

UNIVERSITY OF BERGEN Department of comparative politics

SAMPOL350 Master Essay in Comparative Politics

The Financialization of Capitalism and the Rise of Populism in the United States

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Abstract:

This paper seeks to make sense of the rise of populism in the United States, as evidenced by Donald Trump's election victory in 2016. It takes as its starting point that many of the current explanations circulating in the mainstream media, pointing towards among other; racism, misogyny, Russian bots or the Podesta emails, are ultimately unsatisfactory and a distraction. These explanations simply state a statistic or fact, without providing any explanation of what has allowed the current political culture and polarization in US society to ultimately proliferate. A figure like Trump doesn't just appear by himself in a well functioning democracy, rather it is my contention that he is the result of a secular process of political, economic and social decay. This realization prompted me to look deeper into the profound structural changes the international economy has undergone since the 1970s, when we began witnessing what has been termed the financialization of capitalism. Inequality today are back at levels last seen in the 1920s and 30s, also a time period where the world saw the emergence of populism, a development which would ultimately prove catastrophic. Through the use of historical analysis and process tracing, I carry out a step by step analysis of financialization, beginning with the abandonment of Bretton Woods in 1971 and the birth of neoliberalism. In the aftermath of this, the world transitioned to a credit driven economy, and with each important pivot – from the rise of securitization as a global funding mechanism; to the evolution of a wholesale banking system, capable of conjuring its own funding out of thin air, and ultimately, the eventual collapse during the financial crisis of 2008 – a clearer picture emerges in terms of understanding the current political context. The profound complexity of a financial system in the process of destroying its host, coupled with the realization that the American political system can no longer be accurately described as a democracy; allows me to contend that the populist response we're now witnessing, was to be expected. The post-war international order was always a historical anomaly. It is therefore this thesis contention, that unless we embark upon a journey where we completely alter our economic and political systems as well as redefine our relationship with nature, our societies will keep producing political abominations like Trump and lead us down the path towards authoritarianism.

Table of Contents

1.0 Introduction – A Paradigmatic Change:	4
Figure 1: Financialization and the Rise of Populism in the United States:	6
2.0 The Plan for the Thesis – The interconnected developments of Financialization in the Economic	and
Political Sphere:	7
2.1 The Republican Party Primaries and the Societal Relevance of the Research Question:	9
	11
2.3 Methodology – Complex Systems, Historical Analysis and Process Tracing:	13
	15
3.1 The Explosive Increase in Economic Inequality in the United States:	15
3.2 Bretton Woods (1944-1971) and the Fiat and Petro-Dollar System that Replaced it:	18
3.3 The Birth of Neoliberalism:	23
3.4 The Instructive Case of Chile (1975-1982):	27
4.0 The Road to Financialization – Laying the Foundation:	29
4.1 The Slowdown in US GDP Growth and the Transition to a Credit Driven Economy:	29
4.2 The Modern Banking System's Role in Credit Creation and the Link to the Global Balance	of
Payments System:	36
4.3 Milton Friedman's floating money Contraption – Deficits and Debt without Tears:	42
4.4 Japan – The Canary in the Coalmine:	45
5.0. Process Tracing – Important Historical Antecedents:	49
5.1 The S&L Crisis – Deregulation and Sowing the Seeds of Instability:	53
5.2 Connecting the Dots – The Link between Nixon's Folly and the Rise of Securitization:	58
6.0. Into the Shadows – The Evolution of Wholesale Banking:	61
6.1. Bank Balance Sheet Expansion - The Peculiar role of the REPO-Market and Greenspan's	
Faux Prosperity:	
	63
6.2. Digging Deeper – The Incentives Provided by the Basel I Accord:	67
6.3. The Role of OTC Derivatives in Bank Balance Sheet Construction Unveiled:	70
6.4. Everything Starts Lining Up – The Deregulation of the 90's and the Proliferation of OTC	
<u>Derivatives:</u>	74
7.0. The Great Financial Crisis of 2007-2008:	75
7.1. Important Prior Developments – The Federal Reserve Caught Completely Off Guard:	76
7.2. Breaking Down Securitization and its role as a Global Funding Mechanism:	78
7.3. A Permanent Dislocation – The Problem was and Remains the Global Monetary System: .	.82
7.4. The Results of Financialization and the Road not Taken:	
8.0. The Erosion of American Democracy – Trump is the Symptom, not the Disease:	89
8.1. A Corporate Coup d'état in Slow Motion – The Highjacking of the US Political System:	
8.2. Inverted Totalitarianism and the Rise of Populism:	
Conclusion – The Unsustainability of it All:	96
Ribliography	99

1.0 Introduction – A Paradigmatic Change:

Consider the two following quotes, the first from a former US president, often credited with presiding over the longest peacetime economic expansion in American history. The second quote was made during the final campaign-push of the current US president, and illustrate the momentous political shift we are now witnessing in the western hemisphere and the popular discontent which is fueling it.

"No generation has had the opportunity, as we now have, to build a global economy that leaves no-one behind. It is a wonderful opportunity, but also a profound responsibility." - Former U.S. President Bill Clinton, December 14, 2000 at the University of Warwick.

"Our movement is about replacing a failed and corrupt political establishment with a new government controlled by you, the American people. The establishment has trillions of dollars at stake in this election. For those who control the levers of power in Washington and for the global special interests; They partner with these people who don't have your good in mind." - The final campaign ad of Current U.S. President Donald J. Trump and his message to America, aired on November 4, 2016.

This discontent reached its preliminary zenith on Tuesday November 8, 2016. On that day, Donald Trump, a businessman and real estate mogul who had never previously held public office, defeated the democratic party nominee, Hillary Clinton. I echo Paul Ryan's sentiment here, that what Donald Trump pulled off on November 8. is the greatest political feat I have ever witnessed (Businessinsider, Nov 9th, 2016).

According to the vast majority of political experts, pollsters and bookmakers, the chance of a Trump victory was practically zero. His presidential bid was characterized by one scandal after another and a campaign rhetoric where he not only personally attacked political opponents, disabled reporters and former beauty pageants, but singled out whole ethnic groups as well. In the established media Trump was thus largely portrayed as a laughing stock and buffoon – who despite having virtually no chance of winning the election – provided them with the entertainment value and ratings that justified the extensive coverage he received throughout his campaign. Even so, Trump managed to breach the so-

called "blue wall" (albeit with razor thin margins) and secure the electoral votes in Pennsylvania, Michigan and Wisconsin, which ultimately carried him to the White House. These were white, blue collar workers who had voted for Obama in 2008 and 2012, but who now either sat the election out or flipped their vote to the Republicans. Trump successfully identified and exploited some very powerful currents in the US electorate. Specifically, a great deal of dissatisfaction with the country's development under successive administrations touting the benefits of globalization, free trade and immigration. As such, the election of Trump is the most significant, but just one sign among several, of a broader trend we are now witnessing in the western world. A populist response is taking place against globalization, multiculturalism and the neoliberal economic policies carried out by the Political elites in a range of countries. Pollsters failed to pick up the sentiments among the British populace, when in a surprise upset they decided to leave the EU in June 2016. In the French presidential election in April 2017, the National Front managed to advance from the first round. Although the party was decisively defeated in the second round, that defeat came at the hands of an outsider candidate himself in Emmanuel Macron. At the time of writing, the Federal election in Germany has just been held and the results shows that the right wing AFD-party has received close to 15% of the popular vote and will enter the Reichtag. This will happen at the expense of the established parties, in particular the SDP which has now completely collapsed. These are potentially worrying signs, because it raises the question of whether Europe is on its way down the same path as the US as pertains to political polarization. Globalization, at least the economic aspects of it has certainly gone further in the US, a country that also has a smaller welfare state capable of cushioning these effects. I will further outline this in the chapters to come, but an initial structure of the plan for the assignment can be seen in figure 1 on the next page. Here the main explanatory variables and processes are listed, and the arrows purports to show how they link with each other and to the end result. In other words, I view the rise of this new populism as an historical, economic, and political process which has gradually occurred since an initial pivot with the abandonment of Bretton Woods in 1971. With these

"Which economic and political developments prepared the ground for the rise of populism in the U.S. as witnessed by Donald Trump's election victory?"

introductory remarks, the research question for my Master's thesis can be formulated as follows:

I hypothesize that any attempt to explain what we're now witnessing requires an analysis from several

different perspectives. The figure below is an attempt to systematize my thoughts.

Figure 1: Financialization and the Rise of Populism in the United States:

The Abandonment of Bretton Woods in 1971 and the transition to a Fiat Monetary System, due to runaway inflation and fiscal problems in the aftermath of the Vietnam war and Johnson's "Great Society" welfare programs. The global balance of payment system changes from a system backed by gold to a system reliant on credit. In combination with a fractional reserve banking system, this leads to a massive expansion of credit globally. Bretton Woods is accounted for in Chapter 3.



The "Petro Dollar Recycling System" - Deal between the US and the KSA which ensured that all oil trade would be denominated in US dollars. Chapter 3 will touch upon this aspect.



Financialization of the US economy, enormous expansion of credit now also among businesses and consumers with the introduction of Securitization and derivatives. A shadow banking system comes into existence. Addressed mainly in Chapter 4 and 5.



The election of Ronald Reagan signifies a profound shift, American Unions are decimated and a long term trend of stagnating real wages begins. In conjunction with this, the US welfare state is gradually eroded which further reduces the ability of the US to cushion the effects of increasing economic inequality.



Necessitated the holding of US dollars and purchases of US government bonds by foreign governments in order to have access to the international petroleum market. Further enourages credit expansion and speculation. Chapter 4.1 addresses this aspect in more detail.

This financialized economy proves highly unstable, as witnessed first by the Asia crisis in 1997, the Dot.com bubble in 2000 and finally with the financial crisis of 2008. The US, but also other governments, responds each time by lowering interest rates further and in 2008 with QE programs designed to fuel asset price appreciation. A central theme of this thesis, Chapter 6 and 7 goes into the details of this process.



inequality. The tiny elite who are reaping huge gains from this system makes extensive use of lobbying and campaign financing, in the aftermath of the "Citizens United" decision, further eroding ordinary Americans trust in

their political institutions.

What follows is a

wealth and income

massive uptick in



These intertwining factors gradually fuel more and more popular discontent. Rising income inequality, wage stagnation and a sense of a financial and political elite in bed with corporations having hijacked the political system that seems unresponsive to the plights of ordinary people. Together they lay the groundwork for the rise of populism and Donald Trump's election win in the 2016 presidential election.

2.0 The Plan for the Thesis – The interconnected developments of Financialization in the Economic and Political Sphere:

My topic for this master's thesis is not an account of the US 2016 presidential election in itself. My goal rather, is to tell the story of how we got to this point. The story of which developments fertilized the political soil so to speak and thus made a Trump victory possible. In his book, "Capital in the 21th Century" Thomas Piketty points to some staggering developments in the established western economies. Inequality reached its lowest ebb in the US between 1950 and 1980, when the top decile of the income hierarchy claimed 30 to 35% of the national income or roughly the same share as in France today. Since 1980 however, income inequality has exploded in the US. The upper decile's share of the national income now stands at 45-50%, an increase of roughly 15 percentage points. Furthermore, the richest 1% of the US population increased their share of the national income during this period from 9% to 20%. Of these 20% about half of it ended up in the pockets of the top 0.1% of the population (Piketty, 2013, pp 209-211). Furthermore, a large chunk of these gains has not come from remuneration through meritocratic wage increases owing to higher levels of education and skills. Although Clinton campaigned on a continuation of Obama's economic policies and touted the gains in employment numbers and the recovery of the stock market, these improvements were not felt among many middleclass Americans. They are in many instances now juggling two or three part time jobs, while barely being able to keep their heads above water in the face of stagnating real wages and exponentially increasing healthcare costs. Coupled with this development in the economic sphere, we have witnessed an astonishing development in the political sphere as well. In the EU, deepening integration has meant the transfer of both political and judicial power to supra-national institutions. With more and more decisions ultimately being made in Brussels and individual countries autonomy having been significantly reduced in matters ranging from immigration to trade and economic policy. In particular, the popular backlash against multiculturalism has been significant in the aftermath of a number of terrorist attacks carried out by the Islamic state and individuals affiliated with that organization. History tells us that economic crises go hand in hand with political crises. The collapse of democracy in Weimar Germany came during a period of hyperinflation and an erosion of public trust in the political institutions and their ability to properly address the problems facing the nation. Likewise, the rise of populist leaders in Latin America has been precipitated by those countries lacking ability to stem the development of extreme economic inequality, massive corruption and an erosion of social trust or the

glue that binds a society together. Now, I'm not saying that the political institutions in the west are nowhere near comparable to those in Latin America. History however tells us that no society or institution is immune to political decay and ultimately collapse.

The rise of Populism in the US and Donald Trump's election victory appears to me to have coincided with a number of intertwining developments that ultimately culminated in 2016 when political polarization, not to say frustration, reached a critical point among voters. Americans trust in their political institutions has gradually eroded over time, and faith in congress, the media and the political elite is lower than at any other point in the republic's history (Gallup.com).

This erosion of trust in the political institutions has happened during a time where we have witnessed a large-scale financialization of capitalism, wherein more and more wealth has been accumulated by a tiny elite of large corporation CEO's and hedge fund managers engaged in casino-capitalism on Wall Street. This has been made possible by the continuous blowing of asset bubbles, first in 2000 with the dot.com bubble. When that bubble popped, Alan Greenspan – then leader of the Federal Reserve – responded by slashing interest rates almost down to zero. In combination with greed on Wall Street and a stated policy goal of encouraging home-ownership, a new bubble was blown up in the housing market. When that bubble popped in 2008, it threatened to take with it the whole economy. Consequently, Wall Street was bailed out by the taxpayers under Bush and Obama's troubled asset relief program (TARP). Since then the economy has supposedly recovered, judging by the gains in the stock market and housing prices. However, what if this recovery was felt on Wall Street but not by Main Street? A number of indicators point in that direction. In fact, the average American's real wages have been stagnant since the late 1970's, at a time when prices of housing, healthcare and education has only gone up. What has kept aggregate demand up during the years from 2000 to the present day is largely Americans propensity to borrow. At some point however, this development becomes unsustainable. In order to uncover the fault lines of the US economy, I believe it is necessary to take a closer look at economic history. Specifically, I will begin by looking at the development in income inequality in the US. Income inequality has risen extremely fast, in particular since the late 70s. This development requires a closer look at the Federal Reserve and its monetary policy, which has gone through a drastic change since the abandonment of Bretton Woods in 1971. As such, I find it crucial to supply the reader with an understanding of the changing nature of monetary policy. This I believe may help explain the financialization of capitalism that has coincided with the broader globalization trends. The current instability of the financial system and its propensity for generating crises must be viewed

as part of a broader economic and political development. I suspect these developments may be a key driving force behind the populism that propelled Donald Trump to the White House.

2.1 The Republican Party Primaries and the Societal Relevance of the Research Question:

In retrospect, the Republican Party primary elections were perhaps a sign of things to come in the general election. It became clear early on that the traditional establishment candidates had serious trouble resonating with the voters. A candidate like Jeb Bush, despite receiving massive campaign contributions and outspending Trump from the start, never managed to gain much traction and withdrew after getting battered in the South Carolina primary, a state his brother had won in 2000. Trump on the other hand not only won a plurality of the popular and electoral vote in a stacked republican field, he did it while simultaneously driving up republican primary election turnout to record levels. The massive rallies were indicative of a broader trend, as voters desperate for change – any change – embraced the political maverick candidate and his populist but highly ambiguous "America First" political platform. A platform consisting of anti-globalization, protectionist trade policies and a non interventionist foreign policy on the one side of the political spectrum, as well as tax cuts, deregulation and a massive increase in military spending on the other.

The disillusionment among voters with the establishment candidates was apparent in the Democratic party's primaries as well, as Hillary Clinton's road to the nomination was a lot more strenuous than originally anticipated. Between Super-delegates and a massive advantage in campaign contributions – and by extension – available spending money, she won the nomination clearly. However, Sanders edged her out among white voters and won convincing victories in Michigan and Wisconsin, two of the three rust belt states that would ultimately secure the general election victory for Donald Trump. He articulated the message that would win the presidential bid among blue-collar voters in Michigan, Wisconsin and Pennsylvania; Years of stagnating real wage growth, a loss of the manufacturing base, increasing economic inequality and a political and economic system rigged by and for the elites. These states were carried comfortably by Obama in 2012, but Hillary Clinton failed to capitalize on the supposed economic recovery having occurred in these states during Obama's time in office. I believe this failure of Clinton to resonate with the voters reflects some worrying trends in the US economic and political landscape and we are now seeing them in Europe as well. Voters are increasingly disillusioned

with the current trajectory of western society and the ruling political elite. During the campaign, Clinton ran on Obama's economic legacy and the idea about a "reflation" or economic recovery having occurred. Identifying the historical, economic and political developments which has led us to this point is crucial in this context. It is highly unusual for social and political tensions to be this high in a supposed recovery.

America was originally brought forth by a set of extremely powerful beliefs. Namely, that the individual has certain inalienable rights – the right to life, liberty and the pursuit of happiness – That image, that brand of America is extremely strong. However, there seems to be a very large gap between that long-held image and the America of today. What was supposed to be a government run by and for the people, increasingly seems to be a government run by and for a tiny plutocratic elite. The stress caused by living in one reality (the corrupt), while believing in another (the ideal), over time causes a great deal of stress. Stress that manifests itself in distinct ways. A recent survey carried out in the US found that Americans sense of well-being fell more in 2017 than in 2008, the year that ushered in the Great Recession. Depression levels are higher than ever, as nearly 1 in 5 Americans reported being professionally diagnosed as depressed at some point. Concurrently, suicide rates have surged by 30% between 1999 and 2015. Even financial well-being fell, despite a majority of respondents reporting an improvement in the labor market (New York Post.Com). At the same time, the country is awash in drugs, both legal and illegal. In 2014 there were 245 million prescriptions filled for opioid pain relievers, while the death rate caused by opioid overdoses continues to rise, having more than doubled from 30,000 in 2005 to 64,000 in 2016. Obesity is also rampant, having risen from 11.1% in 1990 to 29.8% in 2016. (Zerohedge.com).

These are signs of a society in decay. More and more Americans are falling behind and Trump capitalized on it when he addressed "the forgotten men and women" during his campaign. Something else is going on here and I struggle to find the usual explanations put forth satisfactory. I believe we can and must do better. This thesis is my attempt to connect a number of developments that are seldom mentioned in the Mainstream media, but which I believe has led to massive changes beneath the surface of American society.

2.2 Theoretical Approach – Connecting the simultaneous developments:

As I mentioned in the introduction, I believe that in order to properly answer my research question, it is necessary to employ a two-pronged approach as pertains to the theoretical foundation that may help explain the backlash against globalization and the rise of populism in the western world. This approach takes as its starting point that looking at simultaneous developments in both the economic and political sphere is necessary if one is to understand the backlash against globalization as witnessed through Trump's election victory. However before getting into this I believe it's necessary to take a cursory look at some of the different explanations that has been put forth since Trump won and why I ultimately find them unsatisfactory.

After the initial shock of Trump's election victory dwindled down, scholars and researchers were quick to point to some immediate hypotheses as to how this could have happened. One of these, which was brought up long before Election Day, was the surging racism among alt-right Trump voters. The narrative was that these voters were acting as a springboard for Trump and were lashing out their hate after eight years of having an African-American president in the white house. That theory also pointed to Trump's hardline stance against Mexican immigration and the rise of a so-called nativist response from white voters. First of all, the election data are not entirely clear on this point. In fact, Trump did five points better among black voters and two points better among Latino voters than Mitt Romney did in 2012. This hardly points to some burgeoning race war (Jake Novak, 2016). Second, while I do not doubt that many republicans voted for Trump out of concern for the current immigration policies, this to me cannot just be plainly denied as racism. Overpopulation, competition for scarce jobs, wage stagnation, pressure on the existing infrastructure and increasing crime rates are inconvenient, but nonetheless plausible consequences of loose immigration policies in both the US as well as in Europe. In other words, this theory just glances at the statistics and then states them as a matter of fact without looking at underlying trends that drives a potential change in the public perception of the challenges associated with upholding current immigration practices.

The second narrative is that Donald Trump did not win the election as much as Hillary Clinton lost. The fact is that Trump performed poorly by the standards of the challengers in post-incumbency elections. Trump also didn't do particularly well in the battleground states, but he won because the handful of states he was able to flip from the democrats were large states. In a sample of post-incumbent elections since 1868, challenger candidates who weren't facing an incumbent always increased party's raw vote total by at least 10 percent; until 2016 that is. Trump in fact only got 3.4% more votes than Mitt Romney in 2012. This represented a 0.2 percentage point drop in Republican's share of the total eligible voters in 2016, from 27.4% to 27.2%. However, the democrats bled voters even more profusely, as their share of total eligible voters decreased by 1.2 percentage points, from 29.6% to 28.4% under Hillary Clinton (Dan, Mclaughlin, 2017).

I am not contesting these statistics, but again find myself asking why? As with the racism narrative, this also becomes more of an exercise in stating statistical facts rather than providing an explanation for the underlying trends that drives these shifts in the electorate. The fact is that if, as Clinton claimed, the economy was performing well and the recovery was being felt by most Americans, then why did they not turn out to vote for her to keep building on the Obama legacy? Furthermore, although Clinton won the popular vote, the entirety of that advantage came from an overwhelming victory in California where she got 4.3 million more votes than Trump. Excluding California from the tally would put Trump ahead of Clinton by about 1.5 million votes. Trump carried 30 of the 50 states and his average margin of victory was 56% vs Clinton's 53.5% or a 2.5% advantage. In other words, in the context of the US federal system with its emphasis on State representation, his victory was in fact very decisive (Investors.com).

Numerous writers have noted that obvious measures of economic struggle, such as poverty and unemployment were poor predictors of support for Trump. In fact, exit polls showed that Clinton won handily among poorer Americans. Moreover, whereas Mitt Romney won among voters who considered the economy the number one issue in 2012, Trump lost such voters in 2016. I believe this is what has given rise to the aforementioned theories of racism, education levels (or lack thereof) and gender playing the biggest role. However, Trump performed better in places where the economy was in worse shape and especially in places where jobs are most at risk in the future. Trump beat Clinton in counties with slower jobs and wage growth and far outperformed her in counties where more jobs are threatened

by automation or outsourcing in the future. This points towards economic anxiety and a bleak prospective outlook as key mechanisms behind his support (Kolko, 2016). Trump himself often brought up the "forgotten men and women" during his campaign. These are the lower and middle class voters many in the Midwest – who have seen their real wages stagnate since the late 1970's. Who may have had a full time job at a manufacturing plant with good wages and benefits but who are now struggling to make ends meet while juggling two or three part time jobs. They are not officially part of the unemployment or poverty statistics, but are facing rising health care premiums, uncertainty about future employment and feel left behind by a political system that seems unresponsive to their plights while continuing to enrich the wealthiest top 1% of the population, big business and its political cronies. Seen in this context, although unemployment came down and the stock market rallied under Obama, this recovery was not felt among large swaths of the US electorate. Falling unemployment and rising financial asset prices looks good on paper and was certainly touted by the media as a signal that the US was on a track of recovery from the recession of 2007-2008. However, if as many suspect, these trends followed the same old path of business cycle recoveries in the US since the 1980's, the lower and middle-class have not benefited much from these gains. As such, I believe it is necessary to delve deeper into the global economy, with a particular focus on developments in the US, beginning with the abandonment of Bretton Woods in 1971. We need to uncover how the political economy of the US has changed and what has been the driving force behind this change.

2.3 Methodology – Complex Systems, Historical Analysis and Process Tracing:

My choice of methods for this thesis takes as a starting point that both quantitative and qualitative methods comes with a distinct set of strengths and weaknesses. My theoretical and substantive interests have led me to hypothesize some very complex patterns of interaction between explanatory variables. Namely how the economic and political trends witnessed during the course of the last decades of globalization, led to a populist backlash that culminated with Trump's stunning election victory. Social scientists today routinely apply multivariate statistical techniques to any question with a large enough database to allow its use. Often however, the desire to use quantitative methods shape how social scientists ask their question. Instead of trying to determine the different contexts in which a cause influences a certain outcome, they tend to assess a cause's average influence across a variety and often

a diverse sample of settings (Ragin, 1987).

