidity at the wrong time. He supported the tax cut in 2001, which is the beginning of these problems. He encouraged people to take out variable-rate mortgages" (Dorgan, 2009: 50).

Eventually, Greenspan owned up to some of his mistakes, admitting before a congressional hearing in October of 2008 that he had been wrong not to aggressively regulate speculative investing (Dorgan, 2009: 41). As it happened, the 'new paradigm' turned out to usher in, not an era of revolutionized economic fundamentals, but instead a period of reckless lending and easy money. The demise of Greenspan's 'new paradigm' highlights not only the failure of the Efficient Market Hypothesis to explain modern economic trends, but also the failure of schematized finance models to adequately serve as reliable investment tools. In addition to these conclusions, Greenspan's misplaced trust in economic growth as an indicator for sound economic stability should generate new debate on what standards ought to be used as measuring sticks for a sound economy. In my view, "sound economics" should be defined by stable, as opposed to quick economic growth. Certainly, some people got rich. However, as Phillips wrote, this market explosion "...did little or nothing for people who rode the subway more than four stops or lived in Yonkers" (Phillips, 2008: 53).

CONCLUSIONS

In the end, no one cause can be pointed to as the source of the crisis of 2008. Alan Schwarts, Bear Stearn's former CEO said of the crash, "...in truth, it was a team effort. We all [screwed] up. Government. Rating agencies. Wall Street. Commercial banks, Regulators. Investors. Everybody" (Cohan, 2009: 450). This perspective couldn't be more true from the view of the author. However, if one overarching cause could be looked to as the genesis of the crash, it would be the persistent and comprehensive deregulation of the Financial Services Industry, as well as the lack of regulation of new financial instruments over the last 40 years that created both agency problems, as well as valuation problems in the marketplace. Ignorance can explain some amount of misguided regulation. However, the process of deregulation was not accidental or adhoc. Instead, it was driven by an ideology that markets were efficient, that the agents within the economy could independently act rationally, and that economic trends could be understood objectively and subsequently priced accurately by sophisticated finance models. From the Regan era to the Bush era, this economic ideology served as the catalyst for the liberalization of the US financial services sector as well as its spectacular demise. From the legalization and absence of effective regulation and oversight of the sub-prime lending industry, to the freeing of financial institutions from stringent leverage ratios, and the deregulation of the banking industry, the federal government turned a blind eye to what was good for the economy in favor of policies that supported short-term profitability over long-term economic stability. Meanwhile, the lack of regulation in the securities market, and the SEC's failure to address the ballooning size of financial firms on Wall Street de facto resulted in a hands-off approach to an industry that eventually spiraled out of control.

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As the government stood idly by and allowed Wall Street to run its course, instead of controlling liquidity and stabilizing growth, the Fed coddled corporate interests and pushed interest rates to unprecedented lows. In particular, Greenspan's mishandling of the economy was not only due to errors in regulatory policy, but also to an error in economic philosophy - a philosophy that championed the view that demand for capital would follow supply, and that the magic of the free-market would be self-stabilizing despite evidence that housing prices were skyrocketing to all-time highs and banks were becoming insolvent.

At this point in the midst of a period of multi-trillion dollar government budget deficits, high unemployment, and uncertain economic forecasts, it would be a mistake to spend too much time decrying mistakes of the past. However, we should not miss the opportunity to learn from the errors of previous administrations. Perhaps a relevant question to ask now is this: Have we learned valuable lessons that help us to better understand the causal factors of the crisis of 2008? In my view, the failure of the free-market economic philosophy espoused by Greenspan and other supporters of the Efficient Market Hypothesis should serve as a reminder of what happens when quick profit, as opposed to stable growth, becomes the end goal of an industry and a government. The longer this lesson is ignored, the longer it will take us to turn the page and lay the groundwork for a new and more stable economic future.

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