As I pointed out in the preceding section, I find many of the current attempts at explaining the populist backlash we are now witnessing, unsatisfactory. While it is an undeniable fact that more white people voted for Trump or that less African-Americans turned out to vote for Clinton than for Obama, these statistical facts by themselves tells us little about the underlying processes at work. Humans have an innate need to make politics as simple and orderly as possible. This tendency is evident everywhere; in the media, in academia, among politicians as well as the general public. Dismissing Trump's victory out of hand as a result of racism among his supporters seems like a desperate partisan attempt to come to terms with a stunning defeat. The other characteristic form of the problem of order-in-complexity concerns the difficulty involved in assessing causal complexity, especially multiple conjunctural causation. When an outcome results from a number of different combinations of conditions, it is not easy to decipher the decisive causal combinations across a range of cases (Ragin, 1987, pp.19-20). That being said, the use of descriptive statistics is a useful first step. Identifying mean and median values and breaking units of observation into groups in order to show that they have different characteristics are a good way of exploring data and confirming some preliminary hypotheses (Astill and Cairney, 2015, p.132). Conceptualization of systematic relationships will be indispensable and the overarching theme of this thesis, simply because my main independent variable is the perfect example of a phenomenon that consists of complex and non-linear systems. The financialization of capitalism that has followed in the wake of globalization illustrates this quite clearly. Traditional economic theory could not explain, much less predict the crisis which unfolded in 2007/2008. financial markets have historically exhibited sudden and largely unforeseen collapses, at a systemic scale. More likely than these crises being triggered by unforeseen stochastic events, is the idea that there are endogenous underlying processes at work here (Battiston et al, 2016). In order to uncover some of these processes my plan is to employ process tracing, by looking at the different economic and political pivots that has intertwined and ultimately driven the financialization of the US economy. A first step towards making sense of this story then, is to look at the trend towards increasing inequality and then trace this process back to a logical starting point. That development has been particularly pronounced since the 1970's when the US under Richard Nixon abandoned the Gold standard and ushered in a new monetary regime of fiat currency.

And so our journey begins.

3.0 Developments in the US and Global Economy 1971-2018

"Of all forms of tyranny, the least attractive and the most vulgar is the tyranny of mere wealth, the tyranny of a plutocracy."

Teddy Roosevelt, 1913

3.1 The Explosive Increase in Economic Inequality in the United States:

Since the 1970s, income inequality has increased substantially in the rich countries, especially in the United States, where the concentration of income in the first decade of the twenty-first century, regained or even slightly exceeded, the level attained in the second decade of the previous century. In this section, I will describe this development as well as outline some preliminary reasons as to why inequality has historically tended to increase over time. This is important both to gain a fundamental understanding of the primary driving forces behind inequality, as well as to lay the groundwork for identifying what eventual differences exists between this historical account and the factors at play in the new globalized economy.

According to Piketty, the fundamental force driving this increasing economic inequality is that in a slowly growing economy; the rate of return on capital will always exceed the growth of the economy as a whole or $\mathbf{r} > \mathbf{g}$. This will become particularly apparent in times of no or slow growth, which has certainly characterized western economies since the great recession struck in 2007-2008. Now, real growth in an economy is determined by two factors, namely population and productivity growth. On average the US population grows by 1.5% per year, productivity growth varies but has traditionally averaged about 2-2.5% per year. The combination of population and productivity means that the US economy can potentially grow about 3.5 to 4% per year in real terms (Rickards, 2011, p.116). However, since the recession of 2008 US GDP has not grown by 3% a single year, indicating that substantial slack still exists in the economy. Although GDP growth was weaker during Obama's recovery, stock market gains were phenomenal with the SP500 rising by 22.6% from 2008-2016 (Marketwatch). Over time then, return on capital investments tends to outpace growth in the economy as a whole, causing a huge windfall to the owners of capital.

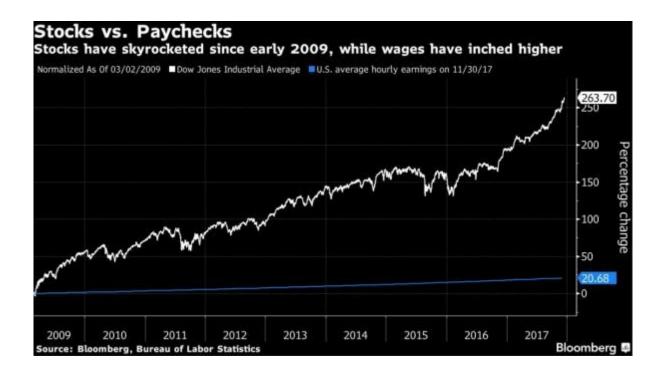
Piketty shows that the average rate of return on capital has held at around 4-5% for most of human

history. It rose above 5% during the industrial revolution and then fell during the middle of the 20th century. During the period of 1910-1950, Economic inequality was reduced in the established western economies, owing largely to the major impact of the two great wars. These total wars destroyed return on capital through several mechanism. High inflation ate away at established wealth through a reduction in the value of interest rate returns on government bonds as well as through the reduction of the value of real estate. Furthermore, stock markets crashed and this reduced the capital gains from soaring stock prices. Politically as well, the wars made higher marginal taxes necessary to fund the war effort and the need for wartime production strengthened the hand of labor through unionization and wage bargaining (Piketty, 2013, pp.18-24).

Beyond this major impact of war and social upheaval on income inequality, the only countervailing force against this development seems to come in the form of the temporary pricking of asset bubbles, like the dot.com bubble that burst in 2000 in the US or the great recession of 2008. In the two years following the meltdown in financial markets in 08, private fortunes in the US shrank from five to four years of national income. It has since then regained and even exceeded that level. Piketty's major argument is this though; beyond these erratic events caused by financial market volatility, there is indeed a long-term trend at work in all of the rich countries in the period from 1970 to the present day. At the beginning of the 1970's, the total value of private wealth (net of debt) stood between two and three and a half years of national income in all the rich countries, on all continents. Forty years later, in 2010, that figure had risen to between four and seven years of national income in all the countries studied. Despite period pricking of asset bubbles then, the general tendency points towards an incredible comeback of private capital in the western world or a new patrimonial capitalism (Piketty, 2013, pp.123-125).

The graph at the beginning of the next page illustrates this quite clearly, as it shows the percentage gain in stocks and wages by US investors and wage earners respectively. Clearly, those invested in the stock market have done extremely well compared to regular wage earners, netting about a 240% greater increase in their income during the recovery from the great recession. About 50% of Americans are invested in the stock market, and of those, the 10% wealthiest Americans own about 84% of all stocks (time.com).

Chart 1: Stagnating Wages and a Booming Stock Market:



Source: ZeroHedge 12/15/2017 "Four Charts Prove The 'Economic Recovery' Is Just A Fed-Induced Entitlement Program For The Wealthy"

According to Piketty, this structural evolution of western economies can be explained by three sets of factors, which intertwine to reinforce the phenomenon further. The most important factor, which I've already touched upon, is slower growth, in particular demographic growth which when coupled with a high savings rate, automatically drives a structural increase in the long-run capital/income ratio. While this mechanism is the dominant force over the very long run, two other factors have dramatically reinforced its effects during the last decades. The first is a gradual privatization and transfer of public wealth into private hands in the 70's and 80's. The second is the long-term drastic growth in real estate and stock market prices, which further accelerated in the 1980s and 1990s in a political context that was significantly more favorable to private wealth than that of the immediate postwar decades.

These developments coincided in the Anglo-Saxon world with the rise of neoliberalism and the election of Ronald Reagan in the US and Margaret Thatcher in the UK. Important to note here, the emergence of this ideological strand was itself related to the stagflation occurring in the western world prior to and

immediately after the abandonment of Bretton Woods. As such, it ushered in a new economic doctrine and monetary policy. In order to understand this political and economic shift in the western world, I think it's essential to explain the economic and monetary system in place up until 1971, namely Bretton Woods. What brought it down? and how did the development that came after have an enormous impact upon many of the trends we see today, namely the increasing inequality, the propensity for instability and crisis in the capitalistic system and the tighter connection between money and politics?

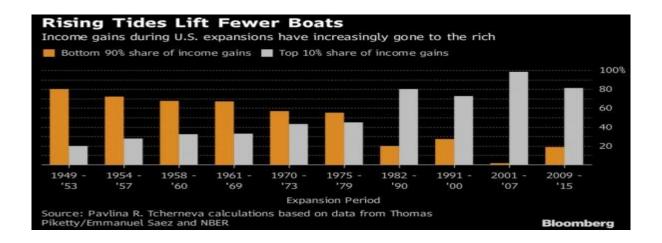
3.2 Bretton Woods (1944-1971) and the Fiat and Petro-Dollar System that Replaced it:

"Money plays the largest part in determining the course of History"

Karl Marx, The Communist Manifesto, 1848.

My aim for this sub-chapter is to give a brief historical account of the Bretton Woods system which was in place until 1971, when Nixon took the US off the gold standard. This is crucial, because a lot of the macroeconomic changes, such as rising income and wealth inequality and stagnant real wages, is a relatively recent phenomenon that started to accelerate during the late 70's and 80's. The chart on the beginning of the next page illustrates this trend clearly. As we can see, up until the 1982-1990 period, the income gains of the bottom 90% and the top 10% were fairly evenly distributed during periods of economic expansions. During the period of 1949-1979 The bottom 90% took home a larger slice of the pie than the top 10%. However as can be seen, during the 80's this trend is suddenly completely reversed with the top 10% now raking in about 80% of the income gains. The economic expansion during George W Bush's presidency, which was driven by the housing bubble, is even more extreme in this regard. The bottom 90%'s share of the income gains can barely even be spotted on the chart.

Chart 2: The Increasingly Unequal Nature of US Economic Expansions:



Source: From Bloomberg in ZeroHedge 12/15/2017 "Four Charts Prove The 'Economic Recovery' Is Just A Fed-Induced Entitlement Program For The Wealthy"

The dissolution of Bretton Woods fundamentally changed the way balance of payments between countries worked, as there was no longer any impetus for units of account to balance. As such, a veritable explosion in credit creation followed. In the following, I will outline this in more detail.

In July 1944, the West, under the leadership of the United States and Great Britain, agreed on a postwar international monetary order at Bretton Woods, New Hampshire. The IMF Articles of Agreement required member countries to fix their exchange rates by setting a par value of their currency in terms of the gold content of the dollar. Countries received quotas on which they could draw to offset temporary payment imbalances. The US on its side, committed to pegging the dollar price of gold at \$35 an ounce. The Bretton Woods era, while punctuated by several recessions, was overall a period of currency stability, low inflation, low unemployment, high growth and rising real incomes. The success of this system over the long haul, required US monetary policy to provide the nominal anchor. However, the US failed to do so. For the system to have functioned as a gold standard with gold as the nominal anchor, the US would have had to allow its price level to vary to give the world's central banks the real amount of gold they desired to hold. Declines in the US price level would have raised the purchasing power of gold and stimulated its production. A simulated gold standard would also have required that the US price level adjust relative to foreign price levels to validate the

equilibrium real exchange rate (given that the nominal exchange rate could not change). For the US price level to have behaved in this way, the Fed would have had to allow the monetary base to decline in response to gold outflows. Only briefly in 1959 did it follow this classical gold standard rule. In the absence of US willingness to allow the price level to fall in response to gold outflows, the system became a dollar standard. For this system to work, the US had to provide a stable nominal anchor for the dollar other than gold.

Although other countries held on to Bretton Woods tenaciously, ultimately inflationary US monetary policy destroyed it. In the late 1920's, the international monetary system had collapsed due to deflationary US monetary policy. In the 1970's it collapsed due to inflationary US monetary policy. Richard Nixon announced in 1971 that the US would end dollar convertibility to gold and implement wage and price controls. This was intended to address the international dilemma of a looming gold run and the domestic problem of inflation. As mentioned, the Federal Reserve would have had to allow the monetary base to decline in response to gold outflows (Hetzel, 2008, pp. 100-102). However, the seeds of the challenges that made this impossible were sown in the mid to late 1960's, specifically with the overwhelming election victory of Lyndon B Johnson and his "Guns and Butter" political platform. The guns refer here to the escalating US involvement in Vietnam and the butter to the "great society" social programs, including the war on poverty. This convergence of the costs of military escalation in Vietnam and the Great Society in early 1965 marked the real turn away from America's successful postwar economic policies. However, it would take several years for those costs to become apparent. America had built up a reservoir of economic strength at home and political goodwill abroad and that reservoir now slowly began to be drained. At first, it seemed that the US could afford both guns and butter. The Kennedy tax cuts, signed by President Johnson shortly after Kennedy's assassination in 1963, had given a boost to the economy. Gross domestic product rose over 5% in the first year of the tax cuts and growth averaged over 4.8% annually during the Kennedy-Johnson years. Nevertheless, almost from the start, inflation accelerated in the face of the twin budget and trade deficits that Johnson's policies engendered. Yearly inflation almost doubled from an acceptable 1.9% in 1965 to 3.5% the year after. It then ran out of control for twenty years. Alan Meltzer in his "history of the Federal Reserve" attributes the great inflation to what he refers to as the "Even Keel" policy, whereby regulatory requirement the Federal Reserve had to allow the treasury to sell its debt at auctions under the best possible conditions. In other words, they would increase the amount of

bank reserves before an auction took place and then remove them afterward. The purpose behind this was to make sure the monetary system was sufficiently liquid prior to treasury auctions, so the US treasury could sell its debt. When the Vietnam War escalated and deficit spending increased, the Federal Reserve continued to add reserves to auctions that was becoming more frequent, but then never removed them, causing the money supply to expand (Lengyel, 1971). It was not until 1986 that inflation returned to the level of just over 1% and during the five-year stretch from 1977 to 1981, cumulative inflation was over 50%. The value of the dollar was thus cut in half (Rickards, 2011, pp 56-57).

On August 15, 1971, Richard Nixon took to the airwaves to announce his new economic policy. The government was imposing national price and wage controls and a steep surtax on foreign imports as well as suspending the convertibility of dollars into gold. The public attack on the Bretton Woods system had begun already in 1965 when then president of France, Charles De Gaulle, gave a speech in which he claimed that the dollar was finished as the reserve currency in the international monetary system and called for a return to the classical gold standard. That same year, France converted \$150 million of its dollar reserves into gold, with Spain shortly following suit. At the time, this represented significant drains on US gold reserves. The problem was fundamentally the price of gold, not that there was insufficient gold to support world trade. This was rooted in the excess supply of paper currency in the US, but also the UK and France (Richards, 2011, pp.59-60).

The Smithsonian agreement, reached by the G10 in 1971 entailed a 9% dollar devaluation against gold and the major currencies were revalued upwards against the dollar. Like Nixon's implementation of price/wage controls and a surtax on imports, implemented 4 months earlier, the Smithsonian agreement was also extremely popular in the US. In the short-term it led to a stock market rally as investors contemplated higher dollar profits from US exports. It was estimated that the dollar devaluation would create about half a million jobs in the US over the next two years which would contribute to a significant boost to GDP. Unfortunately, none of these euphoric expectations came to fruition. Less than two years later, the US found itself in the worst recession since the Second World War. GDP was collapsing, unemployment was skyrocketing along with oil prices and the stock market was crashing as the inflation was spinning out of control. The lesson that a nation cannot devalue its way to prosperity eluded Nixon in 1971 as it had his predecessors during the great depression, as investors panic-sold US dollars. In 1973, the IMF declared the Bretton Woods system dead, which officially ended the role of

gold in international finance and left currency values to fluctuate against one another at whatever level governments or the markets desired. This put a temporary end to the devaluation dramas that had occupied international monetary affairs since the 1920's, but new problems would soon arise (Rickards, 2011, pp. 63-64).

As a response to the gradual demise of Bretton Woods, the major western European nations embarked on a thirty-year odyssey of currency convergence, which culminated with the EU and the implementation of the Euro, which was introduced in 1999. As Europe moved fitfully towards currency stability, the former twin anchors of the global monetary system, the dollar and gold, were nowhere near stable. Despite the expectations of growth and higher employment owing to the end of the dollar/gold peg, and the devaluation that followed, the US suffered three recessions from 1973 to 1981. In all, there was a 50% decline in the purchasing power of the dollar from 1977 to 1981. The price of oil quadrupled during the 1973-1975 recession and doubled again from that level in 1979. A new term, "stagflation", was introduced to describe the unprecedented combination of high inflation and stagnant growth now occurring in the US. The election of Ronald Reagan and the subsequent interest rates hikes carried out by his Federal Reserve chairman, Paul Volcker, where the Federal funds rate was raised to 20%, eventually had the intended effect as inflation collapsed from a peak of 12.5% to 1.1% in 1986 (Rickards, pp.65-66).

Important to note here, when Nixon took the US off the gold standard in 1971, he simultaneously struck a deal with the kingdom of Saudi Arabia (KSA). The essence of the agreement was that the US would protect the kingdom militarily as well as supply the KSA with military hardware, with the important caveat that all oil trade would be denominated in US dollars. This became known as the "Petro Dollar Recycling System" because oil rich countries would then have to invest excess dollar-profits from oil trade with the US back into the American economy. It didn't take long for every single member of OPEC to start trading oil in US dollars. This relationship between oil and the USD functions as the dollars present day backing and arguably gives the dollar its value and gives Washington incredible leverage over the world's financial markets.

Because this paradigm requires all oil exporting and importing countries (effectively every country on the planet) to hold a certain stock of US dollars, this adds to the dollar's value and gives the US the ability to print paper beyond what would be possible under a sound money policy regime. (Zerohedge, Sep 21, 2017).

Furthermore, countries like Japan, the KSA and eventually also China soon found out that the best way

to boost their own export sectors were to reinvest their dollar reserves into US treasury bonds in order to drive up the prices. The price of bonds is inversely correlated with their interest rates, so by pushing up bond prices these countries were effectively lowering interest rates in the US, making consumption cheaper for Americans. Personal consumption as percentage of GDP has moved gradually higher in the US, and today account for about 70% of GDP (stlouisfed.org). However, although the problem of inflation was alleviated for the time being, the seeds of new problems were sown during the economic expansion of the 80's. These problems would gradually reveal themselves in the decades to come and we will delve deeper into this during the course of this thesis.

3.3 The Birth of Neoliberalism:

"We must make our choice. We may have democracy, or we may have wealth concentrated in the hands of a few, but we can't have both."

Supreme Court Justice Louis Brandeis, 1941

My aim for this section is to explain the twin processes of the rise of Neoliberalism and a financialized economy in the US. I'm going to discuss a series of steps, that by themselves don't look all that consequential, however, as these steps have gradually intertwined and fed off each other, they have produced massive changes in the economy. Changes – which I believe – goes a long way towards explaining many of the ills experienced by the middle class and working poor in the US today. This includes the extreme increase in wealth and income inequality, as well as the intermittent instability of the financial system. The chart on the beginning of the next page shows wages & salaries as percentage of GDP in the US, beginning in 1960, until present day. As is clearly illustrated, there has been a secular trend since the beginning of the 1970's, wherein wages and salaries as a percentage of GDP has gradually declined from a peak of approximately 52% to the current level which stands at around 43% of GDP. We know that the overall US economy is a lot larger today then it was in the 1970's, so what has fueled this growth and gradually replaced wages and salaries share of the economy?

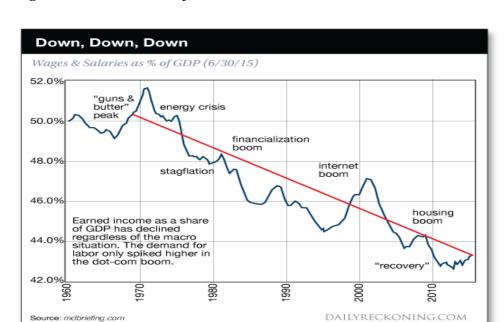


Chart 3: Wages and Salaries as % of US GDP Growth 1960-2017

Source: Charles Hugh Smith in Daily Reckoning September 30.2017: "The Financialization of America... and Its Discontents"

The American Economy was structurally very different in the decades following the Great depression, leading up to the 1980's. During this period, it successfully distributed the increasing wealth broadly across the income spectrum as was shown in the graph on page 18. As a response to the disaster of the Great Depression, which ravaged the US from 1929 to 1939, Franklin D. Roosevelt implemented a range of policy measures designed to counteract the negative effects of a largely unregulated financial sector. Among these were the Federal Deposit Insurance Corporation (FDIC), which ensured the safety of customers bank deposits. Also, the Glass-Steagall Act of 1933 which made it illegal for banks to operate simultaneously as commercial and investment banks and thereby prevented the banks from gambling in the stock market with federally insured deposits. The Securities and Exchange Commission (SEC) was established to enforce market and securities laws; and finally the National Labor Relations Act gave workers the right to collectively bargain and form trade unions. This combination of checks on the financial system, created what has been referred to as "countervailing"

powers" by Kenneth Gailbraith and prevented the US from plunging into a financial crisis for about half a century. While incomes grew across the board, those at the bottom actually saw their incomes grow faster than those at the top (Stiglitz, 2015, pp.17-18).

So what happened? As I outlined in the sub-chapter on Bretton Woods, the dollar was in a free-fall during the stagflation of the 1970's, as a result of loose monetary policy made necessary by the spending binge undertaken by Lyndon B. Johnson. Although it did not reveal itself for decades to come, the decision by Nixon to default on the nation's obligation to redeem its foreign debt in gold, ushered in an era of unparalleled deficit spending and credit accumulation. Perhaps best summed up by former vice president Dick Cheney, when he proclaimed that "Reagan proved that deficits don't matter" (newrepublic.com, May, 2016).

By many economists and political figures on the right however, it was also seen as a failure of the regulatory state and the expansionist fiscal policies with which it was associated. The theoretical pillars justifying the significant state intervention into the economy in the aftermath of World War 2, is perhaps best summarized by John Maynard Keynes in his seminal work "The General Theory of Employment, Output and Money". In this book, Keynes makes the case that Capitalism possesses an inherent flaw that makes it prone to cycles of boom and bust. According to Keynes, there is no automatic mechanism inherent in a capitalist economy that ensures full employment or prevents protracted periods of recessions or even large-scale depressions. This stems from the highly variable level of business investment/expansion. Decisions about investment by businesses must be made in a context of limited information. Consequently, businesses tend to overproduce when confidence and demand is high, which when demand inevitably slumps – as the business cycle reaches its peak – leads to a pile-up of unsold inventories. What follows is a decrease in investments and the laying off of workers. This leads to a negative feedback-loop in which aggregate demand and investment spending is further reduced. According to Keynesians therefore, the state has a responsibility to intervene in the economy during a business cycle trough in order to prop up aggregate demand. The economic orthodoxy in this period of regulated capitalism went beyond calls for an active fiscal and monetary policy during times of a downturn in the business cycle however. Increasingly, the state was seen as an important vehicle for driving the economy, through the provision of public goods such as infrastructure (intercontinental highway system), healthcare (Medicaid, Medicare) and education (compulsory public schooling). These programs were seen as not only helping the economy by raising aggregate demand and employment, but also by elevating human capital and thereby making businesses more profitable

(Kotz, 2015, pp. 3-4).

This all began to change during the 1970's as stagflation plagued the US economy. I have already described a key pivot that occurred during this period with Nixon's decision to take the US off the gold standard. At the same time however, the interventionist economic orthodoxy was being rapidly replaced by a new, more free market-oriented approach. **Neoliberalism** is a concept that can be hard to immediately grasp, particularly as it is often conflated with classical liberalism. In some respects, the former represents a rebirth of the latter, while in other ways they differ substantially. A difficulty in identifying this strand of thought arises from the fact that almost no one self identifies as a neoliberal and the term is often used pejoratively, for example it was often used to describe the intellectual bedrock upon which George W Bush's foreign policy rested, with individuals like Dick Cheney and Paul Wolfowitz often being portrayed as exercising tremendous influence on the president's decision making with regards to preemptive warfare, and the expansion of the security state (Mises.org).

What I am referring to here in an economic context however, is the rebirth of a set of economic principles often associated with classical liberalism in the 20th century. Namely a rollback of the state's role in the economy, significant marginal tax cuts on personal and business income and substantial deregulation and privatization. Two of the most prominent economists, largely seen as responsible for formulating the theoretical bedrock upon which neoliberal economic theory rests, were Milton Friedman and Friedrich Hayek. During the mid/late 1970's both of these men, after having survived a long period in the intellectual wilderness at the University of Chicago, emerged as gurus of this new neoliberal economic orthodoxy. This orthodoxy has been referred to by many names, such as supply side economics, rational expectations theory, real business cycle theory and monetarism. However, the central theme is the elevation of the individual as operating in a context of the free (unregulated) marketplace and this being the sole guarantor of optimal outcomes as pertains to efficiency, economic growth, unemployment and income/wealth distribution. In other words, a capitalist economy naturally maintains full employment, optimal growth and low inflation. Accordingly any slack in the economy is viewed as resulting from misdirected government intervention (Unionization, minimum wage laws, restrictive regulations, high marginal tax rates etc.) that distorts the optimal transmitting of market signals (Kotz, 2015, pp. 4-5).

In order to fully understand the development seen in the US during the past few decades, I shall first take a quick look at the harbinger case of Chile. This is instructive for three reasons. One, this was the

first country to carry out the neoliberal economic recipe on a large scale. Second, it was done during a period of economic turmoil and crisis, making it possible to identify both positive and negative effects and lastly, the political backdrop was one of a military dictatorship, facing few – if any – institutional or oppositional constraints on its ability to carry out its agenda.

3.4 The Instructive Case of Chile (1975-1982):

From 1975-1982 the economic theory of Milton Friedman was put into practice in Chile. Prior to the military coup which brought Pinochet to power, Chile had experienced an extremely polarizing and unstable political and economic environment with massive labor strikes and shortages of both regular consumer as well as manufactured goods. Hyperinflation soon followed, not unlike the current situation in Venezuela. In 1975, two years after the coup, Pinochet turned to the Chicago boys for help with transforming the Chilean economy. A shock therapy was prescribed, which reduced Chile's public sector significantly through privatization, in addition, price controls were eliminated and tariffs were significantly reduced. Furthermore, marginal tax rates were lowered and substantial cuts were made to government spending on healthcare, education, welfare and social security. In the years that followed, Chile experienced strong aggregate growth, averaging 7.3% from 1976 to 1981. Inflation, although still high by international standards, was reduced from 505% in 1974 to 19.7% in 1981. Exports and foreign direct investments also increased stupendously, the latter went from \$2.3 million in 1974 to \$383 million in 1981 (Davis-Hamel, 2012, pp. 81-83).

This is important, because Chile is instructive in terms of the development we would later witness in the US, and the western world for that matter. The reforms instituted by Pinochet in Chile has been referred to as an "economic miracle" and has been touted by many on the right as proof of the effectiveness of rolling back the state and unleashing the free market. However, these people seldom mention the dark sides of this experiment. Although inflation eventually fizzled out, the Chilean population suffered under rising unemployment, falling real wages, a significant uptick in poverty as well as a massive increase in inequality. In fact, Chile today is among the most economically unequal countries in the world, with a GINI coefficient of 0.47, well ahead of the US (Bloomberg.com, 2016).

Another aspect that is seldom mentioned by Chicago-school adherents is the fragility of the foundation upon which this "economic miracle" was built. Privatization of the Chilean banking system was

initiated in 1974 with a gradual denationalization of commercial banks, and importantly, a relaxation of entry barriers for foreign banks. This denationalization of the banking system ultimately led to substantial concentration of banks in the hands of a few large cartels. This process would later have a perverse effect because single banks assumed a disproportionate role within the Chilean economy because of their dominant market share and their connections with most businesses in the country. The reader may already notice the similarity between this deregulation of the Chilean banking system and the prelude and subsequent bailouts of US banks during the financial crisis in 2007-2008. The deregulation of the Chilean banking system was carried out by abolishing quantitative restrictions on loan granting, reducing the role of the central bank, freeing interest rates as well as a progressive lowering of the minimum reserve requirements and by the abolition of restrictions on foreign borrowing (Hruzik, 2015).

The last factor is crucial, considerable borrowing fueled the economic growth in Chile during the late 70's and early 80's as financial markets were deregulated and foreign investments poured into the country. During the period of 1978 to 1981, the external debt of the Chilean private sector more than doubled from \$5.9 billion to \$12.6 billion. Taking advantage of an overvalued exchange rate, (as a result of the decision to peg the peso to the dollar, which protected against profits getting wiped out by exchange rate movements) international investors had acquired enormous amounts of speculative, short-term assets rather than long-term fixed capital investments. Beginning in 1982, shifts in the global financial market caused a sharp increase in international interest rates and a significant downturn in trade. Because Chilean companies were so heavily leveraged, many became insolvent when foreign investors withdrew their capital and transferred their assets.

Between 1982-1983, 810 Chilean companies filed for bankruptcy, double the average of the previous five years. The effects then cascaded into a banking crisis, as the banks that had given loans to these companies were suddenly faced with enormous amounts of debtors unable to repay. The credit contraction then reverberated through the economy, plunging it into a deep recession that saw real GDP contract by 13.6% in 1982, unemployment skyrocket to 22% and inequality as measured by the GINI index reaching a staggering 0.54 (Davis-Hamel,2012, pp.84-85). The legacy of neoliberal economic policy in Chile in other words was at best mixed. However, the policies instituted here would rapidly gain traction in the western world as we will see.

4.0 The Road to Financialization – Laying the Foundation:

4.1 The Slowdown in US GDP Growth and the Transition to a Credit Driven Economy:

As the chart below illustrates, there has been a secular trend towards a slowdown in real GDP growth, starting in the early to mid 1970's, right after the abandonment of Bretton Woods. This was as I've shown the period where the US struggled with accelerating inflation.

10-Year Averages of Annual Growth Rates 5% 5% 4% 4% 3% 3% Real GDP 2% 2% 1% 1% 0% 0% -1% -1% 2015 1985 1990 1995 000 2005 SOURCE: Bureau of Economic Analysis FEDERAL RESERVE BANK of ST.

Chart 4: Real US GDP Growth 1965-2017

Source: Fernando Martin, 2017, Federal Reserve Bank of ST. Louis.

The downturn, which can be spotted in the beginning of the 1980's, coincides with the recession that followed shortly after Reagan got into office. Under the leadership of Paul Volcker – Federal Reserve chairman at the time – the US embarked on a disinflationary path, in which the Federal funds rate (essentially the cost of interbank lending) topped off at 20% in 1981. Inflation came down and from the mid 1980's up until the crash of 2008, US real GDP growth stabilized at around 3% and ushered in a period often referred to as "the Great Moderation", characterized by less violent swings in the business cycle (until 2008, that is). The question is, what was the nature of this growth, and how did it come

about?

The chart below illustrates quite clearly what has happened to the US money supply. After having barely risen during the 1960's, the 1970's and 1980's saw a doubling of M1 (Includes physical currency and checking accounts), from about \$200 billion to over \$800 billion. The development continues through the 90's, before it goes absolutely parabolic during the 2000's, rising to approximately \$1.9 trillion. The steeper the line on the chart, the more rapidly money/credit is being expanded. Important to understand here therefore, is that a significant portion of the economic growth reported over the past few decades can be attributed to an explosion in liquidity as a result of ever increasing debt.

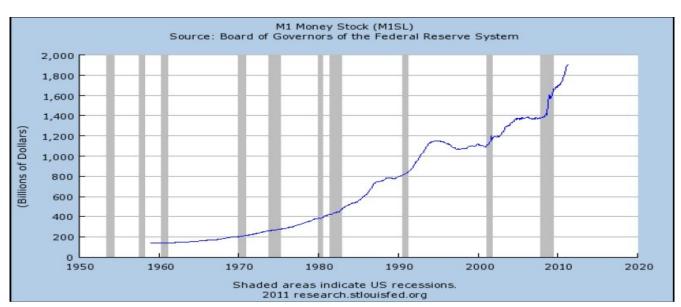


Chart 5: US M1 Money Supply 1960-2017:

Source: St.LouisFed.Org

Richard Duncan, an economist and author, claims that since 1971 when Nixon severed the tie to gold, the US economy changed in a fundamental way. It is not about gold per se, it is about the discipline that any item of limited supply has, as it forces a society to live within its means. Recall that ideally, under the Bretton Woods system, gold would automatically move from countries with balance of payments deficits to those with surpluses. As such, these movements functioned as the enforcer of financial discipline. These gold reserve movements caused domestic banking systems to expand and contract and consequently stimulated the impacted national economy to either heat up or slow down. Accordingly, the consumer price levels and domestic wages and production within a given country was constantly leveled and homogenized by the gold anchor. Countries experiencing a gold drain owing to balance of

payments deficits tended toward wage and price deflation as interest rates shot up in order to stem capital outflow. Opposite, countries experiencing gold inflow, would see interest rates fall as capital became more abundant, this would incite inflationary pressures and gradually the system would rebalance (Stockman, 2013, pp. 295-296). The US failure to live up to this classical gold standard rule, as we saw previously, was the reason why the system collapsed.

Duncan's contention is that when the world severed the tie to gold in 1971 and moved to a system of floating exchange rates, it fundamentally transformed capitalism into a new economic regime which he coins "creditism". The former is fundamentally based on the accumulation of savings, which is then transformed into wealth-generating assets through investments in plants, machinery and human capital. These investments into the real economy increase productivity while lowering prices, thereby raising our living standards. Furthermore, capitalism is based on free market competition, which posits that companies that take excessive risks and fail to generate profits, are allowed to go bankrupt. This bloodletting is a natural and necessary process which clears out bad and speculative assets and serves to periodically deleverage the economic system. In other words, the system is limited by the physical and human resources (tangible assets) available for the accumulation of capital. The process can thus be described as one in which savings generate investments, these investments then yields a surplus (savings), which can then be reinvested in order to acquire more capital. Economic progress was more gradual under capitalism, but according to Duncan, more stable (Maher, 2016)

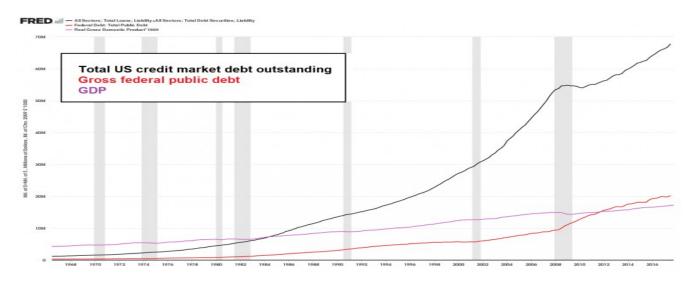
Creditism on the other hand, which is the system we now find ourselves in, is a system predicated on the continuous expansion of leverage and debt. When the government stopped backing money with gold, the economic system was fundamentally altered. In the new age of Fiat currency, credit growth is what effectively determines economic growth. This is because the availability of credit is what drives the upward momentum of asset prices (stocks, bonds and real estate). Why is the continued inflation of asset prices so essential here? First, a "wealth effect" is generally observed when asset prices rise.

Because people feel more wealthy as they see the value of their homes or stock portfolio go up, they are more likely to spend, thus driving up aggregate demand – even while, as in the US – real wages have remained stagnant since the 1970's. This effect was particularly pronounced in the buildup to the financial crisis of 2008, when homeowners were consistently refinancing their homes, essentially piling on more and more debt as housing prices continued to levitate higher. Second, consumers willingness to take on more debt, means the issuance of more credit by the banking system. When banks extend credit, they are essentially creating money. The credit creation theory of banking will be explained in more detail in the next sub-chapter.

As observed in chart 5, the money supply (M1) has grown dramatically since the 1970's. Also, note that when the expansion of credit starts to fizzle out, a recession soon follows. We can observe that credit creation or bank lending was off the charts during the years of the housing bubble. However, as can be seen, the curve started to flatten around 2005. When borrowers reached peak debt and started to borrow less, this soon began to reverberate through the financial sector and blew up spectacularly in 2008 (although signs of systemic distress could be observed earlier). In the current monetary system private deleveraging cannot be done without plunging the economy into a violent deflation that ultimately threatens the stability of the whole system. When people pay off the principal of their loans and stop borrowing, the currency supply contracts. Currency and debt therefore, is like matter and antimatter. In order to pay the interest on the existing debt, new currency must therefore constantly be brought into circulation as chart 5 illustrates.

Importantly for our purposes, pay attention to the extreme spike in the curve in the aftermath of the financial crisis. This is the result of the government's and Federal reserve's attempt to kick start lending by injecting more credit into the system. This was done through what is referred to as "open market operations" or "quantitative easing (QE)", which involves the central bank purchasing government or private bonds. When the central bank does this, it is injecting liquidity into the system, effectively printing money out of thin air. The chart below lends credence to the process Duncan observes.

Chart 6 – US GDP and Credit growth over time:



Source: St.LouisFed.Org

As can be observed in the above chart, beginning in the 1970's, gradually at first and especially in the 1980's and thereafter, total credit market debt – which includes government, personal and corporate debt – begins to absolutely explode. As can also be seen in this chart, while the early post-war US economy was characterized by a tight relationship between GDP and total credit market debt outstanding (hereafter TCMDO). That relationship has now completely broken down and the divergence is getting ever wider. The flattening and subsequent tiny decrease in the TCMDO curve, which can be observed just prior to and during the great recession further illustrates Duncan's point here. When credit growth starts to stagnate or contract, a recession soon follows. Between 1987 and 2008, the US household sector's share of TCMDO went from \$2.4 trillion to \$14.2 trillion, or a fivefold increase at the eve of the financial crisis. Since then it has increased very little and only in 2016 did it surpass the previous high. US consumers in other words, reached peak debt or the point at which they could not possibly service any more debt (Stockman,2016,pp.43-46). As they did, they started to deleverage. Consequently, the economy contracted, and the government and Federal reserve had to step in to pick up the slack.

This turns a crisis of excessive private debt into a public debt crisis. We are as of now in a qualitatively different system than the one we left behind in 1971. Richard Duncan claims that capitalism broke

down already in the aftermath of World War 2. The reason according to him, is that it is entirely possible for the free market under traditional capitalism to provide an equilibrium point in which 25% of the population is unemployed and GDP contracts by 47% as happened in the aftermath of the Great Depression. During those dark days, when the asset bubble at the time imploded and liquidity dried up, the Federal government chose not to intervene and consequently prolonged the economic malaise. What saved the economy then, was World War II, in which government demand and credit expansion fueled the economy in a situation where the private sector was unable to (Coyne, 2015). This Keynesian revolution then prompted a neoliberal counter-response as I demonstrated in the previous section, when stagflation took hold in the 60's and 70's. The question we need to make sense of here is whether Duncan is right, or alternatively, the transition to a credit and debt driven economy is a natural stage in the evolution of capitalism?

Paul Sweezy and Paul Baran, in their classical work "Monopoly Capital", writes that the normal state of a mature capitalist economy is stagnation. The rise of gigantic monopolistic or oligopolistic corporations ushered in a tendency for both the actual and potential investment-seeking surplus among companies to rise. The inherent logic in profit maximizing entails the reduction of unit labor costs when possible, thus inequality tends to increase in society over time. However, what is rational at the individual business level, is not necessarily so for enterprise as a whole. As more and more capital accumulates in the top echelons of businesses and among wealthy individuals, the number of productive investment outlets tends to decrease, as the market clears and the workers/consumers experience slowing wage growth, aggregate demand slumps.

Accordingly, according to Sweezy, the economy becomes more and more dependent upon external stimulus. During and after WWII, government provided this stimulus to aggregate demand, something it also did in the aftermath of the great recession (although as we shall see, the vast increase in inequality following that recession is largely attributable to government intervention intended to prop up asset prices). Two other developments are essential here, the first is globalization understood here as outsourcing of labor and capital investments in the developing world, in the case of the US, this had the consequence that the manufacturing sector was gradually eroded as US companies moved their production to China and other countries. The other is the rise of FIRE (Finance, Insurance and Real estate) as an increasingly larger share of western and particularly the US economy. Chart 7 shows the growing importance of this branch of the economy. Unsurprisingly, it has grown in direct proportion with the simultaneous expansion of credit witnessed from the 80's onwards, and is inversely correlated

with manufacturing's share of GDP output (Foster&McChesney, 2012, pp. 10-12).



Chart 7: FIRE and Manufacturing as % of US Economy.

Source: Global Macro Monitor, "America's FIRE Economy, 2011".

The credit bubble and the FIRE industry it gave birth to, therefore emerged as a way of propping up US capitalism by dramatically inflating asset prices, in what was otherwise a highly deflationary environment (owing to the previously mentioned outsourcing of the manufacturing base which served to lower core inflation through cheap imports into the US from the Pacific Rim countries). In order to provide the reader with a more thorough understanding of this development, a closer look at how the modern banking system functions and the change in the global balance of payments system or how countries settle their trade, is warranted. I believe these two variables are intimately tied together and will help us make sense of how monetary policy has shifted and why we have subsequently witnessed a veritable explosion in credit. understanding this increasing importance of debt and leverage in its turn is crucial in order to make sense of the process of financialization, and the devastating consequences that has followed in its wake.

4.2 The Modern Banking System's Role in Credit Creation and the Link to the Global Balance of Payments System:

"It is fair to say that the core macroeconomic modelling framework used at the Federal Reserve and other central banks around the world has included, at best, only a limited role for credit provision, and financial intermediation. Asset price movements and the feedback among those movements, credit supply, and economic activity were not well captured by the models used at most central banks."

Alan Greenspan testifying before Congress in 2008.

The above quote by former Fed Chairman, Alan Greenspan, is a stark reminder of how spectacularly the conventional economic models failed at spotting, identifying and preventing the financial system meltdown, which was well underway when Greenspan uttered these words. According to most economists at the time just before the bursting of the housing bubble, the US economy was in a "goldilocks" state. Unemployment was low, Inflation was low (the CPI measure of it at least) and GDP growth was averaging about 3% annually. Of course, as was dramatically revealed, beneath the surface massive distortions had taken place.

The previous section outlined how economic growth has stagnated in mature capitalist economies and how credit has gone absolutely parabolic in the aftermath of the dissolution of Bretton Woods and in particular since the 80's. But what caused this pivot? How can we explain our increasing reliance upon leverage and debt, just to keep the economy at neutral or chugging along at very low rates of growth? I believe a key here is the changing nature of the global balance of payments system as well as the modern banking system. My aim for this section and the next is to illuminate this link. In so doing, the reader will be better equipped to understand the following section on financialization of the US economy, the transition to shareholder capitalism and the pathologies that has followed, both economically and politically.

During the 1980's many Keynesian and neoclassical economists shared one fundamental assumption, which linked money to the overall economy. This was the "equation of exchange" or "quantity equation", which says that MV=PY, where M=money, V=Velocity (essentially how often money changes hands), P=price level and Y=GDP growth. In other words, in order to forecast overall inflation,

GDP and money demand growth, a stable money velocity (V) is required. However, as chart 8 demonstrates, beginning in the 1980's a decrease in money velocity was increasingly observed in the US, as nominal GDP did not grow as fast as the money supply (the credit explosion referred to in the previous chapter).

Velocity of MZM Money Stock

4.0

3.5

3.0

2.5

2.0

1.5

1.0

1960

1970

1980

1990

2000

2010

Source: Federal Reserve Bank of St. Louis research.stlouisfed.org

Chart 8 – US Money Velocity over Time:

Source: St.LouisFed.Org

Increasingly, economists turned away from the quantity equation theory and began to rely on models that depicted the economy as unaffected by the money supply often referred to as the "Neutrality of Money theorem". The latter essentially postulates that money does not affect real variables like output or employment, but only nominal variables like inflation. In many ways, this was a form of escapism by economists, as the apparent slowdown in velocity was contradictory in the face of an everexpanding money supply (Werner, 2011, pp. 25-26).

This deemphasizing of the role of money in the overall economy, also had fundamental implications for the mainstream view of economists as relates to the nature of banking. Increasingly banks were seen exclusively as financial intermediaries. "The Financial Intermediation Theory of Banking", posits that banks are not very different from other financial institutions. It follows that according to this theory, the sole purpose of banks is to more effectively allocate capital from those who choose to save it, to those who want to borrow it in order to invest or consume. Thus banks makes profits essentially through the "spread" between the deposit interest rate and the longer-term interest rate the bank charges when it lends. According to this theory then, banks only create liquidity when they borrow short and lend long.

Because there is no clear distinction between banks and other financial institutions in these models, it consequently follows that economists who rely on these models, see no reason to single out banks for special treatment, or even include them in their macroeconomic theories at all. This may help explain why so few mainstream economists foresaw or warned about the systemic buildup of risk in the financial system prior to the great financial crisis. Excessive credit creation and the scourge of excessive private debt buildup, is simply defined out of existence or even seen as a sign of a booming economy, which incidentally was the narrative presented by economists in the very top echelons of government prior to the crisis (Werner, 2015, pp. 362-363).

A second theory called "the Fractional Reserve Theory of Banking" also argues that banks function as financial intermediaries. However, unlike the first theory, it argues that banks collectively create money through the process of 'multiple deposit' expansion. Friedrich Von Hayek argued in his first book that with a reserve requirement of 10%, a bank would lend out the remaining 90% of the initial deposit. Some of this money would be redeposited by other banks and re-lent by other customers, resulting in a process of multiple deposit creation in the banking system. As such, each individual bank operates as a 'financial intermediary', but the systemic consequences of each bank's actions will serve to create money through the process of 'multiple deposit expansion' (Werner, 2015, p. 364). The distinguishing feature here is that each individual bank cannot create credit out of nothing. Banks are thus to be seen as financial intermediaries much like stock brokers and firms that engage in securities trading. However, they are different in one crucial respect; that is, in regards to the regulatory environment in which they operate. Because there are rules requiring banks to hold reserves with the central bank, which limit their ability to extend credit, an individual bank can only lend out money when it has previously received the same amount in excess reserves from another bank – whose own reserves will then have declined – or, from the central bank (Werner, 2014, pp.12-13).

However, there is a third theory – which according to Werner – more accurately describes the current functioning of the modern banking system. This is the "The Credit Creation Theory of Banking". This theory is at odds with particularly the financial intermediation theory, in that it posits that each individual bank can effectively create credit out of nothing whenever it carries out asset purchases or extend loan contracts. In other words, banks do not need to first gather excess reserves or deposits in order to extend credit. Werner shows that in most countries, banks create 97% of the money supply when they extend credit; only a tiny portion is created by the central bank. How does this happen technically? The current regulatory and accounting regime which banks operate under allows banks to

simultaneously book an asset and a liability whenever a new loan is extended. Through the mechanism of a signed loan contract, banks can add the amount of the loan to the asset side of their balance sheet, while the borrower's account is credited with the same amount. Accordingly, new money then springs into existence without being diverted from the economy elsewhere (Werner, 2015, pp 366-367).

Essentially, banks pretend that the borrowers have deposited money, treating them as if they had done so. Because banks are the accountants of our economies, few people notice this accounting gimmick and the fictitious deposits become real (Werner, 2011, pp.28-29). The fact that privately owned and profit-oriented commercial banks create the vast majority of our money supply, is information not generally known by the public and is seldom if ever brought up by mainstream economists. When we recognize the ability of banks to not only ration and determine the allocation of credit, but also to create this credit, it becomes abundantly clear that there is a crucial link here to broader macroeconomic – and in the final instance – political trends. All of the financial crises we have witnessed since the 1980's – the collapse of Long Term Capital Management in 1997, the Dot.Com bubble in 2000 and the real estate bubble of 2008 – were the result of extreme asset price inflation, coupled with high leverage which increased the fragility of the banking system and financial markets. When the inevitable deflation follows, which initiates the bust or the "Minsky moment" wherein everyone stampedes towards the exit at the same time, banks stop lending and the crisis spreads from the financial system to the real economy.

I have now demonstrated how debt has gone absolutely parabolic since the 1980's and how our economies are increasingly reliant upon an ever-greater expansion of it, just to maintain current growth trends. Furthermore, Following Werner, I have made the case that a renewed focus on how banks function in the modern economy can help us make sense of this development. What is missing to fill out the story however, is the historical and political transmission mechanism, which allowed this development to occur.

The crucial link here I believe, is the abandoning of the gold standard. Why? First, under the Bretton Woods system, Central banks exercised much stricter control over the banking system. Strict rules were in place with regards to reserve requirements, cash ratios and separation between commercial and investment activities (Glass Steagall). This was done because under the Bretton Woods system, each nation had to maintain a currency peg to the dollar, which as we know was pegged to gold at \$35 an ounce. If a country ran persistent trade deficits, this peg would be impossible to maintain as reserves

would be drained from that country, serving to debase the currency. Central banks would treat this as a problem of excess demand and respond by raising interest rates in order to limit banks from extending more credit. Needless to say, this served to restrict the long-term rate of credit growth.

After the abandoning of the Bretton Woods system in 1971, there was no peg to protect, as currencies were left to float freely against each other. At the same time banking regulations were dismantled under the guise of neoliberal orthodoxy, which saw them as an impediment to the optimal functioning of the free market. Consequently, as chart 9 below conveys, the reserve requirements of US banks started a precipitous decline. Today, bank reserve requirements have fallen to the point where they are now exceeded by vault cash. This means that further lowering of reserve requirements would have no impact, as US banks are already operating free of any such constraints. Note that this is not just the US by the way, it is largely a global phenomenon.

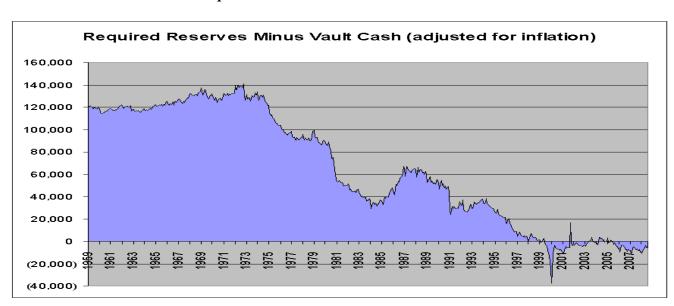


Chart 9 - US Bank Reserve Requirements 1959-2007:

Source: Marketsceptics.com

Important to understand here is that the world trade system changed fundamentally with the abandoning of the gold standard. The world now moved to a system of fiat currencies, left to freely float against each other. The consequence was that by 1980 countries were now willing to take credit in US dollars. Credit – which as a result of no longer being tied to any gold anchor and in combination with mounting US trade deficits (see chart 10) – started to expand extremely rapidly in the 1980's.

Chart 10 – US Current Account balance 1960-2015:



Source: St.LouisFed.Org

Stated differently, the US debt is actually a credit for the nations that are running a current account surplus with the US. These nations then take that credit and put it into their banking system, which as we learned previously, allows them to expand by at least 10X that. Naturally, this precipitous increase in liquidity soon started to bring down the cost of borrowing, and interest rates have been falling ever since. However, the long-term decline in US interest rates was also a result of a conscious effort on the part of the mercantile export-nations of East-Asia.

Japan, the east-Asian tigers and eventually China, soon understood that the best long-term strategy for their export-driven economic model, was to take some of that surplus credit derived from trade with the US and buy US treasury bonds. This further drove down US interest rates and increased the value of the USD. In other words, making it both cheaper for Americans to borrow while also reducing the price of imported goods. In other words, when the US treasury sells a treasury bond that's a form of debt. Essentially the system is one in which debt is leveraged on top of debt. We have thus abandoned every notion of even quasi-sound money. The US is creating debt, which other nations buy and use as collateral for their own leveraging of debt. Then this way of settling trade on a global scale, comes back and impacts the domestic economy. Debt has thus essentially become an asset rather than a liability. It should therefore not surprise the reader to learn that personal consumption as share of GDP has risen

from 60% of the US economy in 1980, to almost 70% in present day. This is far higher than most all other countries (WorldBank.Org). Because of these factors and the US dollar's reserve currency status, which necessitates the holding of US dollars by foreign countries in order to gain access to the international petroleum market, the US has and continues to enjoy an uncanny ability to print without experiencing the negatives traditionally associated with such a monetary policy, like rising interest rates and an erosion of the currency's value. I will now provide the reader with a historical backdrop, which outlines more clearly how the seeds of this development were sown and the problematic consequences it has had.

4.3 Milton Friedman's floating money Contraption – Deficits and Debt without Tears:

Not long after Milton Friedman's neoliberal policy prescriptions were tested in Chile, (with a dubious track record as we've seen previously) the opportunity would present itself in the US, with the election of Ronald Reagan in 1980. Friedman is well known for his economic theories with respect to letting the free market reign supreme, rolling back regulations and cutting taxes. However, what got him the Nobel Price in economics in 1976 was his theories on monetary history and policy. Friedman concluded that inflation was always and everywhere a monetary phenomenon. More specifically, drawing from a vast archive of historical data, he concluded that the great depression and the subsequent deflation had been caused by the Federal Reserve's reluctance to prevent the precipitous fall in the M1 monetary aggregate. Opposite, inflation could be rapidly brought under control if the money supply was allowed to grow by a fixed and unwavering amount, such as 3% per annum. If such discipline was adhered to consistently, nothing more was required by way of monetary policy in order to unleash capitalist prosperity; not gold convertibility, not fixed exchange rates, not currency swap lines or any of the other bulwarks built up around the Bretton Woods monetary system. Once the central bank got into the groove of expanding the money supply by a fixed and reliable amount, the free market would take care of everything, including setting the correct exchange rate between the dollar and every other currency on the planet (Stockman, 2013, pp.260-262).

However, referring back to my previous section on the functioning of the modern banking system.

There is reason to believe that a crucial flaw was inherent in Friedman's theory. Recall that according to

the aforementioned "credit creation theory" of banking, the vast majority of the money supply is created by the private banking system through the double booking of assets and liabilities whenever a new loan is extended. In other words, the central bank cannot control Friedman's key variable here. which is the money supply as measured by the sum of demand deposits and currency (M1). What the central bank can roughly assess is the amount of bank reserves in the system. however this is potential money not actual money circulating in the economy. Actual money therefore, is realized only when banks extend loans and credits the borrower's checking account. Stated differently; the central bank under a regime of sound money could not control the animal spirits of neither lenders (banks) nor borrowers (consumers, businesses). The link between open market operations (expanding bank reserves) to bank credit creation (expansion of M1) to the money multiplier, which is supposed to lead to increased investment and consumption, is therefore a long and complex causal chain. However, once the Federal reserve was freed from the constraints of sound money and having to protect the dollar's foreign exchange value, it had a much wider scope to pursue financial repression policies, such as low interest rates and a steep yield curve that has served to enrich speculators on Wall Street. A steep yield curve here refers to a situation where the yield on long-term bonds is higher than short-term bonds. This induces banks to expand credit more rapidly, as money can be made on the carry-trade. Essentially banks and other speculators like hedge funds, are allowed to loan money at practically zero cost and then invest that money into higher yield bonds. Politicians and Central banks must have been fully aware that this would serve to enrich the wealthiest Americans with little to no income gains accruing to the poor and middle class. However, as we know, the price and interest rates of bonds is inversely correlated. By rewarding this carry-trade, long-term interest rates were further brought down, serving to bring demand forward and prop up consumption in the current (Stockman, 2013, p.266).

Nowhere is this chain of events more evident than in the buildup to the Great Financial Crisis of 2008. The economy under Bush was supposedly remarkably strong according to the talking heads on major news channels. Tax cuts had provided businesses and consumers with newfound optimism and the economy was growing. However what becomes clear when looking at the numbers, is that the three consuming sectors of the economy (Personal consumption expenditure, residential housing and government expenditures) accounted for virtually all of the GDP growth between 2000 and 2007, a remarkable 98% to be exact. Much of the gain in the GDP print during the Bush/Greenspan "boom" was simply a feedback loop predicated on the new debt being injected into the economy by the Federal Reserve. Growth in business investments and real incomes were nowhere to be seen. Real spending for

fixed plant and equipment rose by just 1.7% and less than 1% when the great recession is factored in. Likewise, real private incomes rose at just 1.6% annually, which begs the question of how real personal consumption managed to grow at 2.8% or nearly twice the rate. The explanation of course, is the debt-fueled binge enabled by Greenspan's easy money policies (Stockman, 2013, pp. 447-448).

During the first few years of Reagan's presidency, this development was contained as then Federal Reserve chairman, Paul Volcker, fought the ravages of inflation through a brutal tightening of money market conditions. By 1987 however, the US economy was booming and inflation was no longer a problem. How could inflation – which was running red hot during the 70's – suddenly have vanished by the mid to late 80's, and continuing into the 2000's, in a context where the money supply was being expanded rapidly and in a context of exploding US trade deficits? Recall what we discussed in the previous section. The fundamental nature of money had changed, as countries were now settling in credit and trade no longer had to balance. At the same time, foreign countries like Japan and eventually China were now parking their savings in US treasuries to boost their own export industries, leading to a long-term decline in US interest rates, coupled with a natural deflationary tendency arising from the cheap import goods flowing into the American domestic marketplace from abroad. However, although inflation in consumer goods, as per the Consumer Price Index (CPI) measure remained subdued, significant inflation was, and continuous to be seen in asset prices. The fact is that one of the hallmark signs of the transition to a wholly credit dependent economy, is the continuous inflating and then violent implosion of asset bubbles. We witnessed the devastating consequences of this development in the US and Europe last time in 2008. Since then, real estate and stock prices have once again levitated to new heights and at the time of writing shows no signs of slowing down. However, there is one country that serves as an instructive case of where this development might ultimately lead, and that is the case of Japan, to which I now turn.

4.4 Japan - The Canary in the Coalmine:

During the 1980s, Japan experienced what can only be described as one of the biggest credit-bubbles in recorded human history. Stock and commercial real estate prices skyrocketed. According to the Japanese National Land Agency, the Consumer Price Index (CPI) rose by less than 500% between 1955 and 1998. However, land and commercial real estate prices increased by more than 5000% during the same period. It got to a point where the real estate value of Metropolitan Tokyo surpassed that of the entire United States, a country with 3X the population of Japan and a significantly higher GDP (Werner, 1997, p. 279). Immediately, these numbers seem unfathomable and completely detached from even a remotely sustainable economic development. Nevertheless, according to many economists at the time, these prices were nothing to be alarmed about. On the contrary, they were the result of land scarcity in an overpopulated country and therefore a result of the rational market pricing mechanism at work. What allowed them to come to this conclusion?

Recall that the "quantity theory of money" states that; MV=PY → in other words, the price (CPI) and output (GDP) level is determined by the quantity of money and its velocity (essentially the amount of times money changes hands). Furthermore, M according to this theory is usually defined as the aggregate of private sector assets, largely consisting of bank deposits (Werner, 2011, p. 25). Now, Chart 8 on page 41 illustrated the secular decline we have witnessed in money velocity since the 1980's. The chart depicts US money velocity, but it is a development taking place in most established economies. It most certainly was observed in the case of Japan in the buildup of the asset price bubble during the 1980's. The money supply was thus expanding extremely rapidly, while velocity rather than increasing, or even remaining stagnant, was actually declining.

This apparent breakdown of the quantity theory of money, or the money demand function, confounded economists at the time. Struggling to provide any clear cut answers, they increasingly turned away from a focus on money or banks as important influential variables in the economy. Importantly, it ushered in the "neutrality of money" paradigm, which has become a bedrock among neoclassical and new-Keynesian economists alike. This paradigm states that money doesn't affect real variables, only nominal ones like prices and wages. It is easy to see how by extension this quickly gave rise to the

aforementioned "financial intermediary" theory of banking, which defines out of existence banks and their role as pertains to credit creation.

This becomes apparent through the observation that money is usually defined as an aggregate of private sector assets, largely deposits. This is problematic for several reasons. First, the money demand function states that money is directly related to output and inflation. However, only money that is actually used for transactions will impact output and inflation as per traditional measurements. As I attempted to show in the previous section, the central bank can only control the amount of bank reserves in the system, not how these reserves are actually used. This is a fundamental flaw in the traditional approach, as it assumes that money (M) is used on transactions involving goods and services only, as represented by the traditional measure of consumer price inflation (P). Clearly the fallacy of this assumption is readily apparent in the case of Japan, as the extreme real estate and stock market bubble suggested that private purchasing power was to a larger and larger extent being channeled into the financial markets, which boosted asset prices, but had negligible impact on real GDP growth (Y). Second and related to this, when the early theoreticians were writing about the "Quantity theory", they were doing so in a completely different historical context. More specifically, a context in which the economy was operating through the use of commodity money, such as gold. The role of banks was smaller and less well understood. This relates specifically to what we uncovered in the section about the functioning of the modern day banking system as per the credit creation theory of banking. Recall that in most nations, banks individually create approximately 97% of the money supply. However, as the case of Japan illustrates, when credit creation is increasingly channeled into the financial sector, the twin processes of credit creation and financial asset appreciation starts feeding on each other. Because the banks extended loans with real or financial assets as collateral, as long as the value of the collateral was increasing, new purchasing power was being generated, incentivizing banks to extend more credit. What prompted this development in the Japanese case? Starting in the mid 1970s, Japanese firms began to substitute equity financing for bank loans. Consequently, the demand for bank loans for productive investments in the real economy declined. At the same time however, the central bank (BOJ) operated with a "window guidance" policy, a remnant from the post-war period, wherein the Japanese state directed credit towards its most efficient uses. This had served Japan extraordinarily well for many decades. However, in a context where the demand for productive loans was deteriorating - coupled with this forward guidance policy – banks which were interested in extending more loans, but finding no productive outlets for them, chose to expand by extending loans, using land and property values as

collateral.

This explains how economists could rationalize the Japanese Real estate bubble. The traditional metrics they were relying upon did not suggest a bubble. Money velocity was decreasing and CPI was low. Because CPI remained muted (even registering a mild deflation at times), the Japanese Yen did not depreciate against other currencies, which prevented capital flight and enticed foreign investors to join the speculation. Capital flight might have had the effect of pricking the bubble earlier, as it would have driven up interest rates. Taken together, all of these factors were suggesting that credit creation was not excessive. However as I have tried to illustrate here, the low velocity and inflation were symptoms of a deeper underlying problem, as it camouflaged the enormous distortions and malinvestments that were taking place within the Japanese economy (Werner, 1997, pp. 278-281 & 294-298).

When the bubble finally popped in the beginning of the 1990s, a recession and banking crisis, largely unanticipated, followed in its wake. Furthermore, this crisis would prove extremely resistant to standard solutions suggested by conventional economic theory. The tried and true policy recommendation of lowering interest rates, failed to illicit any response, as property and stock prices continued their rapid descent. In fact, the Nikkei stock exchange fell from a peak of 38295 points in January 1990, to a low of 7534 points in February 2009. Japanese stock prices were thus reduced by 4/5 during the course of two decades (Macrotrends.net). The more traditional Keynesian approach of stimulating aggregate demand through government spending, also proved inadequate, as no lasting recovery came to fruition. Rather, the result was an exponentially growing national debt. This failure of Keynesian pump priming, served to boost the supply-siders whose moneyless real business cycle theories were used to justify IMF and World Bank inspired structural reforms, consisting of deregulation, liberalization and privatization. However, the implementation of US-style shareholder capitalism, rather than reviving the national economy, produced the well-known ills of higher income inequality and a rise in violent crime (Werner, 2011, pp.27-29).

In a world ripe with reckless and extreme monetary policy measures, Japan is certainly vying for the top spot. The country now has a total debt load of more than one quadrillion yen (about \$10 trillion), which translates to a debt-to-GDP ratio of 224%, well ahead of Greece with its 180% ratio. Keep in mind that Japan is the world's third largest developed economy, not some banana republic. A collapse here would be felt throughout the world economy. An obvious difference between Japan and Greece of course, is that the latter country effectively traded away its option to conduct its own monetary policy

when it entered into the European Monetary Union (EMU). This meant that the Bank of Greece could not respond to the debt crisis that arose by buying government bonds (i.e. print money) and had to implement austerity measures in an attempt to ease the minds of international creditors. Not so in Japan. In fact, the Bank of Japan (BOJ) has been conjuring trillions of yen out of thin air for several decades now, in order to buy up a huge chunk of the Japanese government's debt load. Then, when it ran out of bonds to buy, the BOJ started purchasing Japanese stocks, to the point where the BOJ is now a top 10 shareholder in 40% of Nikkei-listed companies. Most recently the bank has started what it refers to as "yield curve control" in an attempt to make sure that the Japanese government won't have to pay more than 0.1% interest on its humongous debt load. Last year, the Japanese government spent approximately 24.1% of its total tax revenues just on servicing the debt load, both payments towards principal and interest. It stands to reason, that even a slight uptick in interest rates on Japanese government bonds would be catastrophic. So why do domestic purchasers like pension funds and investors continue to throw money into these 0.1% yielding bonds? As we know, Japan has been fighting deflation – largely a result of demographics – for a long time. With deflation, when the purchasing power of a country's currency increases every year, holding a bond at close to zero yield may make sense, because you are still maintaining your purchasing power. However, recently inflation has begun to rear its head after years of BOJ commitment to a 2% inflation target. And they are now achieving about 1% inflation a year. This has led to people selling their bonds, thereby pushing up interest rates. So far, the BOJ has scooped up all of the bonds sold by private investors in a desperate attempt to keep yields from rising. No wonder, if rates on Japanese government bonds were to rise to say just 1%, the cost of servicing the debt would consume all of the government's tax revenues (Sovereignman.com, 2018).

The case of Japan illustrates several important aspects. First, excessive private credit creation in a context of declining investment outlets in the real productive economy, effectively caused the Japanese bubble. Second, the bursting of this bubble had enormous negative consequences for the Japanese economy. Consequences that still to this day haunts the country and has proved extremely resilient towards conventional solutions. Rather private debt has been moved over to the public balance sheet, effectively kicking the can down the road in a desperate attempt to stave off deflation. Lastly, I believe Japan's story serves as a forewarning to the west of the devastating costs the distortion of our monetary system and the financialization of our economies may ultimately end up imposing upon us.

5.0. Process Tracing – Important Historical Antecedents:

"Let me issue and control a nation's money and I care not who writes the laws"

Mayer Amschel Rothschild (1744-1812)

The presidency of Ronald Reagan is often hailed by conservatives as having stopped the march of big government and brought fiscal restraint to Washington. Yet, at the end of Reagan's second term, federal outlays averaged 21.7% of GDP, not much of an improvement from the alleged "big spending" Carter years and significantly higher than the 19.3% of GDP recorded under Lyndon B. Johnson. Much of this increase was owing to a massive increase in military spending, with the Pentagon's budget nearly tripled within just six years, going from \$140 billion to \$370 billion. Ronald Reagan himself had spent a lifetime denouncing deficits and big government, but the lesson learned from his presidency as Dick Cheney succinctly put it, was that "deficits don't matter". The usual deflection resorted to by republicans when confronted with these facts, is that Reagan succeeded in reviving the national economy and putting it on track for sustainable growth over the next couple of decades (Stockman, pp.57-58 & p.90). However, as I will illustrate in this section, the Reagan presidency was in many ways the starting shot for the financialization of the US economy and the destructive tendencies that has followed in its wake – an extreme increase in debt and leverage, massive income inequality and a gutted middle-class. All of these developments in its turn has led to the intermittent instability of the financial system and the propensity towards crisis that we witnessed most recently in 2008/2009.

In 2004 while the housing bubble was brewing – Ben Bernanke, then chairman of the Federal Reserve – stated that prosperity would be everlasting. His reasoning was that the government and its central bank had now perfected the art of modulating the business cycle (Stockman, 2013, p. 17). Indeed, much was pointing towards less violent swings in the business cycle. The 80's, 90's and early 2000's (with the exception of periodic unrest in financial markets) had been characterized by relative calm with respect to traditional indicators such as aggregate demand, employment and inflation. This period was often referred to as "The Great Moderation". However as we shall see in this section, while debt fueled growth and financialization seemed to work at first glance, what was – and still to this day is

happening – is that demand was being brought forward. As this process continues, more and more debt is required to sustain current growth rates. In a traditional business cycle, recessions triggered bear markets, which slowed consumer spending, leading to less profits for firms and falling stock prices. What we have today instead, is "credit cycles" wherein falling asset prices themselves cause the recession. This is because access to credit now drives aggregate demand in a context of falling real wages and exploding inequality. As we have seen previously, growth started to fall during the early 2000's and has been even slower in the aftermath of the great financial crisis. The periodic debt crises and instability of the financial system is the other side of the coin. And as we shall see during the course of this chapter, – with each new crisis – more and more radical monetary policy measures have been required to keep the system going (Mauldin, 2018). In this chapter I will start by looking at the Savings and Loan crisis, which erupted in the US during the 1980's. Specifically, which policy steps were taken leading up to and as a response to the crisis. Furthermore, the 1980's was the decade when securitization and derivatives trading began to take off. It then further accelerated in the 90's and 2000's. My aim therefore, is to explain the rise of securitization and an enormous concealed derivatives market, by looking at the gradual evolution of the interbank lending market. I will make the case that the evolution of wholesale banking was made possible by the clean break with sound money in 1971, which enabled the aforementioned credit explosion as well as the misguided regulatory policies pursued by the neoliberal ideology under the Reagan and subsequent Clinton/Bush administrations.

In my opinion, this is perhaps the most crucial development for the reader to understand as pertains to the financialization of our economies. This is because it marked a radical step away from the traditional role of banks as depository institutions into a more "wholesale" and speculative industry, which sole purpose as time went by became to expand just for the sake of expansion, by generating ever greater amounts of credit and then levering this credit up in order to engage in increasingly speculative and risky activities. I believe that providing the reader with a stepwise and more comprehensive account of this process is absolutely crucial.

The complete lack of information from the mainstream media and our elected officials as pertains to the 08 crisis was and is startling in my opinion. The standard explanation was a collapse in the subprime mortgage market originating with low-income borrowers who shouldn't have gotten access to credit in the first place, which again caused credit to freeze up. But why did credit freeze up completely? How could our financial systems have become so fragile and interconnected that a series of defaults by low-income borrowers in the US now threatened the whole global economy? You would

think that a crisis of this magnitude, that resulted in such massive turmoil and individual heartache among ordinary people, not to mention an extraordinary transfer of wealth to the financial sector. The latter in the form of numerous bailouts and asset relief purchase programs, which costs were ultimately borne by the taxpayers, would at the very least inspire our elected officials to provide us with a thorough explanation of what actually happened. Not to mention how it could happen, as well as concrete steps towards fixing a system that imploded so violently and with such massive repercussions for the general public.

Alas, none of that materialized. Few in power seems to notice or care. Instead, the banks and financial institutions were bailed out at the taxpayers expense; interest rates were lowered to the zero or even sub-zero bounds, in order to bring forward additional debt-fueled consumption while punishing savers. Some limited regulations were slapped on the financial institutions (Dodd-Frank in the US, in the EU rather, the zombie banks are being kept artificially afloat through ECB bond purchases), and the narrative soon returned to the traditional one of "normalcy", "reflation" or "recovery". However as I mentioned in the introduction, this narrative does not jive with the developments taking place within the social and political sphere. These tensions as well as political polarization is at an all time high, with more and more people expressing dissatisfaction and disdain with the economic and political system. In other words, most people can sense that something is deeply wrong, but they can't quite pinpoint the exact reason.

Part of the reason for this seeming myopia may be that politicians as well as the general public, lack an adequate understanding of a financial system that has become so complex, so abstract, that very few actually understand its inner workings. At the same time, its continued functioning – as the financial crisis demonstrated – seems to be imperative for the real economy. It seems plausible to me, that our elected officials in government as well as the central bankers overseeing this sector are trapped within the confines of a system that has largely metastasized on its own. As we saw in 08, the credit freeze and subsequent deleveraging that occurred had immediate and violent consequences for the real economy, and prompted politicians and central bankers to respond with unprecedented measures. Every new crisis in this credit-driven system seems to require new and even more radical policy measures than the last one, in order to prevent the financialization monster from eating its own tail.

A second related, and far more sinister reason, may be that these politicians are themselves beholden to this system. A quick look at the biggest political campaign contributors among the Fortune 500

companies in the US seems to at least partially confirm that suspicion. In fact, 3 of the 5 biggest contributors are among the "too big to fail" behemoth banks, with Goldman Sachs occupying the top spot (see chart 11). Is it a coincidence that the last three treasury secretaries (Steve Mnuchin, Timothy Geithner and Hank Paulson) have been former Goldman Sachs bankers?

The 30 Biggest Political Donors on the Fortune 500 Political Donations Between the Years 2007 and 2017 iblicans (%) Total donations (\$) STOM \$12M \$4M **S2M** \$6M SSM Goldman Sachs Microsoft
J.P.Morgan \$7.2M Morgan Stanley \$5.4M \$4.1M citi \$4.1M charles SCHWAB WELLS FARGO \$3.2M \$3.2M \$3.1M \$2.9M \$2.8M dish \$2.6M \$2.6M \$2.6M RACLE S2.4M CISCO \$2.2M \$2.1M \$2.1M \$2.1M \$2.0M \$1.9M \$1.7M 38.1% 61.9% \$1.7M howmuch ~

Chart 11: Political Donations by fortune 500 US Companies 2007-2017:

Source: Zerohedge.Com

Notice that these campaign contributions are non-partisan, with Goldman Sachs contributing \$11.5 million, pretty evenly split between both Democratic and Republican Political campaigns. Possibly as a hedge against any unfavorable legislation or regulation becoming law under either party.

Regardless, what seems clear to me is that we will not get any further unless we gain a better understanding of the inner workings of this system and how it has evolved over time. The following is an attempt to provide the reader with a stepwise account of the process of financialization, as well as how it ultimately would manifest itself in the financial crisis of 2007-2008. A crisis – which judging by the present political and social turmoil – is still playing out.

5.1 The S&L Crisis – Deregulation and Sowing the Seeds of Instability:

"Give a Man a gun and he can rob a bank. Give a man a bank and he can rob the world"

- Unknown Origin

My aim for this section is to demonstrate through the example of the S&L (Savings and Loan) crisis, how the financialization of the US economy really got going under Ronald Reagan's administration during the 1980's. Furthermore, I will make the case that contrary to popular belief, the S&L crisis was not only a failure of the free market, but a result of misguided government policies that encouraged unproductive speculation. To me, this crisis demonstrates that Neoliberalism is hardly as devoted to the free market as it is often portrayed.

The Federally insured savings and loan system was established in the early 1930's to promote the construction of housing during the Depression and in order to protect banks against the kind of panic that followed the stock market crash of 1929. The Federal Home Loan Bank Act of 1932 led to the establishment of the Federal Home Loan Bank Board (FHLBB), an institution tasked with creating a reserve credit system in order to provide mortgage money for home financing and to oversee federally chartered savings and loans. The second main building block of the modern savings and loan industry was established with the national Housing Act of 1934, which created the Federal Savings and Loan Insurance Corporation (FSLIC) to insure S&L deposits. The FSLIC, under the jurisdiction of the FHLBB, was tasked with providing federal insurance on savings and loan deposits. In exchange for this federal protection, these banks were regulated geographically and in terms of the types of loans they could offer. The 1960's however, brought a gradual loosening of these restraints, as their geographic reach was extended and their lending power somewhat expanded. By and large though, this did not significantly alter their status in terms of protection and regulation.

However, during the 1970's a number of economic factors would intertwine in a way that radically altered the fortunes of the savings and loan industry and consequently the regulatory parameters it would come to operate under. These banks had issued hundreds of billions of dollars of thirty-year fixed-rate loans (often at 6%), but they were barred from offering adjustable rate mortgages (ARMs). The profitability of these banks therefore declined rapidly when interest rates rose and by the mid-1970s the industry was insolvent on a market-value basis. With inflation running at 13.3% by 1979 and

with these banks being restricted from paying more than 5.5% interest, the industry could not attract new money. When Paul Volcker launched his crusade on inflation in the late 1970's, interest rates soared to their highest level in a century. By 1982, the industry was insolvent by \$150 billion on a market-value basis.

Now, policymakers had been discussing the prospect of easing the regulatory burden on these banks since the early 1970s. However, it was not until the Reagan administration got into office, that this deregulatory fervor really got under way. Much as in Chile, policymakers armed with Friedman's neoliberal policy prescriptions, argued that the banking industry had been hampered by burdensome government regulations and that the only viable solution was to turn the industry over to the self-regulating mechanisms of the free market. In 1980 the "Depository Institutions Deregulation and Monetary Control Act (DIDMCA)", which was signed into law by then president Carter, began that process by removing restrictions on interest rates paid by S&L's. Important to note here though, this deregulatory move intended to bolster free market competition was accompanied by a step in the complete opposite direction. Namely, the strengthening of the federal protection accorded to these institutions by increasing the FSLIC insurance from a limit of \$40000 to \$100000 per deposit. This selective interpretation of "Free enterprise" with deregulation on the one hand, coupled with increased government protection on the other would lay the foundation for serious moral hazard in the industry.

That being said, the first round of deregulation failed to get the industry going again. Subsequently Congress followed up with another round in 1982, when under the "Garn-St. Germain Depository Institutions Act", the phase-out of interest rates ceilings was accelerated. More importantly however, was the dramatic increase in thrift investment powers; they were now authorized to issue consumer loans, up to a total of 30% of their assets; make commercial and corporate loans; and invest in nonresidential real estate up to a total of 40% of their assets. Furthermore, the act allowed thrifts to provide 100% financing without any down payment from the borrower (Calavita 1997, pp.10-14). Just a year earlier, the commercial real estate industry had helped push through congress the gigantic 1981 tax cuts and had reaped a stupendous reward; namely, the granting of a very quick (10 years) tax depreciation on office, hotel and other buildings which ordinarily had a useful lifespan of 30 to 50 years. It should come as no surprise that the combination of relaxed lending standards and expanded investment outlets, as well as a newly tax-incentivized real estate industry, led to a boom in commercial building as soon as the economy emerged from the Volcker-induced recession. Thrifts were now heavily involved in this lending (Stockman, 2013, pp. 416-417). In 1982, the requirement that thrifts

have at least 400 stockholders and that no one stockholder could own more than 25% of the stocks was also eliminated. This made it possible for a single entrepreneur to own and operate a federally insured bank, tasked with real estate mortgage lending. Deregulation was thus aggressively pursued on all fronts simultaneously. The process was further accelerated by virtue of the fact that federal and state regulatory agencies often coexisted and overlapped. The system was one characterized by a dual mandate, wherein state-chartered thrifts could be insured by the FSLIC. As standards were loosened on the federal level, state agencies were compelled to do the same or risk defunding. The California department of savings and loans (CDSL) is an illustrative example. Beginning in 1975 the CDSL had been staffed by strict regulators, with little tolerance for deviation. However, when the federal regulations began to be relaxed in 1980, thrifts overwhelmingly switched over to federal charters. This exodus resulted in the CDSL losing more than half of its funding and staff. The agency thus learned the hard way that if it were to survive, and if state politicians would continue to have access to the thrift industry's lobbying dollars, it had to loosen up.

By 1984, the deregulation of thrifts was all but complete, as they had gained greatly enhanced investment powers as well as more flexibility in terms of setting interest rates. However, as this was coupled with greatly enhanced federal deposit insurance protection, the moral hazard arising from deregulation would soon prove to be significant. Deregulation thus sunk thrifts deeper into debt, as they were competing for riskier deposits, but also opened up the system to pervasive and systemic fraud. As federally insured deposits flowed into the thrifts, whose investment powers were now greatly enhanced, in combination with a lot of new (often questionable) owners flocking to the industry, the seeds of a catastrophe had been sown. One of these was Erwin "Erv" Hansen, who in 1980 acquired the "Centennial Savings and Loan" in northern California. Traditionally, a conservative thrift bank with a net worth of \$1.87 million, Hansen immediately took steps to increase the company's access to credit and leverage. In order to do this, he used what was referred to as "land flips", essentially sales and resales of land between associates in order to artificially inflate the market value of the land in question. Hansen and his wealthy high-financier friend, Sid Shah, used this technique with some regularity for mutual advantage. During one of these episodes in the early 1980's, they bought and sold one property, initially worth \$50,000 back and forth to each other, until it reached a market value of \$487,000 or an almost 1000% increase, whereupon they received a loan based on this inflated collateral value. Then in 1983, Centennial made use of this newly acquired credit, by initiating a leveraged buyout of the Piombo Corporation, a California construction company. Almost overnight, the tiny

Centennial thrift had become a development conglomerate. To maximize profits, Hansen had to get around the restrictions put in place against loaning money to one's own development company. Some creative financing tricks would come in handy here, as Hansen received loans from other California thrifts while he reciprocated by loaning them money for their projects. A trio of local journalists; Stephen Pizzo, Mary Fricker and Paul Muolo, fittingly described what was going on in the Californian thrift industry "Immediately money began to flow like artesian spring water among the main players". Centennial's collapse would cost the FSLIC and consequently the taxpayers \$160 million. (Calavita, 1997, pp.23-25).

The problems started to become apparent in 1984, when Continental Illinois became the first case of a "too big to fail" banking crisis. Like many other banks at the time, Continental had by the mid 1970's started to implement a growth strategy of commercial lending, which by 1981, it had soundly accomplished. The bank had become the largest commercial and industrial lender in the United States, and its total assets had grown precipitously from \$21.5 billion to \$45 billion. However, the bank's loan to assets ratio also grew, increasing from 57.9% in 1975 to 68.8% in 1981. This alone makes a bank more vulnerable to the risk of default, however that was not all. Continental had made some very risky bets, among them a \$1 billion purchase of CDO's (corporate debt obligations) from another bank, Penn Square Bank, NA., in Oklahoma. This bank in its turn had accumulated a number of extremely speculative oil and gas exploration loans. In 1982, Penn Square failed and had to be bailed out by the FDIC. When the news of Continental's exposure to Penn Square securities became known, it caused a dramatic 62% drop in the company's share price and several downgrades of its debt by a range of rating agencies. Importantly, Continental relied extensively on CD's (Certificate of deposits) in the eurodollar interbank market. However, the downgrade of its debt and a shattered public perception meant the bank's funding costs rose significantly. During the first half of 1983, continental's share price recovered somewhat, but the bank's internal integrity continued to deteriorate, with nonperforming loans mounting and an increasing number of investors jumping ship. The floodgates broke in 1984 when a classical bank run occurred, with depositors scrambling to get their money out. Because Continental had borrowed substantially in the interbank lending market, the bank run on Continental was deemed to be of systemic risk and thus prompted a bailout by the FDIC, which provided the first capital injection of \$2 billion. Subsequently, the Federal Reserve would guarantee further liquidity through the interbank market, and an additional \$5.3 billion from a group of other US banks were injected. Controversially, the FDIC also made it clear that it would stand behind and protect any and all

depositors at Continental, regardless of the official \$100,000 limit on deposit insurance (Lee Davison, 1995, pp.236-243).

By 1987, insolvencies were growing exponentially month by month and the FDLIC itself went bankrupt. The Reagan administration's response was a bailout of the FDLIC, through a \$10.8 billion recapitalization injection in August 1987. The total estimated cost of cleaning up the S&L mess is estimated at a \$147 billion. A number of reasons for the crisis have been presented, the interest rate crisis of the 1970's, where fixed interests rates were lower than the inflation rate at the time was obviously an important factor. It tossed the thrift industry into a tailspin – where the search for yield – coupled with the Reagan administration's deregulatory agenda, soon led to a massive increase, not in the collateral or the underlying value of the thrift's assets holding up all the debt, but in leverage and credit based on artificial inflation of asset values (much of the same dynamic we observed in the section on the Japanese real estate and stock market bubble). Large parts of the industry was thus gambling for resurrection in the real estate and stock market as the previously mentioned "land flipping" deals exemplifies. Coupled with this, was the government guarantee backing depositors and thrift institutions through the FSLIC insurance. In other words, there was a significant amount of moral hazard embedded in the system, and banks would get that confirmed when the Reagan administration bailed a number of them out at the taxpayers expense in the late 80's (Calavita, 1997, pp. 30-33).

In other words, this was a failure of both the private and public sector. It was rooted in misguided government policy, implemented by politicians bought and paid for by special interest. Former FHLBB chairman, Edwin Gray stated that, and I quote; "As bad as the financial crisis – that is to say, the 'thrift crisis' – is... the real issues are far less 'financial' than they are 'political'. The thrift crisis is, and has been from the beginning, a political crisis". During the critical period between 1983 and 1988, S&L institutions decidedly influenced the policy-making process through some 160+ PACs (Political Action committees) with the sole purpose of easing regulatory requirements and expand the opportunity to pursue high risk, high yield avenues of growth. These PACs poured some \$4.5 million into house and senate campaigns, with more than \$1 million channeled to members of the house and senate banking committees. In fact, as the thrift institutions debt problems ballooned, more and more money was being funneled to Washington D.C. (Calavita, 1997, pp. 86-88).

The S&L crisis thus illustrates the confluence of several causal factors. As with the inflating of the Japanese asset bubble, we see the expansion of debt and leverage leading up to a bust, which in

combination with the moral hazard aspect of government mortgage guarantees and ultimately bailouts, led to excessive risk taking in a collateral starved market, in the search for higher yield. Furthermore, there is the important political connection, where thrift industry leaders, actively lobbied house and senate members in order to promote a deregulatory agenda. An agenda, which at the time, had a great deal of sympathy within the Reagan administration.

5.2 Connecting the Dots – The Link between Nixon's Folly and the Rise of Securitization:

I believe we have illuminated an important causal chain of events here. The great inflation of the 1970's put Thrift banks in a significant choke, as they had issued a significant amount of fixed rate mortgages. The rapidly increasing inflation meant that these banks were at the time experiencing heavy losses on their loan portfolios. As Paul Volcker frenetically raised interest rates in order to stoke the inflationary fire during the 70's and 80's, thrifts were thus hit with a double whammy. As we know, the federal funds rate is the rate at which banks can borrow from the Federal Reserve and subsequently it determines the cost of interbank lending. The solution presented as a way out of this mess was the deregulation, which really got going in the early 1980's under the Reagan administration. This would allow Thrifts more freedom in terms of setting interest rates, expand their avenues in terms of commercial lending and open the industry up to new owners (often with a questionable reputation as we've seen). Important for the reader to understand, these policies had broad bipartisan support at the time. The first major piece of legislation enacted under Reagan as far as deregulation of the Thrift industry goes — the "Garn-St. Germain Depository Institutions Act" (hereafter GSGDI act) — is named after the bills two co-sponsors, one democrat and one republican respectively, and it passed with an overwhelming 272-91 vote count in the house.

An important part of this story was the greatly expanded leverage that thrifts were now able to operate under, on the basis of significantly reduced capital requirements and an expansion of their investment powers. We also know that this deregulation of the industry was the neoliberal response to the inflationary crisis that squeezed thrift's profit margins during the 1970's and beginning of the 1980's. In other words, the passage of the GSGDI act was a response to problems already building in the financial system in the aftermath of the repudiation of sound money at Camp David in 1971 and the inflation that

followed (Stockman, 2013, pp.404-405). This led to the deterioration of the balance sheets of traditional deposit mortgage lenders, who now faced increasing competition from nontraditional lending institutions. A crucial aspect of the changes entailed by the GSGDI act therefore is to be found on a closer examination of the second category of reforms introduced. Namely the reforms that relates to changes in the sources and uses of funds by traditional depository institutions. Importantly for our purposes, the major change in the source of funding for depository institutions introduced by the GSGDI act, was the authorization of money market deposit accounts, that is, accounts that are fully competitive with shares issued by money market mutual funds (Cornett & Tehranian, 1990, pp. 98-99). Money market mutual funds saw the light of day in 1971 (hardly a coincidence as we shall see), and are set up as registered investment companies under the investment act of 1940 (Winthrop Capital Management, 2012). Originally, money market mutual funds were offered outside of the banking industry, and so did not fall under Regulation Q, which was introduced in conjunction with the Glass Steagall act of 1933. As we know, the Glass Steagall act separated commercial banking activities from the speculative business of investment banking. Regulation Q was an important part of this, as it introduced interest rate ceilings on bank deposits, which was done in order to discourage banks from overextending their loan books and then finance them with deposits obtained from their competitors by chasing interest rates higher. This was deeply offensive to free marketers, but senator Glass had the foresight necessary to understand that competitive efficiency had to be sacrificed at the altar of banking safety, given the moral hazard implicit in deposit insurance protection and fractional reserve banking. That being said, the inflation that followed in the aftermath of Nixon's reelection and which prompted him to go off the gold standard in 1971 had an unintended consequence with respect to regulation Q; respectively, a flight out the banking system into unregulated money market funds that could invest in assets such as high grade commercial paper and treasury bills (treasuries with shorter maturities), and thereby offer higher yields. At the same time, the soaring inflation put a massive squeeze on the commercial banking system (hereunder thrift institutions) as it caused massive mark-to-market losses on their fixed assets, mainly mortgages and treasury bonds, which have longer maturities than treasury bills and therefore lower yield (Stockman, 2013, pp.177-179).

I would like to summarize this as it is important with respect to what we are about to dive into. As a result of the great inflation and the squeeze it put on thrifts; the GSGDI act was passed in 1983 as a way for commercial banks to effectively evade Regulation Q. Banks were now permitted to establish money market accounts as FDIC-insured alternatives to money market mutual funds, which helped

stem the deposit outflows from banks into money market mutual funds. Two points here. First, as I alluded to previously, it is hardly a coincidence that the first money market mutual fund came into existence in 1971, the same year that Nixon took the US off the gold standard. Remember what we discussed previously; the US was now running large trade deficits and settling these transactions in credit. Consequently, money market mutual funds were established as a response to the rapidly growing need for the US treasury to sell its debt at auctions. As foreigners; Japan chief among them at first, started to park their savings into US treasuries and interest rates started their precipitous decline. Second, in order for the reader to understand why these money market mutual funds were able to offer a higher yield than the traditional depository institutions, and why subsequently banks and politicians started to push for deregulation we need to take a look at another part of this story.

The falling interest rates were namely also being assisted by the parallel explosion in newly created high yielding securitization products. Products, which could be placed on the balance sheets of banks and other investors as assets and then used as collateral to fund even more credit. Credit which subsequently found its way back to the lucrative US treasury market.

The advent of securitization therefore was a key pivot as far as the ability of banks and other financial institutions to expand leverage in the aftermath of the break with sound money. As we shall see however, this was only the beginning. In the United States, the securitization process started at a relatively small scale, when Government sponsored enterprises (Such as Ginnie Mae and Freddie Mac) began issuing securities backed by residential mortgage pools (MBS or Mortgage backed securities). In the beginning, the market was relatively small as only GSE's issued this paper and the requirements were relatively stringent. Only "conforming" mortgages – in other words, loans to borrowers with good credit (FICO) scores were eligible for securitization. However, starting in the 1980's, the market for GSE paper started expanding exponentially, to the point whereby the early 2000's it had overtaken the market for US treasuries, to become the single largest debt market in the US (Chernenko, 2013, pp. 5-6). However, this process got a lot more sinister as the financialization of the US economy really got going, especially during the 1990's. The GSGDI act and the S&L crisis that followed was only the beginning.

What is readily apparent therefore, is that Nixon's decision to abandon the Bretton Woods agreement in 1971, inaugurated a remarkable global surplus recycling mechanism with positive feedback mechanisms for the US government, the wealthy and the big corporations. The US was now absorbing

a large part of the world's industrial surplus goods while US financial institutions would administer the foreign capital flowing into the US in three ways. First, it provided credit to American consumers (whose wages stagnated in the process). Second, it channeled direct investments into US corporations (whose enormous profits were largely channeled back into this system in order to boost stock prices and dividends, rather than being spent in the real economy). And thirdly it funded the purchases of treasury bills (essentially funding US government deficits). The rise of securitization was an important part of this story and one which we will get back to once we have established the proper context. We are about to venture into the shadows, where the core dynamic of financialization has played itself out.

6.0. Into the Shadows – The Evolution of Wholesale Banking:

"At this juncture, however, the impact on the broader economy and financial markets of the problems in the subprime market seems likely to be contained" - Chairman Ben Bernanke, Testimony to US

Congress March 28. 2007

"I and others were mistaken early on in saying that the subprime crisis would be contained. The causal relationship between the housing problem and the broad financial system was very complex and difficult to predict" - Chairman Ben Bernanke, New Yorker Magazine Interview December 1. 2007

When the mainstream media and politicians try to explain to the public why and how the financial crisis of 2008 transpired, the usual explanations presented centers around the problems originating in the US subprime mortgage market. The defaults happening here they claim, was a result of fraudulent lending practices by banks. Furthermore, they often cite the collapse of Lehman Brothers in 2008 as heralding the starting point of the crisis. The proposition voiced by many, was and still is, that had only Lehman Brothers been bailed out, the crisis would have been significantly less contagious and the panic could have been avoided. I find these accounts of the crisis deeply intellectually unsatisfying. First of all, very little is usually said about how defaults in one particular segment of the US housing market could have such rapid and widespread global effects, and how that transmission mechanism actually worked. The topic of shadow banking and derivatives was briefly brought up right after the crisis, but was never really described or discussed (at least in public forums) and quickly died down. Part of this may have to do with the complexity of the issue, but the important point is that this shadow

banking system did not just arise out of nothing. There must have been a systemic process leading up to its birth and subsequent explosive growth, which allowed it to have such devastating effects when it began to unravel. Furthermore, this evolution must have been either overseen and accepted by our elected officials, or alternatively, poorly understood by them. Second, I cannot recall of or name a single banker who went to jail in the aftermath of the crisis. What that tells me (if we assume a functioning criminal justice system), is that the practices they were engaged in, although certainly immoral, were probably not technically illegal. In other words, any account of the criminal aspect of the crisis must look at the incentives and regulatory framework the banks and other financial institutions were operating under at the time. Third, the quotes by Ben Bernanke at the start of this chapter tells us something important. Namely, that those operating and overseeing monetary policy at the time were completely unable to comprehend what was going on, nor the consequences it would have. The problems didn't start with the collapse of Lehman Brothers. It started on August 9th 2007, a full year before the collapse of the US investment bank, when liquidity or the interbank lending market started to completely freeze up on a global scale.

Why and how could this happen, and how has this market assumed an importance of this magnitude? Furthermore, the fact that the problems were felt so acutely by Northern Rock, a British bank, a full year before the collapse of Lehman, tells us that whatever was going on in the interbank lending market was global in nature at the very outset. This is corroborated by the fact that in 2008, while the problems were piling up, the largest beneficiaries of the Federal Reserve's emergency loans were not American banks, but European ones. Through the use of an interbank transfer called a foreign central bank liquidity swap, the Federal Reserve lent almost \$600 billion to troubled European central banks who used them to recapitalize their own domestic banking systems. These swap lines were reopened again in 2011 during the Eurozone crisis and an additional \$109 billion were injected (Fowler, 2014, pp. 827-829). In other words, the problem quickly turned global due to a severe liquidity crunch among not just US banks, but European banks as well. What was going on? To get at this, we need to dive deeper into what was going on on the inside of the financial system leading up to the crisis.

6.1. Bank Balance Sheet Expansion - The Peculiar role of the REPO-Market and Greenspan's Faux Prosperity:

What we really need to get at here is the development within the interbank system. In order to illuminate this path, we need to return to the evolution of monetary policy. In a series of articles during the 1970's, Milton Friedman demonstrated that fully \$30 billion of new money supply had been generated within the US economy by the end of the 1960's. Then, during the 1970's all of the money supply targets started to break down rapidly, prompting several economists to investigate what was actually going on. One of them, Steven Goldfell, concluded that traditional mechanics like M1 were off by significant amounts and recommended a shift in monetary base targeting, but stopped short of providing an explanation of what was actually causing this shift. What was apparent was that something else was satisfying the economic demand for money. In 1974, the Federal Reserve finally started to wake up to the fact that their own measure of the money supply was no longer accurate.

Now, recall what we learned in the section about the functioning of the modern banking system; namely that modern banks create 97% of the money supply when they extend credit. Furthermore, as we learned in the section about the transition to a credit-driven economy in the aftermath of Nixon closing the gold window; banks were now no longer constrained by the gold standard and the only thing standing in the way of credit creation therefore was the demand for loans and the equity/collateral backing this demand. Importantly, as we briefly touched upon at the end of the previous section, during the 70's, money market mutual funds became increasingly attractive to both domestic and foreign banks and the ability to invest in these was one of the opportunities provided by the GSGDI act.

We therefore now know that the problems with forecasting and determining the money supply were a result of something going on in the interbank market, which must have allowed it to expand the monetary aggregates above and beyond what the Fed expected or was able to control. Where to go from here? We need to start by looking at REPO (repurchase) agreements, which is one of the key transactions that banks began to undertake in the interbank market. In the beginning of the 1970's, the Fed was reluctant to treat this as a monetary phenomenon, as there was no agreed upon definition of what a repurchase agreement actually was. In the traditional definition, a REPO is a sale and subsequent buyback of a security (usually the next day), where the borrower's security functions as the

collateral backing the transaction. Essentially, it is a way for banks to obtain short-term funding. So what motivation would a bank have for doing this? During an investigation into the matter in 1979, the Federal bank of New York found that the way banks were actually conducting these transactions, was that they would deposit assets into an account in order to obtain REPO funding (which went into a new overnight account). They would then use the REPO account to conduct monetary transactions. In other words, they would write checks against the REPO account even though the funds were segregated outside the traditional definition of a deposit. The investigation concluded that a substantial part of the missing money was explained by these interbank REPO transactions in the money market funds. Essentially, banks were using the temporally expanded liability side to issue new loans and thereby expand the money supply. What we are starting to witness then, is a radical monetary revolution away from deposits of dollars toward the more ill-defined and sinister interbank lending market (Forssbæck & Oxelheim, 2003, pp. 106-107).

A story to illustrate this point is perhaps fitting here. It begins with Paul Mozer, the CEO of Salomon Brothers, a US investment bank. In the early 1990s, Mozer was bidding in excess on US treasury and MBS paper during auctions. In fact, he was not only bidding in excess of the asking price, but was trying to buy whole auctions of treasury paper. There was no apparent reason at the time for why he might do so. After awhile, the treasury department noticed what Mozer was doing and called him up, explicitly telling him to knock it off. Yet a week after that phone call, Mozer did it again. This led to the treasury creating the 35% rule (no single bidder can buy more than 35% of the auction). Still, even after the warnings and an explicit rule being instated, Mozer kept bidding for more treasuries at auctions. In 1991, the government had finally had enough and threatened to suspend Salomon Brothers from the auction process. That led to Warren Buffet (the largest investor) taking over the company in 1991.

Why was Mozer so intent on acquiring more treasury paper? From the outside it seemed illogical, as the company wasn't making a whole lot of money from the paper itself. Ultimately it led to a joint government investigation into the matter in 1992, to try to figure out what was actually going on. Their mandate was to preserve the integrity of the auction process. After sampling 98 dealers, what they found was that all of them were overbidding for government paper at auctions. With regards to MBS paper, many dealers were even maintaining two separate sets of books so they could do this. What was going on here? Why were all these investors going to such great lengths to obtain auction on-the-run securities, often in flagrant violation of the rules? Even in the government report it wasn't entirely clear.

Recall what we uncovered previously about the role of the REPO market. Banks were using the funds obtained in the REPO market for their own purposes on the liability side. Essentially it had become an integral part of the interbank funding mechanism. However, because REPO is essentially a collateralized loan, this meant that collateral was now in high demand among banks. Therefore, when the US government issues an on-the-run security, this is the most pristine and low risk collateral out there. Obtaining access to this collateral in order to fund the REPO transactions had therefore become so crucial, that dealers were willing to take on the extra risk in order to get their hands on it. Perhaps the strongest law in the universe is the greed of bankers, so it seems obvious that they wouldn't do something like this unless there is some kind of return on it. Their intention therefore must necessarily have involved some kind of multiplier effect or ability to create greater leverage. In order to get at this we need to look at the concept of Rehypothecation. While Hypothecation refers to the practice of pledging collateral in the purchase of a security. By extension, rehypothecation necessarily involves the multiplication of securities in REPO transactions. <u>In other words</u>, if a bank holds a security in its inventory it can lend this security out to another bank at the same time as it uses it, and not just to one bank, but to multiple banks. This means that the collateral which is used to obtain REPO funds, is pledged not just once, but multiple times by multiple actors (Deryugina, 2009, p. 256). We see here the first contours of a development wherein collateral starts morphing into something in itself currencylike.

In essence, the interbank system – through the rehypothecation of securities – was now creating, as well as exponentially growing the collateral necessary to obtain funding in the REPO market, while this credit was being used by banks to expand their liability side and thus issue even more credit. It goes without saying that as this process takes hold, the underlying system is at risk here. If there is ever a default among one of the big players, there is not really collateral in the system to backstop all the transactions that has occurred. Essentially a run on collateral follows and this is what happened in 2007, as these banks had rehypothecated not just treasury securities, but also Mortgage backed securities (MBS). MBS paper therefore took on enormous proportions in the REPO market. Although 2007 was a watermark event in this regard, already in the 1990's, one could begin to see the potentially destructive effects of this system on a smaller scale.

As we get to the 1990's, Alan Greenspan had been appointed new Fed Chairman by Ronald Reagan back in 1987 and President Bill Clinton had emerged victorious in the 1992 presidential election. This decade is often described as the "Great Moderation", as inflation (the CPI measure of it at least) had

been brought under control and economic growth was accelerating. We know that much of this purported growth was to a considerable extent being driven by an epic stock market bubble in the technology sector, largely abetted by the infamous "Greenspan Put", a term used to describe his operating approach in terms of monetary policy; Where he would lower the federal funds rate whenever the stock market entered correction territory, thus showering Wall Street speculators with additional liquidity in order to keep asset prices from falling. Greenspan was by many hailed as the "Maestro" and a genius, for having successfully revamped US monetary policy.

A closer look at the famous Speech Greenspan gave in 1996 confirms that something else was going on. The speech is most well known for the phrase "Irrational Exuberance", referring to the skyrocketing asset prices seen at the time. However, what Greenspan was really talking about was the topic of missing money. What he said was that the connection between money demand and the money supply had gotten to the point where the Federal Reserve could no longer predict either side of the monetary equation. The asset price inflation was thus a symptom of what we talked about earlier, namely what was going on within the wholesale banking sector. It is thus hardly a coincidence that the Fed started to target the federal funds target rate (FFTR) instead of the money supply. It was a tacit admission that they had lost control of what was going on within the financial system. So how would the Fed determine where to set the FFTR? Based on Friedman's work, that inflation is always and everywhere a monetary phenomenon, the Fed would assume that monetary policy was effective as long as inflation stayed low or within their target range (between 1.7 and 2%, above 2% would warrant tightening). (Jeffrey Snider, 2018 Transcript).

Let us briefly pause here and hark back to our previous discoveries. Inflation as measured by the CPI came down dramatically during the 80's, much owing to the fact that the East Asian export nations were now supplying Americans with cheap consumer goods. As we also learned, this trade was now settled in credit, credit which was then recycled back into the US bond and stock market. There is every reason to believe that the Fed's inflation targeting was heavily skewed by this development. In other words, when Greenspan cut the FFTR under the assumption that inflation was "well behaved" he simply further enabled and abetted the upward momentum of asset prices that served to shower the richest Americans – who hold most of the financial assets – with outsized windfalls (Stockman, 2013, pp. 484-485). What we can draw from this is that Greenspan was no maestro or genius. He happened to occupy the Chairman seat at the Federal Reserve during a time when the financial system started to expand completely detached from the real economy. By extension, Bill Clinton's reputation as some

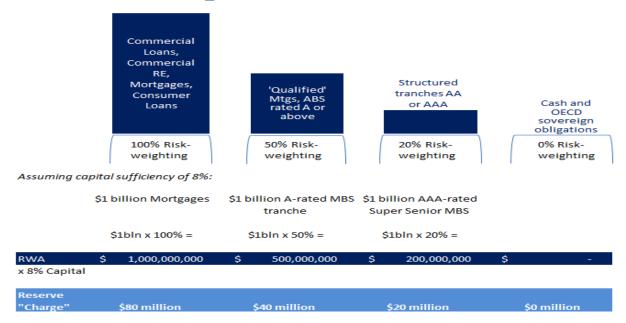
sort of economic genius is also decidedly undeserved. They were both relying on faux prosperity funded by the money that according to Greenspan was purportedly missing. The money wasn't really missing though, but the economy was relying on new forms of it to meet economic and financial needs. During the 90's, this system became even more weird and arcane, with increasingly destructive consequences eventually making themselves apparent.

6.2. Digging Deeper – The Incentives Provided by the Basel I Accord:

Let's get slightly more technical here. We need to take a closer look at what was established during the Basel I accord in 1988. Banking regulation had up to that point been mostly focused on the liability side. In other words, how much vault cash did banks have on hand to meet a potential run by depositors. As we have already established though, by the 1980's, officials found it increasingly difficult to even define money. So what good was it to have a regulatory regime only focused on the monetary side of the equation? Accordingly, the Basel I accord shifted the focus over to the asset side of bank's balance sheets. What regulators decided to do was to carve up bank balance sheets into 4 socalled "risk buckets" (see chart 12). Consequently, regular commercial loans would receive a 100% risk weighting, while qualified mortgages (hereunder A rated MBS paper) would receive a 50% risk weighting. The risk weighting was applied to setting the capital ratio, which under the original Basel rules was set to 8%. In other words, if a bank had \$1 billion in regular unqualified mortgages, that would mean a capital requirement of \$80 million. However, that same \$1 billion invested in A-rated MBS paper, would fall into the 50% risk bucket, and therefore go on the balance sheet as only \$500 million in risk-weighted assets. Under the same 8% capital requirement therefore, a bank would only need \$40 million in capital. However, claims and guarantees provided by "qualified banks and entities" (mostly GSE's) could enable banks to move their assets into an even lower 20% risk bucket and thereby lower their capital requirement even further – down to \$20 million – assuming the same \$1 billion mortgage pool. Lastly, Sovereign obligations (Treasury bonds), usually deemed as the safest investments (a government can never default right?), Would receive a 0% risk weighting. This highlights the incentives Paul Mozer and other dealers were operating under when they were overbidding for US treasuries. Namely risk free collateral, which could be used in the REPO market and rehypothecated in order to conjure even more money out of thin air.

Chart 12: Risk weighting Basel I:

According To Basel Accords



Source: Jeffrey Snider, Alhambra Investment Partners. Chart-book available at Macrovoices.com

The moral hazard inherent in this regulatory structure should be readily apparent. Banks now had an incentive to manipulate their accounting system in accordance with this risk bucket approach laid down by Basel I, to further reduce their capital requirements. It's important to understand what we're talking about here. It's essentially a multiplier effect of leverage; that banks could now have the same capital ratio, but be at completely different amounts of leverage, granted to them by investing in securities which risk was poorly understood. We are now within the realm of bank balance sheet construction. Banks were here essentially incentivized towards being able to themselves define the characteristics that would allow them to shift assets between the different risk buckets. Doing so would effectively allow them to reduce their capital ratio and thereby expand their leverage.

In order to get this going, and be able to move their assets into lower risk buckets, banks needed to be able to define quantitatively the characteristics of these assets. Moving assets into the lower risk buckets, weren't necessarily straightforward, as many of the assets in question were illiquid. In other words, their risk was not easily quantifiable. What we're getting at here, when we talk about better defined assets on bank balance sheets; we're talking about derivatives; as a way for banks to move risk off of their balance sheets. A financial derivative is an instrument which value derives from the price of

a different underlying financial entity. It's essentially a way to hedge against risk, where the party who issues the derivative agrees to bear the cost of a future adverse price movement for the buyer of that derivative, who in turn pays a fee or "spread" ((IMF.org). Historically, these instruments go back a long way and "futures contracts" have been used by for instance farmers, to protect themselves against a fall in crop prices. This part of the derivatives market is in the US organized as exchanges, the oldest of which is the Chicago Board of Trade, where futures and options are traded. Importantly, this market is regulated by the "Commodity Futures Trading Commission" (CFTC), through the "Commodity Exchange Act" of 1936. In the 1980's however, a new type of derivative called a "swap" was developed. Participants in these agreements, as with the futures trade, entered into an agreement about future payment depending on price movements, only that these derivatives were based on financial instruments (currencies, credit and interest rates), not commodities. Unlike futures, these derivatives were traded on an over-the-counter (OTC) basis between private investors.

In the 1990's these types of derivatives started to proliferate. Between 1994 and 1997, the notional value of these OTC contracts tripled, to the point where they totaled an astonishing \$28.7 trillion (Citizen.org). Importantly, in 1994, after a series of high profile scandals related to this trading, the US General Accounting Office issued a report warning about the concentration in the OTC market among 15 major dealers and the associated risks it posed to market liquidity and the stability of the financial system (Stanford.Edu. p.46-47). Adoption of any regulatory oversight of this market was prevented however, as it was fought viciously by OTC dealers, as well as the "Maestro" himself-Alan Greenspanwho found "regulation of derivatives privately negotiated by professionals, unnecessary" (Stanford. Edu. p.46-47). An ominous warning of the toxic concoction that was now brewing in the US financial markets came with the collapse of Long Term Capital Management (LTCM) in 1998. LTCM was founded by John Meriwether, a former bond arbitrage trader at "Salomon Brothers". After the Treasury auction scandal referenced earlier, he left the firm along with a group of traders to start on his own. At first, LTCM profited handsomely from arbitrage trading in the bond market (essentially betting on the interest rate spread between newly issued and off-the-run securities). However, because arbitrage profit is so small, leverage must be used to generate substantial profits. In the case of LTCM, that was done to the extreme. By borrowing in the REPO-market, using its (mostly borrowed) assets as collateral, LTCM managed to amass \$125 billions worth of securities, piled on top of an equity capital of \$4.8 billion. Its leverage ratio was thus an astonishing 25:1. Nevertheless, this was only the official balance sheet leverage. LTCM had also issued OTC derivatives, so-called interest rate swaps, of a notional

value of \$1.25 trillion. When the Russian Federation defaulted on its debt in 1998, the swap spreads increased dramatically because of the perceived heightened risk to government solvency, and consequently LTCM took massive losses to its portfolio. A liquidation of the fund, would have forced the numerous Wall Street investors to take a haircut. Instead of letting the firm go bankrupt however, Alan Greenspan and the federal reserve opted to keep the party on Wall Street going, by organizing a \$3.6 billion bailout (Philippe Jorion, 2000, pp. 4-7).

The saying "Privatize the profits, socialize the losses" seems apt here. Purportedly a champion of free and unregulated financial markets – Alan Greenspan – who had fought tooth and nail to prevent regulation of OTC derivatives; was now facing the choice of letting the free market actually work, or keep blowing air into the gigantic asset bubble that was brewing on his watch. He chose the latter. The implications of this would prove to be extremely destructive. Rather than serving as a cautionary tale, banks and other hedge funds looked at LTCM and saw that immense profits could be made by gambling in the derivatives market. If by any chance something went wrong, the Fed would provide a liquidity backstop.

6.3. The Role of OTC Derivatives in Bank Balance Sheet Construction Unveiled:

In order to provide the reader with a better understanding of how these derivatives actually worked and could be used to manipulate the risk buckets (as per the Basel I regulatory framework), I believe we need to take a closer look at this process through a more practical example. Below, I attempt to provide the reader with a description of how the interbank market started to function during the 90's and how the wholesale expansion of credit essentially began to take on a life of its own. The chart on the beginning of the next page is an attempt to illustrate how individual banks operated, what their motivations for doing so were and the effect it ultimately had on the wider economy, as this process of manipulating capital requirements began to take hold. These charts are obviously not drawn to scale, as they are an attempt to illustrate how the actual process worked.

Chart 13: Interbank lending market and Balance Sheet Expansion Under Basel I Rules:

BASIC INTERBANK FUNCTION - Basel 'Conjuring'

FIGURE 1-3



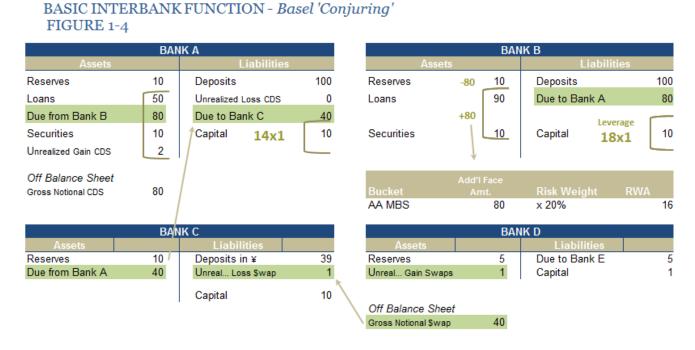
9.25%

40 10

Source: Jeffrey Snider. Alhambra Investment Partners. Chart-Book available at Macrovoices.com

As I alluded to earlier, one way banks could put their assets into a lower risk bucket was to use "qualified counterparties" to issue guarantees and claims that made what was otherwise risky assets appear like less risky assets. <u>Importantly for our purposes</u>, a qualifying central counterparty (QCCP) is an entity (a bank) that is licensed to operate as a CCP by the appropriate regulator with respects to the products offered, hereunder derivatives (bis.org). Assume Bank A (a OCCP) here wrote for bank B \$40 in gross notional credit default swaps (CDS) on what is otherwise unqualified mortgages, that would have allowed Bank B to reduce the risk weighting from 100% down to 20% by putting these otherwise unqualified mortgages into the 20% risk bucket. What Bank B does by paying Bank A a premium on the CDS, is economical because it allows Bank B to expand their leverage (from 10:1 to 14:1) while affecting their capital ratio as little as possible. Note that by the traditional accounting rules in place, the gross notional of the CDS doesn't go on the balance sheet of Bank A here. All Bank A is required to report on its balance sheet is the market value of the default swap, not the actual guarantee that goes with it in the event of a default, which for Bank B is substantial. During the 1990's and 2000's CDS's were low risk instruments because from the perspective of Bank A the risk of default was practically zero. They were therefore written with low premiums, because Bank A expected to collect premiums and never have to pay out anything. A lot of what Bank B is doing here in terms of achieving its leverage with high capital ratio is therefore hidden from view. Often in notes of sections of bank A, as these were over the counter (OTC) instruments as we've established (Antczak, Lucas & Fabozzi, 2009, pp 167-170). This becomes more complex as more capital and other players enter the system.

Chart 14: Interbank lending – Basel Conjuring Continued: Source: Jeffrey Snider, Alhambra Investment Partners:



We can assume Bank B was so pleased with the original transaction, that they want to do it again. They therefore go to Bank A for another interbank loan in the REPO market, of an additional \$40. They obviously, once again, want to turn what was risky assets according to Basel regulatory standards into less risky assets. So in this example the \$80 increases their leverage to 18x1, even though the capital ratio only goes down from 10% to 8.62%. Where it gets more complicated however; is where does Bank A get the additional \$40? Assume they get it from Bank C, which for the purposes of this example we'll pretend is either a Japanese Bank or Money market fund. Their \$40 is therefore originally in yen. So how does Bank C get its \$40 to Bank A so that Bank A can forward another \$40 to Bank B, so that

Bank B can then use the additional \$40 to engage in its balance sheet manipulation, where they can have high leverage without affecting the capital ratio significantly? The way this happens in this example, is that Bank C engages in a currency swap with Bank D. As with the previous CDS example, the currency swap doesn't go on the balance sheet of either Bank D or Bank C, it only goes on the balance sheet in both places as the market value of those derivatives. So bank D which might not have either the dollars or the capital has engaged in an off balance sheet arrangement with Bank C, so that Bank C can turn yen into dollars which it can then lend to Bank A, so that Bank A can lend to Bank B, while simultaneously writing a CDS for Bank B, so that Bank B can achieve high leverage with low capital ratio by transforming regular mortgages into A-rated MBS paper and thereby get into a lower risk bucket (Jeffrey Snider, 2018).

I hope the reader through these stylized examples get a sense of how many intertwining dimensions goes into what ultimately boils down to a money multiplication process, where all of these banks are essentially conjuring money out of thin air. A lot of these transactions goes on in the shadows, as they don't even show up on any of the bank's balance sheets. They are therefore not just complicated methods of expanding leverage – they're also potentially catastrophic failure points, in a system that was at the time growing exponentially – completely detached from any sense of purpose beyond generating immense profits to the insiders, and with minimal regulatory oversight. In fact, during the late 1990's and in the early 2000's the few remaining barriers that kept the financial system from going completely off the rails were meticulously removed by the financial industry lobbyists and their political henchmen. On November 12, 1999, with overwhelming bipartisan support from both parties, Bill Clinton signed the "Gramm-Leach-Bliley act" (GLBA). This was the final death knell for "Glass Steagall" which had been adopted in the aftermath of the great depression (Cuaresma, 2002, pp. 497-498).

Citigroup and Goldman Sachs, the latter of which was chaired by Henry Paulson – who would later become secretary of the treasury under Bush and have to deal with the fallout of 2008 – lobbied extensively for the repeal of Glass Steagall, on the assumption that it would make the US financial system more competitive and attractive. However, "GLBA" was sold to the American public as a way for them to get all of their financial services, like life insurance and pension planning, served in a single bank branch. What they were really after wasn't so much that they wanted to sell insurance products in their depository branches to their depository customers though. The commercial banks like Citigroup wanted to free themselves from the shackles of the vertical money multiplier (Central bank \rightarrow bank \rightarrow

Customers deposits), to be better able to manage their own balance sheets as their shadow brethren (investment banks) had been doing up to that point through horizontal (interbank) balance sheet expansion. In other words, they wanted in on this game of expansion and leverage, and the only way to do that was to remove the last legal restriction that prevented the depository institutions from getting into the derivatives market. Then in December, 2000, just before he departed from office, Clinton signed the "Commodity Futures Modernization Act". The working group who had researched and then advocated for the proposal, consisted of among others, Alan Greenspan and Arthur Lewitt, the latter of which was a former policy advisor for Goldman Sachs. The law not only declared OTC derivatives exempt from CFTC or SEC oversight, it also declared all financial derivatives legally enforceable (Stout, 2009, pp.5-6).

6.4. Everything Starts Lining Up – The Deregulation of the 90's and the Proliferation of OTC Derivatives:

The reader might get a sense of where I'm going with this. It all came together in the late 90s and early 2000s. The off balance sheet activities of banks during the early/mid 2000's leading up to the crisis, especially CDS volume, just goes completely parabolic at this point. Shadow banking is an appropriate term here, as so much of this occurred off balance sheet within the confines of the interbank market. Here it was hidden from the view of regulators and politicians who had spent the better part of 3 decades fostering and enabling the development in every which way they could. The role of banking is traditionally to take in deposits (savings) in order to allocate capital to where it's most needed. That concept was completely obliterated, as the system and the players operating within it, became ever more intent on expanding for the sake of expansion. It is no understatement to say that credit, and by extension, the collateral backing up that credit, was effectively being conjured out of thin air by these financial institutions. The economy looked good on the surface in the 1990s (less so in the start of the 2000's) but this was predicated on the fact that US and international banks were effectively creating leverage out of nothing and in the process stoking the fire of a US housing bubble that had begun to take on epic proportions already in 1992, when Bush the elder had signed the "Housing Community and Development Act". Under the rubric of "financial safety and soundness", the two home mortgage companies often referred to as "Fannie Mae and Freddie Mac", were permitted to leverage their

balance sheets to more than 200:1 in the case of guaranteed mortgage pools. Promoting home ownership thus became a bipartisan mantra in Washington D.C. Wall Street welcomed this development and why wouldn't they? The GSE's would now buy their loans, proceed to repackage them into MBS securities, which would then be sold and used as collateral in the REPO market by the very banks issuing the loans in the first place. A scheme even Charles Ponzi himself would be proud of. The bill would ultimately set in motion a pervasive and relentless weakening of underwriting standards that was nothing but financial venom (Stockman, 2013,pp.406-407). That aspect of it, (subprime) has received most of the attention in the aftermath of the crisis that would follow. For our elected officials that is a beneficial way to portray the story; namely that the whole crisis and the problems that has since followed, was simply a result of a bunch of people getting mortgages that shouldn't have gotten them in the first place. It covers over their own role in the story and keeps the public from asking fundamental questions about the relentless degradation occurring within not just the US, but also the world economy, as a result of financialization. The fact that we don't understand what happened is a problem not just for monetary policy, but for everyone having to live with the consequences of a system so inherently contradictory, so fundamentally flawed and ultimately, so thoroughly unjust. I aim to tell a different story.

7.0. The Great Financial Crisis of 2007-2008:

"It is well enough that people of the nation do not understand our banking and monetary system, for if they did, I believe there would be a revolution before tomorrow morning."

-Henry Ford

The global monetary system that had the ability to create its own funding through the mechanisms we uncovered in the previous chapter, broke down in 2007/2008. My aim for this section is as follows. First, I want to describe at a relatively high level of detail why the global monetary system experienced what looks like a permanent dislocation during the financial crisis. Second, although establishment economists and politicians today claim that we are experiencing reflation and an economic upturn, the social and political tensions are perhaps at their highest level seen since the interwar period. This is evidenced by the rise of populism not just in the US, but in Europe and Latin America as well. That

points towards broader systemic consequences now making themselves apparent. Furthermore, it tells us that very little was actually solved by governments and central banks response to the crisis. Banks are perhaps safer, but remain too big to fail (or jail), Inequality is still off the charts, OTC derivatives are still legal and growing in volume and global debt as a percentage of GDP is at the highest level ever recorded. In fact, that debt growth is what has made an anemic recovery possible. Essentially, we are stealing from the future by pulling demand forward, while continuing to enrich the global speculators who caused the crash in the first place. In what follows, I will try to make sense of what happened leading up to and during the Great Recession.

7.1. Important Prior Developments – The Federal Reserve Caught Completely Off Guard:

"The world stopped on August 9. (2007) It's been astonishing, gobsmacking. Look across the full range of financial products, across the full geography of the world, the entire system has frozen."

-Adam Applegarth, CEO of Northern Rock

What economists and TV commentators usually tells us about how the Federal Reserve and monetary policy works, is what is called "maturity transformation". In other words, a bank borrows in the short-term market and lends in longer term securities or loans. As we uncovered in the previous section, during the 1970's and 1980's monetary policy evolved towards what is referred to as interest rate targeting. The idea being that if you controlled the cost of funding or the short end of that maturity transformation, you could control what the banking system did and consequently the overall economy. By raising the cost of funds, through the federal funds target rate (FFTR), that would make it more expensive for banks to borrow, who would then in turn make fewer loans, which would serve to cool the economy downstream by restricting credit growth. There are several problems with that, beginning with the fact that the federal funds market is not the entirety of the global money market, as we uncovered previously when we delved into derivatives and interbank lending during the 90's and early 2000's. One of the reasons why focusing on the FFTR was justified, was that the London Inter-bank offered rate (LIBOR) and the Federal Funds Effective Rate (FFER) tracked the FFTR closely up until

2007. LIBOR is the average of interest rates charged when borrowing from other banks, estimated by a handful of large global investment banks, largely related to so-called Eurodollars (offshore dollar deposits) while the FFER is the weighted average of the cost of domestic funding, largely in New York Money markets. A simplistic monetary model was therefore developed against the background of what was thought to be a seamless global financial system. What happened in 2007-2008, shattered this assumption.

We need to review what happened in the middle of the 2000s leading up to the crash. After Lowering the FFTR down to 1% in the aftermath of the Dot.com bubble and the recession that followed, the Federal Reserve under Alan Greenspan initiated tightening in June 2004 as PCE inflation was heating up. From that period to June 2006, the Federal Reserve raised the FFTR 17 times each time by 25 basis points, from 1% to 5.25%. Under the textbook orthodox convention of monetary policy and interest rate targeting, that was a significant amount of tightening. When problems started to emerge in 2007, the Fed opted to once again initiate easing, and did so by cutting the FFTR back down to 1% again. However this time, LIBOR did not follow the FFTR down, it stayed elevated and continued to rise, while the FFER was actually lower than the FFTR. Simply put, what that tells us is that there was a dollar shortage in the offshore banking system, while there were too many in the US domestic banking system. This explains the dollar swaps that were conducted by Ben Bernanke, meant to liquidate European Banks, which I mentioned in the previous chapter. The global financial system in other words, was no longer operating in a seamless fashion, but started to splinter during the Great Recession. That is our entry point before diving deeper into this story.

A couple of days before August 9th, on August 7th 2007, the Federal Open Market Committee (FOMC) of the Federal Reserve held its regular meeting. During the first half of 2007, there had been various signs that things were not quite right, as mortgage default rates had been rising in conjunction with the previously mentioned tightening process. Because they were slightly alarmed about what was going on, they discussed where the economy was headed. Bill Dudley, who was then head of the assistant open market committee of the Federal Reserve, told the committee that they had investigated the commercial paper program and the problem banks that had come up – among others, Bear Sterns and Countrywide – and, as far as he was concerned, there were no imminent problems. Let us pause for a moment and contrast this with the quote by the CEO of Northern Rock (a British bank) at the start of this chapter and think about what this actually means. According to Adam Applegarth, "the entire funding mechanism effectively broke down on August 9th; it was a clean break, a substantial break" (Jeffrey

Snider, 2018). In other words, just two days before the system seized up, the Federal Reserve had absolutely no idea what was coming. They were completely blindsided by this development, which tells us a lot about how monetary policy was operating at the time and how the people at the apex of the institution overseeing and conducting it, were completely unprepared for what was about to happen. It also speaks volumes about the complexity of the financial system that had developed outside of their view.

One of the first headlines to emerge in 2007, was that there were problems in the commercial paper market. The same week Bill Dudley gave the all clear message to the FOMC, the commercial paper market froze up completely. Examining the history of the commercial paper market leading up to the break however, it defies the narrative of maturity transformation. That is, asset backed securities (ABS) and the commercial paper associated with them, was exploding in volume during a period when the Fed was supposedly tightening financial conditions by raising the FFTR. Opposite of this, while the Fed was easing in early/mid 2007, the ABS market just got increasingly worse, devastated in fact. Convention is obviously missing a great deal here and so this whole story and by extension, our monetary system, is open to reinterpretation. Why and how did ABS paper become such an important funding mechanism, to the point where it freezing up, threatened the global financial system? To get at this we once again need to return to the shadows and take a closer look at the entire process of securitization.

7.2. Breaking Down Securitization and its role as a Global Funding Mechanism:

Securitization was an important part of the housing bubble, but it was also an important part of the global funding mechanism that developed during the 1990s and early 2000s as described previously, in that it not only allowed the ABS funding to grow, but to proliferate. What characterized the global monetary system during this period was that it grew exponentially. As we have seen, banks were able to conjure out of thin air the funding mechanisms and liabilities necessary for continued expansion. However, the process can be likened to one of erecting a house on top of sand. While it may stand for a while, the underlying integrity is inherently unstable. In 2007-2008 the structural foundation that was holding up all the debt started to crack violently and securitization was an essential part of the financial

engineering that had made it all possible. Breaking it down will make clearer what the fault lines were.

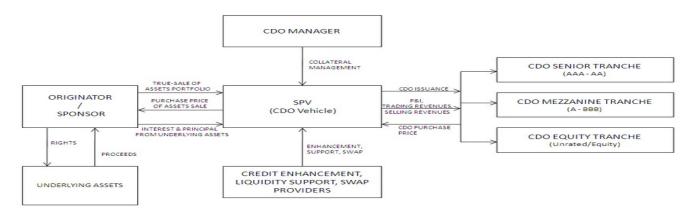


Chart 15: Securitization Model (CDO=Collateralized Debt Obligation).

The sponsor or originator would put together a pool of mortgages where each loan had reasonably similar characteristics. These were large pools of mortgages (often into the \$billions). The idea being that one would begin to slice and dice this pool of mortgages in order to create various pieces that had defined characteristics that would be saleable to other clients. What often happened was that they would take the pool of mortgages and sell it or transfer the title to a Special Purpose/Investment Vehicle (SPV/SIV). They would then start "tranching" (french for slicing). They would carve it up into different pieces, defined by how each one handled credit and cash losses. The tranches at the bottom (the equity pieces and the mezzanine pieces) were going to take the losses first, so if anybody defaults in the mortgage pool, the losses would affect the lower pieces first. Eventually, if there was a large amount of defaults, the senior tranches would be affected. Typically, the way these worked, was that the senior piece at the top which was most protected, would compose about 85-90% of the pool. When we're talking about tranching, we're really talking about slicing them up and repackaging them as bonds that could be sold as fixed income securities with defined risk characteristics based on highly complex mathematical models that took into account implied correlation and volatility. That was an important selling point for Wall Street when putting these together. Because these products had an equity piece with defined characteristics in terms of credit and default risk, and because it was first in line for losses, it would yield an above market interest rate for prospective buyers (often insurance companies and

pension funds).

However, while selling off the equity pieces at the bottom was relatively easy, (because they were higher yielding) selling the safer, low yielding senior pieces was a problem for Wall Street. These were not only less risky and therefore lower yielding, they were also immense (85-90%). The solution they came up with was relatively simple. They started to tranch the senior piece into what was called a "leveraged supersenior". The name hints at what was going on here. In order to boost the attractiveness of a product that was too big and low yielding, and be able to sell it off the SIV, they then approached investors and enticed them into putting up just a small amount of equity capital. The rest of it, the investors would borrow in the money market, effectively leveraging their returns. Recall what we discussed previously. Borrowing in the Money/REPO markets while using this CDO paper as collateral was proliferating, as it was viewed as pristine/low risk. Because they were borrowing in these money markets, they could get a lower funding cost, which allowed them to get cheap leverage and thereby boost their returns on the otherwise low yielding product. What was going on then, was essentially a maturity transformation within a maturity transformation. The traditional bank model was effectively recreated within the confines of securitization, where the capital put up by the outside investor was miniscule and where most of the funding used to buy the rest of the mortgage pool, came from borrowing in these money markets, including the ABS paper. That's the reason why the ABS paper was so vital at the time. It was essentially funding an immense portion of the MBS market.

Naturally, although that solved the yield/funding part of the problem for Wall Street, there is still leverage and consequently a liquidity risk here. What would happen if the commercial paper market would no longer accept the MBS collateral? At the time that was thought to be impossible, but to put investors mind at ease, the sponsors behind the SIV's (big Wall Street banks like Citigroup, JP Morgan and also big European banks) offered to stand behind the paper. In other words, they offered a liquidity backstop in case of funding problems in the money markets, which again, was thought to never happen. These liquidity backstops – written without any increase in reserves or plan of ever actually having to pay out on them – thus became very widespread and consequently tied the big banks into this portion of the MBS structures. These big banks essentially wrote disaster insurance without any reserves and this was therefore a crucial element as far as developing contagion when things broke down in 2007/2008. An important reason for this contagion was the confusion surrounding who actually owned the backstops, as all of these SIV's during this period were off balance sheet. That is, they were basically shell companies established abroad (often in the Cayman Islands) by a sponsoring bank. In order to

understand the contagion transmission mechanism, we need to look at how the pricing of these MBS structures actually worked. Remember, residential mortgage pools are illiquid, that is they can't be quickly turned into cash if defaults starts mounting.

This represented a problem for Wall Street insofar as these money markets were the principal source of funding. If investors were going to pledge these assets in the money market, they needed a way to price them. Mutual funds operate on the basis of maintaining mark-to-market pricing, that is a stable net asset value (NAV) of \$1.00 per share, and so have to value their assets on a daily basis. Recall what we established earlier; this leveraged supersenior MBS paper was also being pledged as collateral in the REPO market. As a REPO counterparty, you want to know the volatility in the price of the collateral you're obtaining in the event of credit problems. Wall Street then, needed a way to obtain the daily value of this paper. What they came up with was premised on the idea that one needs to have accurate estimates of default probabilities and delinquencies. From that, one could establish recovery rates and most crucially, correlation. Why is correlation important here? Intuitively it makes sense, as we have an equity piece at the bottom of the structure that takes all of the losses first in the event of defaults. If the correlation is 100% then, that is either very good or very bad, because it implies that either nobody defaults or everybody defaults. This has implications for the senior piece of the mortgage structure, because if defaults starts mounting in the equity tranche, the protection offered below it is being eroded, which means the investor in the senior tranche is at risk.

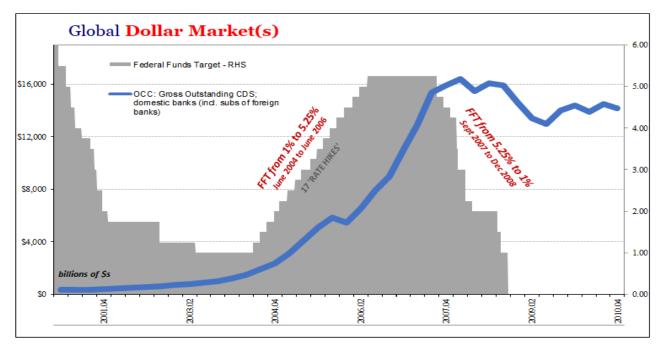
So how was this implied correlation extracted? What happened was that they started to monitor the instruments that did trade on a daily basis, and were the most liquid part of the mortgage market. Importantly, the ABX index was frequently used. This index tracks a basket of subprime mortgages and the way it derives the value of them, is by inferring the implied correlation through the use of OTC derivatives, that is credit default swaps (CDS). In a continuation of the Orthodox neoliberal assumption of efficient markets and rational actors, it was assumed that the actors operating within the CDS market did in fact know what the correlation was, so the CDS's that did trade were used to arrive at the implied correlation of various mortgage structures and products and hence priced thereafter. The connection between what we uncovered in the previous section about the evolution of shadow banking and the process of securitization is therefore to be found in the off balance sheet CDS market and its functioning leading up to the financial crisis. It was assumed that as long as this market's status and functioning was stable – in terms of pricing and actual payouts – it reflected a healthy market for CDO's – and by extension – the MBS part of it. Remember what we learned previously though, the

CDS market was growing exponentially during this period (2000-2007). owing to both the deregulation going on during the 90's as well as the fact that banks were engaging in this regulatory capital relief as per Basel I rules.

7.3. A Permanent Dislocation – The Problem was and Remains the Global Monetary System:

As the chart below illustrates, the Fed had no ability to play itself into the Derivatives space. The CDS market was expanding rapidly and completely detached from the Federal Reserve's rate hikes conducted during the period of 2004-2006.

Chart 16: Federal Funds Target Rate and Gross CDS's Outstanding:



Source: Jeffrey Snider, Alhambra Investment Partners

Because the CDS market was so important in terms of pricing the various CDO's this obviously had enormous ramifications for the system as whole. What does that lead to in terms of collateral effects more widely? We're starting to observe here, that this was not an isolated case of Subprime, but a much larger systemic problem. This is further reinforced by the fact that the CDS's weren't just used to price the MBS securities, they were also used as protection in the event of default within the same structures.

If the pricing of these products goes haywire, then hedging through purchasing insurance, which CDS's essentially are, also becomes more difficult, leading to a self-reinforcing spiral. All of this tells us that the system had gotten incredibly complex to the point where even obtaining a full overview of who was exposed to what, would eventually pose an enormous challenge when things started to go awry.

And that they most certainly did. Monetary policy works with a lag, and in the second and third quarter of 2007, some worrying signs started to emerge. Although the Fed's interest rate hikes leading up to that point had no dampening effect on the CDS market, they did have an effect on the mortgage market. As the adjustable rate mortgages people had taken out started to reset at higher rates, payment problems and defaults began to mount, in particular in the subprime segments where underwriting standards had been questionable to say the least. As seen in chart 16, the Fed responded in the third quarter of 2007 by lowering the FFTR dramatically in order to alleviate the pressure. By then it was too late however. On August 9th, the French bank "BNP Paribas" announced that the US commercial paper (ABS) that they had bought through their money market funds were no longer possible to accurately price, and that they were therefore going to stop valuing them. When these news broke, it caused an immediate panic throughout the broader financial system, to the point where there was a complete evaporation of liquidity in certain market segments.

The connection to subprime mortgages runs through the ABS paper market. BNP had invested in this paper under the assumption that it was completely safe, but as we know the MBS paper had been put up as collateral in the money and REPO markets in order to obtain funding. When default rates ticked up in conjunction with the Fed's rate hikes, that immediately registered as an uptick in volatility in the CDS's. Remember, the CDS's were used to price the MBS structures. It was this pricing mechanism that then started to go haywire, with problems emerging in terms of accurately valuing the collateral which had been used to obtain funding in the money markets. The panic and crash resulted from the realization that a segment of the collateral in the money markets was in fact rotten, as well as the lack of knowledge in terms of who was actually exposed to it. This led to money market funds and banks now starting to reject most commercial paper, in the belief that they too were exposed to subprime. A devastating feedback loop was thus triggered, as the entire global funding mechanism started to buckle under its own weight. Everything was classified as toxic as banks started to scramble for liquidity, in order to be able to provide the backstops they had issued without any actual reserves, as well as the default swaps which were now being called into play.

This was essentially an interbank shadow banking run as opposed to a traditional bank run by depositors. What was being hoarded, was not money as commonly defined, but rather bank balance sheet capacity. Everything took place on electronic ether, as all the conjured "wealth" started to rapidly evaporate. As it did, it triggered further panic and thereby more margin calls and firesales, which pushed the prices of all the financial assets down further. The subprime story therefore is way overdone, that and the panic resulting from the announcement by BNP Paribas was the famous straws that broke the camel's back. What happened was that the system, which had up until that point been able to effectively conjure out of thin air its own funding and continued expansion, was suddenly exposed to a fundamental reinterpretation of the collateral holding up the mountain of debt. As that happened, the money markets which once operated as a seamless whole, began to splinter. When they did, the contagion quickly spread to every part of the financial system. The example of AIG is illustrative here. Traditionally an insurance company, AIG had written out so many CDS's (half a \$trillions worth) with no reserves to actually pay out on them, that when it became clear that the company was going down, it posed an existential threat to the global economy. The reason as we've been over in the section about derivatives, is that the system itself was incestuous. CDS's had become vital to banks who had overleveraged their balance sheets prior to the crisis. In this situation, AIG wasn't a standalone entity, as the guarantees they had provided to other entities, was a crucial part of those institutions ability to engage in this regulatory capital relief. A failure of AIG then, might have bumped them up from a 20% risk weighting to a 50% risk weighting, thereby triggering insolvency, by bumping up their required capital ratio. The issue in other words was that liquidity risk was poorly understood because of the complexity of the system. The fact that people still to this day do not really understand what actually happened is a problem, not just for monetary policy but for our political system and social cohesion as well, as evidenced by the developments we're now witnessing in established democracies. It is my hope that our journey thus far, has helped clarify the underlying fault lines.

7.4. The Results of Financialization and the Road not Taken:

Through our step-by-step analysis of financialization up to this point, I now feel that I can rightly claim that what happened in 2007-2008 was more than just a financial crisis, of which there have been many since 1971. It was a permanent rupture of our monetary system, which had been predicated on balance sheet capacity or the financial system's ability, through balance sheet expansion, to essentially conjure credit out of thin air. Even after Bear Stearns failed, few expected that a recession would occur in the US, much less on a global scale and with the intensity and duration we witnessed. What that tells us, as I mentioned in the chapter detailing the term "creditism", is that the real economy has now become dependent upon the financial system's ability to continually expand debt and leverage. The problem is that financialization gradually hollows out and destroys the real economy. The reason is that the fundamental nature of it is to substitute leverage, rent-seeking and speculation for the real-world expansion of goods, services and wages. This so-called "wealth" is created by leveraging more debt on top of a real-world collateral which utility value remains more or less the same (real estate) or alternatively, is under constant pressure, leading to either exhaustion or collapse, as with our petroleum resources and ultimately the natural world. This commodification of capitalism is the number one driver of the soaring wealth inequality we have witnessed in the US, as well as in many other countries. Karl Marx referred to this as "fictitious capital", and as it pours into bonds, stocks and real estate, it has pushed the value of those assets into the stratosphere, out of reach for most of the population who fall further and further behind, as their real wages stagnate. As such, financialization is intimately linked to the rise of "shareholder capitalism" or Milton Friedman's idea that the only responsibility of a firm is to drive up the price of its stock, in order to return dividends to the owners. The destructive effects of this in the real economy should be readily apparent. The incentive to invest in R&D, real CAPEX spending or retraining of workers is severely diminished, as this does not enable short-term profits to be made, but rather requires savings and long-term investments. Financial engineering has therefore emerged as the key driving force, as speculators, hedge funds and large corporations, which can borrow and move massive amounts of money with lightning speed thrives on it. Accordingly, during the Dot.com bubble, the housing bubble as well as in the current "everything bubble", what has enabled the stock market to continuously inflate, is corporate equity withdrawal (CEW). Many of these companies however, don't

generate the free cash flow necessary to fund these windfalls, and so they finance it by more borrowing in the credit markets. With interest rates historically low, this is extraordinarily cheap and usually based on projected profits. Consequently ,this cheap credit is used to fund more mergers, stock buybacks and takeovers and stock prices are inflated, further enriching the 1% who holds most of the financial assets, while the real economy is cannibalized in the process. Companies have to pay back their debt however, and so they extract it from the population by saddling them with a crippling debt peonage. As real wages have stagnated, Credit card loans, student loans, exploding healthcare as well as utility, rent and housing costs has gradually and thoroughly completely gutted the American middle class. According to a 2017 Fed survey, 40% of the adult population would be unable to cover a \$400 unexpected emergency, and more than 25% have foregone necessary medical care owing to them not being able to bear the costs (federalreserve.gov). At the same time, homelessness is exploding, with 10% of New York City students now homeless, double the rate it stood at in 2007-2008 at the height of the financial crisis. 25% of homeless in America are actually employed as well, a testament to the profound deterioration now taking place in the US economy, even as Trump touts the "greatest economy in history" (Zerohedge.com).

When the bubble finally burst in 07/08 and the paper value of stocks and real estate began to evaporate, the home equity and CEW financing quickly dried up. In a 70% debt financed consumption economy, where the concept of savings has been completely obliterated, you cannot address those imbalances without a recession. Rather than allowing for the "creative destruction" that a recession necessarily entails however, the politicians and central bankers opted instead to bail out the financial sector responsible for the mayhem. One could perhaps argue that this was necessary, given the severity of the recession and the immediate consequences in terms of unemployment and lost output. That being said, it is my opinion that such a bailout should have come with a complete overhaul of the regulatory framework, in order to prevent another crisis, and it should have been more specifically targeted at helping the Main Street economy through a more active fiscal policy like major infrastructure projects and QE for low income people struggling (essentially cash transfers). OTC derivatives should have been banned, the Firewall provided by Glass Steagall should have been erected again. Those responsible should have had their bonuses confiscated and been criminally prosecuted and banks should have been nationalized. None of this was done however (Except in Iceland). Rather, the central banks of the world responded with unprecedented measures to prop up the rotten financial system and reflate asset prices. Short-term nominal interest rates were lowered to the zero bound to encourage

more borrowing while punishing savers as real interest rates were now negative. Simultaneously, QE was carried out to force down long term interest rates, and inject additional liquidity into the system. Additionally, mark-to-market was revoked, effectively allowing the banks to mark their rotten securities to fantasy. Now their books weren't just a fallacy with debt as an asset, they didn't even know what their assets were worth.

Notice that as financialization gradually hollows out the real economy, the only way to keep it going is to tear down another barrier of financial discipline and fiscal prudence. Whatever discipline that exists must be removed, or else the financialization monster eats its own tail. Sound money? Gone. Limited leverage? Gone. Prudent lending? Gone. Mark-to-market discovery of the price of collateral? Gone. Separation between commercial and investment banking? Gone. Free market setting of interest rates? Gone. Lastly, the discipline of losses being absorbed by those responsible for issuing the credit in the first place (Too big to fail)? Gone. Owing to the failure to address the underlying issues, the imbalances that plagued the world economy in 2008 are even more ominous now. Total debt has ballooned much higher than it was back then, while growth has been lackluster. At the same time, because of the extended period of cheap and abundant credit, malinvestments and rampant speculation has gone on unheeded. The New York times recently ran an editorial pointing towards the fracking industry being a potential bubble, as the venture is not profitable and has kept expanding by gorging on cheap credit, as the stock values explodes higher, fueled by speculators looking for yield and based on projected rather than current profits.

Because of this I am left to conclude that another financial crisis is baked into the cake. As the demand pull from the current expansionary monetary policy ends, there is going to be an unfilled hole. As consumption slows and companies have to mark down their profit projections, the gigantic stock market bubble will begin to deflate. The politicians and central bankers have clearly painted themselves into a corner as a result of this extended period of financial repression. You can't create prosperity by inflating the value of paper assets on top of a real world collateral that isn't growing at anywhere near the rate necessary to justify it. The problem our elected officials are now faced with, is that if collateral values starts to fall, it will quickly create a destructive domino effect because of the tremendous leverage in the system. Much like the crash in 1929, margin calls will trigger more margin calls because of the inherent counterparty risk embedded within the derivatives market, which has continued to grow exponentially in the aftermath of 2008. Central bankers and politicians can't allow this to happen, as the already severely underfunded pension obligations are dependent upon high and rising

asset values. So they will do the one thing they can do, which is print the currency into oblivion.

The problem was and still is the global monetary system, in particular the role of the US dollar. In fact, this was explicitly mentioned by the former People's bank of China (PBOC) governor, Zhou Xiaochuan as the fundamental problem prior to the crisis in 2008. As the Triffin dilemma teaches us; the issuer of the global reserve currency must run perpetual trade and budget deficits in order to supply the world with dollars. During the almost 4 decades leading up to the collapse of 2008, the global monetary system did this, camouflaged under the rubric of "the great moderation". However, as we have now seen, there were several warnings, – from the S&L crisis in the 80's to the LTCM debacle in the 90's – that beneath the surface, massive distortions were taking place, as a direct consequence of a monetary system so completely out of whack. In the current era, subprime mortgages are dead, gone and buried, but 10 years later we're left to wonder why the consequences are still with us. As I hope to have demonstrated by now, the problems are more deeply embedded and seem to be a function of capitalism having reached its twilight zone. As of now, a crisis is not only unavoidable, but also necessary. There are limits to growth no matter what mainstream economists proselytize in financial media. Infinite growth on a finite planet isn't sustainable, and with the ecological and environmental challenges we are now faced with, a systemic reset, or deeply fundamental reform is necessary not only for our economic well-being, but ultimately for the survival of the planet and our species. In 1998 Wall Street bailed out a hedge fund (LTCM). In 2008, The Central banks bailed out Wall Street. When the next crisis comes, who is going to bail out the central banks? Each crisis seem to get bigger and require ever more stimulus and radical measures. The issue we are potentially faced with the next time around, unless we address the fault lines of our political economy, is government solvency. The final Main chapter will be an attempt to gather and connect the remaining dots in order to fill out this picture and ultimately make sense of the political development we are now witnessing in the US.

8.0. The Erosion of American Democracy – Trump is the Symptom, not the Disease:

"The old world is dying, and the new world struggles to be born; now is the time of monsters"

- Antonio Gramsci

What explains the turn to a reactionary, hypocritical demagogue such as Trump? The Democratic Party continues to blame everything from Russian bots, fake news, and racist deplorables in the American heartland. Although worrisome, these are ultimately symptoms of as society in the process of becoming completely unmoored. It serves to draw attention away from the fact that the democrats lost an election most of the pundits thought they would win. It further solidifies in their minds that the election result had nothing to do with the inability of the Clinton and Obama administration to address the fundamental problems plaguing US society. Internal documents from the Clinton campaign show that they hoped for Trump to win the Republican nomination (Politico.com). Meanwhile the Republican establishment was working hard to prevent this outcome, yet he still managed to pull off an upset victory.

What this illustrates off course, is that across the political spectrum, people had just completely lost all faith in the system, as it's no longer responding rationally to the very real problems felt by larger and larger swaths of the American populace. During this final chapter of this thesis, I will make the argument that the ossification and degradation of the US political system is the result of what Chris Hedges has described as a corporate coup d'état in slow motion or the financialization of the political system. I will further contend that America is currently on its way down a very dark path and has been for a long time. The attempt to resuscitate a dead financial system ten years ago, keeping it on life support while continuing to enrich the insiders and elite who blew it up in the first place, was in many ways the final nail in the coffin for the bankrupt ideology of neoliberalism. Seen in this light, Trump is merely a symptom of a deeper underlying disease plaguing US society. Unless the foe liberals in the democratic party comes to terms with their own role in causing this animosity among voters, as well as begin to discuss and present solutions to the very real problems facing larger and larger segments of the US population – then as the election of Trump showed – voters will turn away from liberal democracy itself and towards populism and ultimately authoritarianism.

8.1. A Corporate Coup d'état in Slow Motion – The Highjacking of the US Political System:

In September 2011, protesters occupied Zuccotti Park in lower Manhattan. This was the beginning of the "Occupy Wall Street" movement. The protesters were responding to the very real injustice of the US political economy and the establishment elites who just three years ago had bailed out Wall Street. The movement expanded rapidly across not just the US, but on a global scale as well. What is fascinating is that many of the protesters demands far from being radical or extreme, made a lot of sense. Reinstating Glass Steagall, working towards a more rational healthcare system, getting money out of politics, and forgiving student debt can hardly be classified as unreasonable demands given what had just unfolded. Yet, the movement received little mainstream media coverage, nor were their demands really brought up in US public debate. Instead, the protesters were largely dismissed altogether and portrayed as radicals with no concise message (Earle, 2012, pp.3-4). What is perhaps less well known is the degree to which these protests perplexed and downright frightened the political and economic establishment in the US. A coordinated crackdown across the country was carried out in November 2011, and the protesters were cleared from the areas they had occupied. Afterward, the movement splintered and died out. Why such massive police and security agency mobilization to break up a movement with not yet fully articulated demands, consisting of unarmed and peaceful protesters? Internal government documents show that the FBI and DHS treated these protests against the US corporate and banking structure as potential criminal and terrorist activity and further, that these agencies worked for and in collusion with these large Wall Street firms (justiceonline.org, 2012). The documents include a report by the Domestic Security Alliance Council (DSAC), which is described as a "strategic partnership between the FBI, the DHS and the US private business sector". The documents further shows that the FBI monitored OWS from its inception, even before the protests officially began in Zuccotti park, and that information about the group was shared with representatives from the New York Stock Exchange (Democracynow.org, 2012). The story of OWS demonstrates two important points. First, that the fusion of big business and state power in the US is now very far advanced. And secondly, that the US political and economic elite is terrified of, and prepared to go to great lengths to prevent a specific narrative from even entering the public sphere. Namely, the one traditionally

associated with the political left, of class-based struggle and the need to break with neoliberal economic orthodoxy. In order to understand the processes at work here, we once again need to return to the 1970s.

On August 23rd 1971, Lewis Powell, a corporate lawyer, submitted a memo to the Chamber of Commerce. The memo has been described as a blueprint for the corporate takeover and domination of American democracy. In it, Powell makes the case that the US free enterprise system is under a sustained and broad based attack. While acknowledging that there had always been vocal minorities critical of the system on the left, he drew a demarcating line between earlier periods and the one within which the US now found itself in. Increasingly, he saw this attack as emanating from important social institutions; respectively academia, politicians and the media. Powell further laments that rather than responding adequately to this perceived "attack"; American businesses, which as he states "funds and theoretically controls" many of these institutions have failed to adequately respond, if at all. Only through a coordinated and sustained "counterattack" could American business stop the march of leftist ideology according to Powell, and it had to be carried out on all fronts. Through advertisement, the media, the political arena, and through the court system (reclaimdemocracy.org).

Franklin D. Roosevelt himself said that the institutional arrangements (Glass Steagall, labor relations reform, public works etc.) instituted in the "new deal", effectively saved capitalism in the aftermath of the Great Depression. As we established previously, the stagnation of the 70s gave rise to the new neoliberal orthodoxy. The Powell memo must be seen in conjunction with this broader development. During the presidencies of Ronald Reagan and Bill Clinton as we have seen, the neoliberal agenda was carried out in full. Labor unions were dismantled, federal spending was curtailed (except for the military which now accounts for 50% of discretionary federal outlays), and restraints on the financial sector was lifted. We have seen the devastating effects this has had on the US economy. What is perhaps harder to immediately spot, is the corrosive influence the neoliberal agenda has had on the political system, and consequently on the citizens faith in the system as a whole. According to a 2014 study carried out by Princeton and Northwestern universities, the US is no longer a democracy, but an oligarchy. The researchers demonstrate that the system's responsiveness towards the average citizen's policy preferences is practically zero. Stated differently, when a majority of the population favor policies that doesn't align with the interests of the economic elites, they generally lose. In contrast, the system is highly responsive to the policy preferences of strong lobbying organizations and high net worth individuals (Gilens&Page, 2014, pp.9-11).

The 2010 landmark case, "Citizens United vs Federal Election Commission" drives home the point of the extent to which Corporate and donor money now drives the election cycles – and by extension – how the people serving at the top echelons of government are beholden to these special interests. The Supreme Court here effectively granted the right of corporations to spend unlimited amounts of money on independent political campaigns. As we saw earlier, corporations like Goldman Sachs, JP Morgan, Citigroup etc., funnel enormous amounts of funds into political campaigns on both sides of the isle. There is no way for an ordinary American to vote against the interests of Goldman Sachs, Raytheon or Lockheed Martin in today's system. The financialization of the economy, which we have described at a high level of detail previously, then grotesquely starts cannibalizing the last remaining vestiges of democratic institutions. Sadly, the Democratic Party in later years has been as complicit in this development as the Republicans. As we saw previously, it was during Clinton's presidency that the last remaining firewall (Glass Steagall) protecting Americans from a rapacious financial elite was removed. It was Clinton who signed NAFTA into law in 1994, accelerating the loss of manufacturing jobs and outsourcing in the American heartland. It was Clinton who signed the 1994 crime bill, containing among other, the "three strikes, you're out" provision, which led to the US accumulating 22% of the world's prison population with ~4,5% of the world's population..; many of color, and serving lifelong sentences for non-violent crimes. Those who get out are saddled with a crippling debt peonage, having to pay inordinately high rates on everything from phone calls to jail bail bonds (truthdig.com).

It should come as no surprise then, that by the 1990s the Democrats had achieved fundraising parity with the Republicans and that when Obama ran in 2008, the democrats got more. The Elite and big corporations understood that the public wanted change, so they got behind the candidate who had the tailwinds behind him. What did that mean for Obama's ability to deliver any real reform? The Dodd-Frank act and the Affordable Care Act (ACA) are both good examples here. During the writing of both bills, enormous lobbying pressure by the financial sector, pharmaceutical industry, and health insurance providers respectively, ended up diluting and obfuscating the final bills. They both swelled to enormous proportions (thousands of pages in the case of ACA), contributing to swell the trough at which lawyers feed, while not solving the real issues, like "too big to fail" or excessive debt in the case of Dodd-Frank and the out of control healthcare costs and lack of coverage for millions of unemployed or underemployed Americans as pertains to ACA.

This is not to single out Obama. He was just one individual, operating in an extremely flawed and hostile environment, where money wins elections and where you're beholden to the same donors and

corporations after the fact. Not only that, after the extremists in the Republican Party seized the majority in congress in the 2014 midterms, they did everything possible to prevent Obama from getting any of his legislative agenda through. The complexity and lack of oversight with any one individual, further complicates decision-making. It is hardly implausible to imagine that the decision to bail out Wall Street as well as the terms of Dodd-Frank was significantly colored by then treasury secretary Timothy Geithner, himself a former Goldman Sachs Banker. In other words, we're talking about systemic failure and an erosion of democratic institutions that runs so deep as to make real structural changes well nigh impossible. In the final chapter I will try to make sense of this at a deeper level.

8.2. Inverted Totalitarianism and the Rise of Populism:

"All experience has shown that mankind is more disposed to suffer - while evils are sufferable - than to right themselves by abolishing the forms to which they are accustomed"

-Declaration of Independence

Sheldon S. Wolin, in his book "Democracy incorporated" takes on an almost prophetic character in terms of describing what we're now witnessing play out in American Society. Wolin draws a dividing line between earlier totalitarian regimes and what he calls a new form of "inverted totalitarianism", a category into which he places the current US political system. Earlier totalitarian regimes like Nazi Germany or Mussolini's Italy were characterized by an all-encompassing politicization of society, although exclusively through the party mantra, portrayed as it was, as engaged in an epic struggle or war. This necessitated the elimination of political opposition as an expression of disunity and an elevation as well as mobilization of the populace into a national movement. In effect, politics was relegated to the sole purpose of orchestrating society's unanimity as defined by the party leader and the ruling ideology.

As the name hints at, inverted totalitarianism follows a different path. According to Wolin, one can no longer point to any institutions in America as being legitimately democratic. Not the highly managed money saturated elections, the lobby infested congress, the imperial presidency nor the class based penal and judicial system. The latter of which has been described by Matt Taibi as "two tiered". One law applies to poor people who can be thrown in jail for loitering or missing a credit card payment.

Another applies to the rapacious financial elite, seemingly able to get away with anything from laundering drug cartel money as in the case of HSBC, to peddling fraudulent mortgages (Wbur.org). Inverted totalitarianism does not find its expression through a demagogue or a charismatic leader, as was the case in the classical version. Rather it is expressed through the complex structures and the faceless anonymity of the corporate state. It purports to pay fealty to the democratic institutions and it relishes American patriotism, chiefly expressed through the constant adoration of the armed forces and a debt driven consumer culture (illustrated by Bush's encouragement of Americans to go shopping after 9/11). Rather than pursuing unanimity however, Inverted totalitarianism instigates divisiveness while depoliticizing the citizenry. Instead of abolishing opposition, the opposition is curtailed and neutralized through several different mechanisms. The most obvious being the central pillar of money in politics and the role of lobbyists, as well as the two-tiered justice system. The last of which not only functions to keep large swaths of the populace in a constant state of fear and despair, but is also used by the elite to rewrite and distort legislation that once protected democracy, as in the case of "Citizens United". Rights then, are revoked through the use of judicial and legislative fiat in the furtherance of corporate and elite control of the system. The system is then legitimated by periodic elections, where the citizen is reduced to a mere spectator, periodically asked to serve up pliant legislators for the corporate oligarchs (Wolin, 2008, pp. 185-188).

While the system at first glance seems to peddle a "hyperactive" political discourse, this is really an illusion. It is a politics that is in earnest void of the political, in the sense that the fundamental issues like profound inequality and poverty, rampant corruption, endless wars and foreign entanglement and the expansion of the wholesale security and surveillance state, are not really addressed or debated. The extravagant election cycles, more expensive every year, portray this clearly, centered as they are on manufactured political personalities (something Trump understood very well), empty rhetoric, personality attacks, sophisticated focus groups and a constant stream of opinion polls. The turn to identity politics by the Democratic Party after having completely surrendered to neoliberalism under Bill Clinton illustrates the degree to which the elites have managed to encourage division and destroy cohesiveness in the population (Hedges, 2015).

Cultural wars may immediately seem like an expression of strong political association, but it is really the opposite. The attention these issues receive from the profit driven media oligopoly, serves the elite well, eager as they are to take firm stands on issues which doesn't fundamentally threaten the existing power hierarchy. Think about how masterfully the focus on issues such as abortion and gay rights has

allowed the two parties to divide the population. In the case of the Republican party, it made possible the co-optation of "christian values", and thereby large segments of the population in the deindustrialized Midwest, who continue to cast their ballots (to the extent that they even bother) for a party largely responsible for the pillaging of the American heartland. It also enabled them to shift the blame for the profound despair this part of the population is going through, towards "welfare queens", criminals, illegal aliens, and the so-called "intellectual liberal elite". As the population is increasingly severed from a context of intelligent dialogue, ambiguity and qualification and rendered wholly reliant on TV and social media echo chambers for their information, is there any wonder that political polarization and downright hate among the American populace is at an all time high?

People yearn to understand the societal decay that is now taking place, but the creeping transformation American society is undergoing, have rendered them without the vocabulary to make sense of their own reality. This is blatantly evident in the rise of fake news and extreme conspiracy theories on the far right, such as the insane belief among some in the alternative right; that mass shootings are carried out by paid crisis actors and orchestrated by the government in order to take people's guns away. It is a coping mechanism for a lot of people, as the system is unable to respond rationally to people's plights. At the same time, this system continues to peddle the fiction of hope and redress through the next election, a quarter of high GDP growth, or the next consumer good purchase. In this context, it is only a matter of time before people start retreating into magical thinking, as a last ditch effort to make sense of a world that seems to descend further into madness with each passing day.

The Opposition in the US was never focused in a way that presented a credible challenge to the status quo. The financialization of capitalism and the crisis it precipitated in 2008 began to change that. 2008 was the straw that broke the camel's back. Namely the bankrupt ideology of neoliberalism and any illusion that the system was in any way able to respond rationally, or in any way accountable towards the vast majority of the population. It destroyed any trust the populace had towards the establishment elite and perhaps even more ominously, towards liberal democracy itself. It was in this context that the groundwork for the rise of populism and a figure like Trump was effectively laid. Note that while the leftist progressive response mounted by OWS was crushed, the Tea Party Movement, which channeled its raison d'être towards what Steve Bannon has referred to as "deconstruction of the administrative state", went on to win big in the 2010 midterm elections, while receiving millions of dollars from the Koch brothers and other billionaire donors. This makes sense, following Wolin; the system of inverted totalitarianism will avoid harsh methods of control, as long as the "dissent remains ineffectual" or does

not fundamentally challenge the established order. As he writes, under inverted totalitarianism, politics is subordinate to economics (Wolin, 2008, p.189). The Tea Party platform of Lower taxes, climate change denial, deregulation and further erosion of social welfare and Medicare, as championed by among others, Ted Cruz, is a boon for corporate America. It was this right wing populist momentum Donald Trump seized upon in the general election in 2016. He tapped into the popular discontent and managed to channel their anger towards immigrants, foreign countries and bad trade deals, and away from the real culprits of the people's despair, namely a rapacious corporate and financial oligarchy and a bankrupt political system as we've seen throughout this thesis.

Conclusion – The Unsustainability of it All:

"The new always happens against the overwhelming odds of statistical laws and their probability, which for all practical, everyday purposes amounts to certainty; the new therefore always appears in the guise of a miracle."

-Hannah Arendt

And so our journey is approaching its end. Looking back at the process, the thesis took another direction than I had perhaps originally thought. A consequence of me quickly realizing how little I actually knew about the inner workings of the financial system leading up to the crisis of 2008. I set out to reveal the secular development we have witnessed since the 1970's, when the financialization of capitalism began in earnest. With each new pivot, the complexity and interconnectedness of the system gradually started to reveal itself. Although the writing process has at times been frustrating and overwhelming, it has also been deeply intellectually satisfying, because as I look back on it now, I feel there is a clear red thread throughout the different chapters. From the initial pivot starting with Bretton Woods and the rise of neoliberalism, to the transition to an international balance of payment and banking system reliant on the constant expansion of credit, to the S&L crisis and the rise of securitization, making possible the evolution of a financial system capable of essentially conjuring its own funding out of thin air, leading up to the eventual collapse in 2008. With each step, the economic and ultimately political developments we have witnessed in the US in later years began to make more sense. From the extreme increase in inequality, to the gradual hollowing out of the middle class, to the increased political polarization and frustration towards a system that is no longer responding rationally.

And ultimately, the populist response it would engender.

What I hope to have demonstrated during the course of this thesis is that Donald Trump did not just rise out of the ashes of a botched election, caused by Russian bots, Racism or the Podesta Emails. He is the result of a still ongoing secular process of profound political, economic, cultural and social decay. The rotting carcass of the Republican Party left in the wake of the financial crisis, has under Trump metamorphosed into a cult. The yearning for a cult leader among the American Public was not created by Trump himself. The population was primed for it prior to him seizing his moment. The extreme personality focus on Trump by the corporate media and the Democratic Party is therefore futile, and a derailment. While it may temporarily sink his approval rating, it ultimately serves to further the national reality TV-show that has replaced any real debate about the deeper underlying, structural issues facing American Society. What's more, it fuels the hate and division in the populace, which is currently tearing the social fabric apart.

Trump is the symptom of a failed democracy, and the longer the Democrats and their media accomplices try to peddle and perpetuate the fiction that the US is still a functioning democracy, with Trump and the political mutations surrounding him, somehow being just a temporary abomination; one which can be swiftly dealt with and discarded during the next election cycle, the more the US will barrel towards authoritarianism. This refusal to take ownership of their own role and failure to heed the warning signs is inherently dangerous. The underlying problem is not Trump, no matter how repugnant, narcissistic and dishonest he may be; it is a political and financial system, which has presided over the greatest wealth transfer upwards since the 1920s and 30s, a period in which we also, not coincidentally, saw the rise of populist movements as a response to the perceived failure of liberal democracy, which would ultimately mutate into totalitarianism.

This crusade that attempts to reduce a political, economic and social crisis to the person of Trump is therefore extremely dangerous. My fear is that even the power-holders, not just the citizens, don't fully understand the consequences of their furtherance of a political and financial system that has become so complex, so all encompassing, that focusing on a fundamental debate about who we are and where we are going as a species becomes extremely difficult. Everything revolves around keeping the system viable and afloat, seldom looking beyond the next quarterly GDP report or the latest tweet coming out of the White House. The postwar order of relative peace and stability is in fact an anomaly viewed in a longer historical perspective. As we barrel towards another financial and even more ominously,

ecological and environmental crisis of unprecedented proportions, our ability to focus becomes ever more pressing. Simply because of the fact that these crises will require a coordinated and complete restructuring of our societies. Away from the notion of perpetual growth on a finite planet, and towards sustainability and justice. Without viable solutions and a willingness to respond to the problems, the stage will be set for even more detestable figures than Trump to resonate with the disgruntled parts of the population, looking for someone and something to blame for society's current trajectory.

I wish I could end this thesis on a happy and optimistic note. But the truth is I don't know if we'll be able to rise up and face the challenges ahead of us. I don't even know if we'll be able to survive as a species. Traditional liberalism now seems perplexed and unable to respond towards not only the authoritarian right wing populists, but towards as we've seen, the problems it has engendered, which ultimately led to the rise of these malignant forces. In this present crisis then, perhaps what is required of us now, is what Reinhold Niebuhr referred to as a hunger for perfect justice, which may appear from the outside as a "sublime madness in the soul". According to Niebuhr, nothing else possesses the fortitude necessary to rise up and confront radical evil. Traditional liberalism is a useless force in moments of extremity he said, as it lacks the spirit of enthusiasm, and is too intellectual and too little emotional to move the world out of its beaten track.

The years ahead of us will reveal the accuracy of that statement.

"The midday sun slips behind mountains,

the Yellow River turns for the Sea,

Trying to see for a thousand miles,

I climb one more story."

-"On the Stork Tower" by Wang Zhihuan

The End

Bibliography:

David A. Stockman, 2013: "The Great Deformation; The Corruption Of Capitalism In America". Public Affairs.

Sheldon S. Wolin, 2008: "Democracy Incorporated – Managed Democracy and the Specter of Inverted Totalitarianism". Princeton University Press.

Jens Forssbæck, Lars Oxelheim. 2003. "Money Markets and Politics". Edward Elgar Publishing.

Stephen J. Antczak, Douglas J.Lucas and Frank J.Fabozzi, 2009: "Leveraged Finance: Concepts, Methods and trading of High-Yield Bonds, Loans and Derivatives". John, Wiley & Sons Inc.

Stephen A. Fowler, 2014: "The Monetary Fifth Column: The Eurodollar Threat to Financial Stability and Economic Sovereignty. Vanderbilt Journal of Transnational Law. May 2014, Volume 47. Issue 3, pp 825-860.

Sergey Chernenko, Sam Hanson & Adi Sunderam, 2013: "The Rise and Fall of Securitization". Harvard and Ohio State University.

Thomas John Lengyel, 1971: Federal Reserve 'Even Keel' Policy: An Historical and Empirical Analysis. Louisiana State University and Agricultural & Mechanical College.

Kitty Calavita, Henry N. Pontell and Robert H. Tillman, 1997: "Big Money Crime; Fraud and Politics In The Savings And Loan Crisis". University of California Press.

David A. Stockman, 2016: "A Nation On The Brink Of Ruin . . . And How To Bring It Back. Laissez Faire Books.

Joseph Stiglitz, 2015: "Rewriting the Rules of the American Economy: An Agenda for Growth and Shared Prosperity. W.W. Norton.

Robert L Hetzel, 2008: "The Monetary Policy of the Federal Reserve: A History". Cambridge University Press.

James Rickards, 2011: "Currency Wars; The Making Of The Next Global Crisis". Penguin Group, New York, USA.

Thomas Piketty, 2013: Capital in the Twenty-First Century. Harvard University Press.

Niall Ferguson, 2012: The Great degeneration; How Institutions Decay and Economies Die.

Dani Rodrik, 2017: Populism and the Economics of Globalization

Michael A. Genovese, 2017: "The Trumping of American Politics; The Strange Case of the 2016 Presidential Election"

Philippe Jorion, 2000. "Risk Management Lessons from Long-Term Capital Management. European

Financial Management 6. (September 2000): pp. 277-300.

Ran Hirschl, 2008: "The Judicialization of Mega-Politics and the Rise of Political Courts". Annu. Rev. Poli. Sci.

John Bellamy Foster & Robert W. McChesney, 2012: «The Endless Crisis – How Monopoly-Finance Capital Produces Stagnation and Upheaval from the USA to China. Monthly Review Press. New York. Marcia Millon Cornett and Hassan Tehranian, 1990: "An Examination of the Impact of the Garn-St.Germain Depository Institutions Act of 1982 on Commercial Banks and Savings and Loans". The Journal of Finance, Vol.45, Number 1 (1990).

Ragin, Charles C. 1987. The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies. Berkeley: University of California Press.

Stuart Astill and Paul Cairney. 2015. "Complexity theory and political science: do new theories require new methods?" Handbook on complexity and public policy.

Battiston et al, 2016. "Complexity theory and financial regulation" Science, 19 Feb. 2016: Vol. 351, Issue 6275, pp. 818-819.

David M. Kotz, 2015. "Neoliberalism, Globalization, Financialization: Understanding Post-1980 Capitalism".

Ashley Davis-Hamel, 2012. "Successful Neoliberalism?: State Policy, Poverty, And Income Inequality In Chile. International Social Science Review, Vol 87, No. 3&4 (2012), pp. 79-101.

Joshua Hruzik, 2015. "Causes of the Chilean Financial Crisis in the 1980's". The Bonn Journal of Economics, Vol IV (2).

Lynn A. Stout, 2009. "How Deregulating Derivatives Led to Disaster, and why Re-Regulating Them Can Prevent Another. Cornell Law Faculty Publication.

Richard A. Werner, 2015. "A Lost Century in Economics: Three Theories of Banking and the Conclusive evidence". Centre for Banking, Finance and sustainable development, Southampton Business School.

Richard A. Werner, 2014. "Can Banks Individually Create Money Out of Nothing? - The theories and the Empirical Evidence. Centre for Banking, Finance and sustainable development, Southampton Business School.

Richard A. Werner, 2011. «Economics As If Banks Mattered: A Contribution Based On The Inductive Methodology». The Manchester School 1-38. Supplement 2011.

Richard A. Werner, 1997. "Towards a New Monetary Paradigm: A Quantity Theorem of Disaggregated

Credit, with Evidence From Japan". Kredit und Kapital, vol.30, no.2, July 1997, Berlin: Duncker & Humblot pp.276-309.

Maria Deryugina, 2009. "Standardization of Securities Regulation: Rehypothecation and Securities Commingling In The United States And The United Kingdom".

Jeffrey Snider, 2018. "Eurodollar University Season 1". Transcript available at Macrovoices.Com.

Simon Black, August 1, 2018. "Why Japan may spark the next crisis". Sovereign Man.Com.

Lee Davison, 1995. "History of the Eighties, Lessons for the Future". Volume I, Chapter 7: Continental Illinois and "Too Big to fail". FDIC Research and Statistics Division.

Winthrop Capital Management, 2012. "The Future of Money Market Mutual Funds".

Jolina C. Cuaresma, 2002. "The Gramm-Leach-Bliley Act". Berkeley Technology Law. Volume 17.

Ethan Earle. 2012. "A Brief History of Occupy Wall Street". Rosa Luxemburg Stiftung. New York.

Martin Gilens and Benjamin I. Page. 2014. "Testing Theories of American Politics: Elites, Interest Groups, and Average Citizens. Princeton and Northwestern Universities.

https://www.investors.com/politics/commentary/its-official-clintons-popular-vote-win-came-entirely-from-california/

http://nordic.businessinsider.com/paul-ryan-president-donald-trump-2016-11?r=US&IR=T http://news.gallup.com/poll/1600/congress-public.aspx

http://www.zerohedge.com/news/2017-09-21/petrodollar-under-attack-heres-what-you-need-know https://dailyreckoning.com/financialization-america-discontents/

https://www.zerohedge.com/news/2017-12-15/four-charts-prove-economic-recovery-just-fed-induced-entitlement-program-wealthy

https://mises.org/blog/whats-difference-between-liberalism-and-neoliberalism

https://www.bloomberg.com/news/articles/2016-11-24/chile-mexico-u-s-have-highest-inequality-rates-oecd-says

 $\underline{http://www.mauldineconomics.com/frontlinethoughts/credit-driven-train-crash-part-1}$

http://www.economicnoise.com/2014/03/15/capitalism-creditism/

https://www.stlouisfed.org/on-the-economy/2017/february/why-economic-growth-slowing-down

https://fred.stlouisfed.org/series/TCMDO

https://dailyreckoning.com/creditism-death-capitalism-part/

 $\underline{https://dailyreckoning.com/richard-duncan-capitalism-is-dead-heres-where-that-leaves-us/}$

https://macromon.wordpress.com/2011/02/03/americas-fire-economy/

http://www.marketskeptics.com/2009/03/us-banks-operate-without-reserve.html

https://fred.stlouisfed.org/series/BPBLTT01USQ188S

https://data.worldbank.org/indicator/NE.CON.PETC.ZS?locations=US

http://www.macrotrends.net/2593/nikkei-225-index-historical-chart-data

https://nypost.com/2018/02/13/americans-are-more-depressed-and-miserable-than-ever/

https://www.zerohedge.com/news/2018-04-05/visualizing-which-political-party-corporate-america-

loves-most

https://www.truthdig.com/articles/the-coming-collapse/

https://www.federalreserve.gov/publications/files/2017-report-economic-well-being-us-households-

201805.pdf

https://www.truthdig.com/articles/sheldon-wolin-and-inverted-totalitarianism/

http://www.wbur.org/onpoint/2014/04/15/matt-taibbi-inequality-the-divide

https://www.zerohedge.com/news/2018-10-24/more-half-million-people-americas-homelessness-crisis-

rapidly-exploding-both-coasts

https://www.bis.org/review/r090402c.pdf

https://www.bis.org/publ/bcbs227.pdf

https://www.cnbc.com/2016/11/09/sorry-uncovering-americas-racist-underbelly-wasnt-why-trump-

won-commentary.html

http://www.nationalreview.com/article/443801/real-reason-trump-won-democratic-turnout-decline

https://fivethirtyeight.com/features/trump-was-stronger-where-the-economy-is-weaker/

https://www.imf.org/external/bopage/pdf/98-1-20.pdf

https://www.citizen.org/sites/default/files/forgotten-lessons-of-deregulation-derivatives-report.pdf

https://fcic-static.law.stanford.edu/cdn media/fcic-reports/fcic final report chapter3.pdf

https://www.democracynow.org/2012/12/27/the fbi vs occupy secret docs

http://reclaimdemocracy.org/powell memo lewis/

http://time.com/money/5054009/stock-ownership-10-percent-richest/

https://www.politico.com/magazine/story/2016/11/hillary-clinton-2016-donald-trump-214428

http://www.justiceonline.org/fbi files ows